BEST PRACTICES

Title of the practice-1

Multilevel Monitoring of Students

Objectives

The major aim of multilevel monitoring is to create conducive environment for the students which facilitates to improve their attitude towards academic, social and ethical values.

This is subdivided into following objectives:

- To monitor and provide support for improving academic performance
- To nurture the conducive environment for their multidimensional development by providing relevant guidance
- To mentor the students for their behavioral, professional and personality development
- To improve interpersonal connectedness with teachers and peers
- To enlighten the students on professional ethics and social awareness
- To provide emotional support to individuals in consultation with the parent

The context

Future of the nation depends on well-qualified and skillful technocrats. In this regard higher education should facilitate the students with adequate skills to impart their efforts towards the growth of the nation. India will arise followed by the support from academic institution and their interaction with industries. The Institute has implemented multilevel monitoring in order to improve academic performance and overall personality of the students in all the dimensions. It enlightens the students on professional ethics, behavioral and social aspects. It also establishes healthy relations between teachers, students and parents.

The practice

The institute has introduced a "Multilevel Monitoring Scheme" by the involvement of all the concerned authorities in the institute for overall development of the competent

engineers. As the college excels in the triad of engagement, the students feel safe, supported, and capable of solving academic and professional challenges.

Multilevel Monitoring Scheme is categorized into three parts:

- **Academic engagement**

  Increasing student's engagement in learning means setting high academic and behavioral standards, implementing flexible teaching methods, and making students feel that learning is relevant. Helping students to reach a high academic and behavioral standard requires learning support for all students.

  As and when required, academic counseling is provided at multiple levels as GFM, class teacher, GFM coordinator, HOD, Principal and management. GFM provide college tutoring and other learning supports. Efforts are made to imbibe professional ethics and social values amongst the students to make them responsible citizens. TPC'S and TPO specifically focus on employability and developing such graduate attributes to enhance skilled based education. Entrepreneurship development cell help students in establishing startup at an early stage, where student can convert their idea in to highly scalable and viable enterprise.

- **Interpersonal connectedness:**

  For better connect with, teachers must increase interpersonal connectedness in their classrooms. Connected teachers can identify students' needs and potential, that helps in each student's successes. Also it creates a caring, structured environment with high and clear expectations.

  For the same, one teacher is nominated as 'Guardian Faculty Member (GFM)' for batch of students. The GFM regularly monitors the attendance, academic performance and maintains all relevant records of students in a systematic way. Free time of GFM is available to student and parents outside the Class to share their problems. GFM develops family ties by communicating regularly about student's achievements and challenges. This scheme helps break the barrier amongst the students, teachers and release some burden off the parents.

- **Physical and emotional safety:**

Promote positive college environment through zone of physical, emotional, and academic safety that involves implementing strategies that encourage students to feel valued and competent and to act with pride and respect for college policies and property. Such environment creates good interpersonal connections of students with their teachers and peers.

GFM acts as a mentor to students in emotional and academic support with motivation. The GFM & class coordinator helps the students in resolving problems related to campus life and domestic issues. A professional counselor is available on campus for psychological and personal issues like depression, anxiety and loneliness. Identified cases are forwarded to the professional counselor. Tutor is available for providing self-awareness to develop strengths and control weaknesses, develop personal and professional goals.
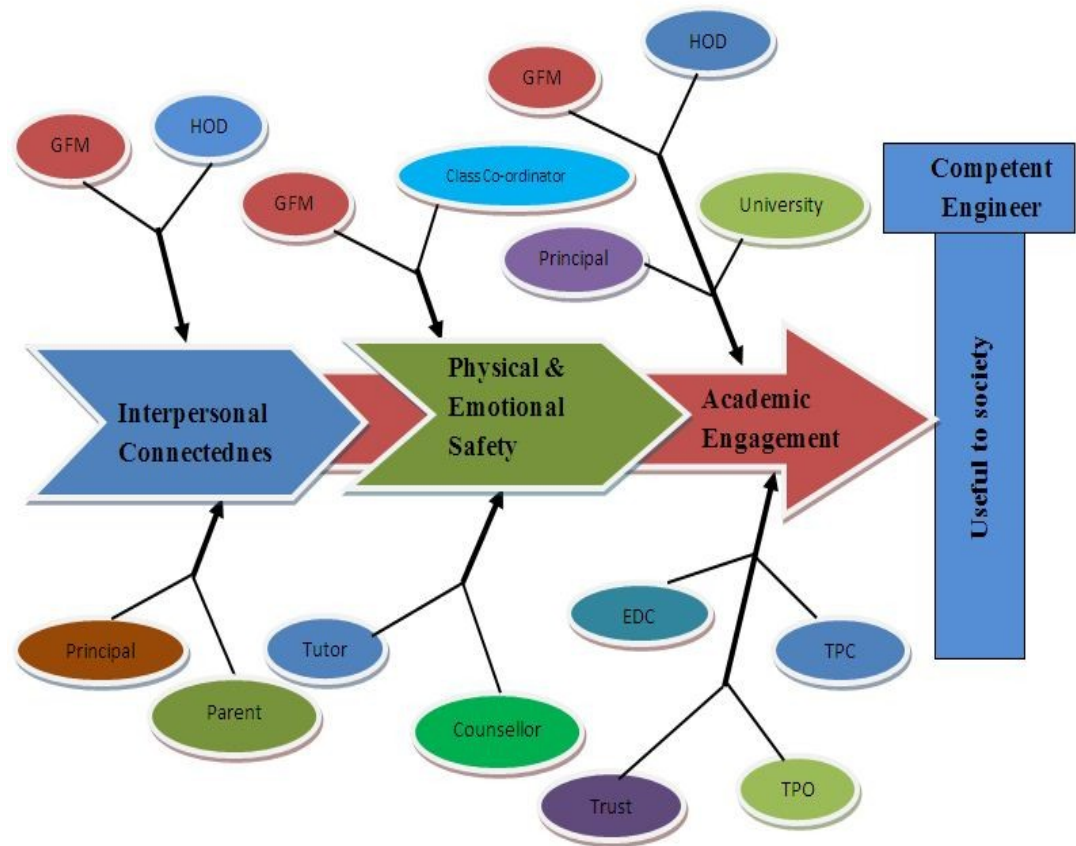
Evidence of success

