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 2021-22)

BEST PRACTICE-I

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

Objectives of the Practice:

- To address the learning levels and make teaching more student-cantered.
- To assist the faculty with better planning of their teaching and learning strategies.
- To improve knowledge, acquisition through integrated learning strategies, elective courses, and core courses.
- Assist students to develop their critical thinking and problem-solving abilities.
- To improve technical skills through the use of contemporary tools.
- To use MOOCs to enhance one's capacity for self-learning.
- To strengthen the curriculum to better meets modern business requirements.

The Context:

Student learning, a desired outcome and the main objective of higher education institutions, is significantly influenced by effective teaching practises. In an effort to give students the finest learning experience achievable, faculty members work hard to adhere to the principles of good methodologies. As a result, OBE in Teaching - Learning is being deployed 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). Every semester, IQAC conducts academic audit twice to guarantee that OBE is implemented effectively. The academic audit team confirms the following criteria and notifies the IQAC Coordinator of any compliance.

- 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 review in lesson plan and in 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). In order to implement OBE, IQAC reviews faculty performance then provides the required recommendations.

Faculty members are encouraged to enroll in online certification programmes like SWAYAM and COURSERA as well as Faculty Development Programs/STTPS offered by prestigious institutions in order to enhance their knowledge in the way to teach and learn.

Evidence of Success:

- 69 % of UG B.Tech students have successfully graduated.

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.

BEST PRACTICE-II

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

Objectives of the Practice:

- To develop technical clubs and professional associations that are 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 develop students into responsible citizens with the ideal traits like character, bravery, teamwork, discipline, leadership, a secular worldview, and an adventurous spirit.

The Context:

For a student to be employed or to proceed a start-up, they must acquire the necessary knowledge in their area of engineering, as well as the relevant soft skills and coding abilities. Students who participate in all of the scheduled co-curricular, extracurricular and extension activities will undoubtedly be well-suited for any type 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). Physical and mental development of students through extracurricular activities.

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.