- University rankers and improved academic results
- Increased number of participants in technical activities
- Increased number of participants in co-curricular, extracurricular and social activities
- Students Placement in Multinational Companies
- Increased number of Entrepreneur

Problems Encountered and Resources Required

- ➢ Considering the special needs of psychological counseling of the students, professional counselor was required and appointed.
- ➢ Newly appointed faculty members need orientation program for effective implementation of the scheme.

Notes:

Considering the success of the scheme, it is evident that, teachers can play a vital role in the overall development of the students. Refinement of the existing system may lead to better performance with respect to learning.

GFM HOD

GFM

Class Co-ordinator

GFM HOD

University

Principal

Competent Engineer

Interpersonal Connectednes

Physical & Emotional Safety

Academic Engagement

Useful to society

Principal

Parent

Tutor

Counsellor

EDC

TPC

Trust

TPO

Title of the practice-2

In-house Development of Digital Teaching-Learning Resources

- **Objectives**

    - The major objective of the practice is to develop digital teaching-learning resources and provide an open platform to make those available through the use of ICT enabled technologies.

    - To provide a platform for knowledge transformation and live interaction with experts through video conferencing facility

    - To inculcate habit of independent learning amongst the students through the use of self-learning laboratory

    - To provide experience of learning rather than reading from books by referring exclusively recorded video sessions prepared by faculty members.

    - To provide easy interface of the developed digital resources through QR codes.

- **The context**

    The quality of engineering education largely depends on the nature of learning rather than good credits. Sound practical knowledge is essential to become successful engineer and is missing at present and require bridging the gap between expected knowledge and the credits.

    ICT enabled teaching learning methods are instrumental in developing self and independent learning attitude amongst the students.

    In line with OBE, to enhance the learning ability use of ICT tools like, LMS MOODLE, Self-learning Laboratories, VC and Online Video Recordings of theory and laboratory sessions, DCD Facility available in campus to improve quality of lecture session.

- **The practice**

    Learning Management System – MOODLE, which is free and open-source software used to prepare lecture notes, laboratory manuals, presentations, university question papers with solutions, e-books, tutorials, videos, quiz, etc. by respective subject

coordinator. Assignments, mini projects, add value in improving practical and intellectual skills of students. MOODLE is available as a mobile app, which is highly beneficial to students for 24x7 accesses. Communication through WhatsApp, Google groups, text messages by the faculty for information dissemination.

Video lectures are integrated as part of traditional courses, serves as a cornerstone of many blended courses, which is main information delivery mechanism in MOOCs. Students can watch at their own place, pause, repeat small sections of the entire videos. Watching something being done before their eyes over and over again can be beneficial for learning comprehension. For naturally visual learners, a video can help them move from knowing to understanding, and increase their confidence that they are carrying out instructions correctly of faculties. So, institute recorded different videos of faculties while teaching and giving demonstration of practical sessions and it is uploaded on You-tube.

Virtual classrooms are the need of the present education system for effectively and efficiently disseminating knowledge. VC (video conference) lectures are now becoming a necessary and important tool and teachers are using it more and more **for**

teaching and learning in their classrooms. The technology facilitates learning by

enabling distant or remote learners to learn and collaborate with IITs and NITs

irrespective of their location. The technology has become a great tool educators

can use to improve their student's learning. Sometimes students get bored of the

teacher's teaching methods and class, which is why you need to break up that

monotony with a special guest speaker. Also, institutes that make frequent use of

video conferencing for teaching and learning give learners the opportunity to learn

from a slew of informative experts and specialists, while eliminating the hassle of

inviting a guest speaker to the classroom.

Self learning is also important since any learning is effective only when such

learning happens from within and not forced due to external circumstances. In

other words, self-learning is motivated by a desire from within which makes it

useful for learners to actualize the drive and the necessary motivation from within

so that such learning is enriching. Apart from this, the luxury of learning at one's

own pace and at a time of choosing means that students can pick up from where

they left off in addition to learning from any device or location that makes such

learning a leisurely experience. So, institute provides Self learning labs ion each

department which contains different materials for learning like URL of NPTEL

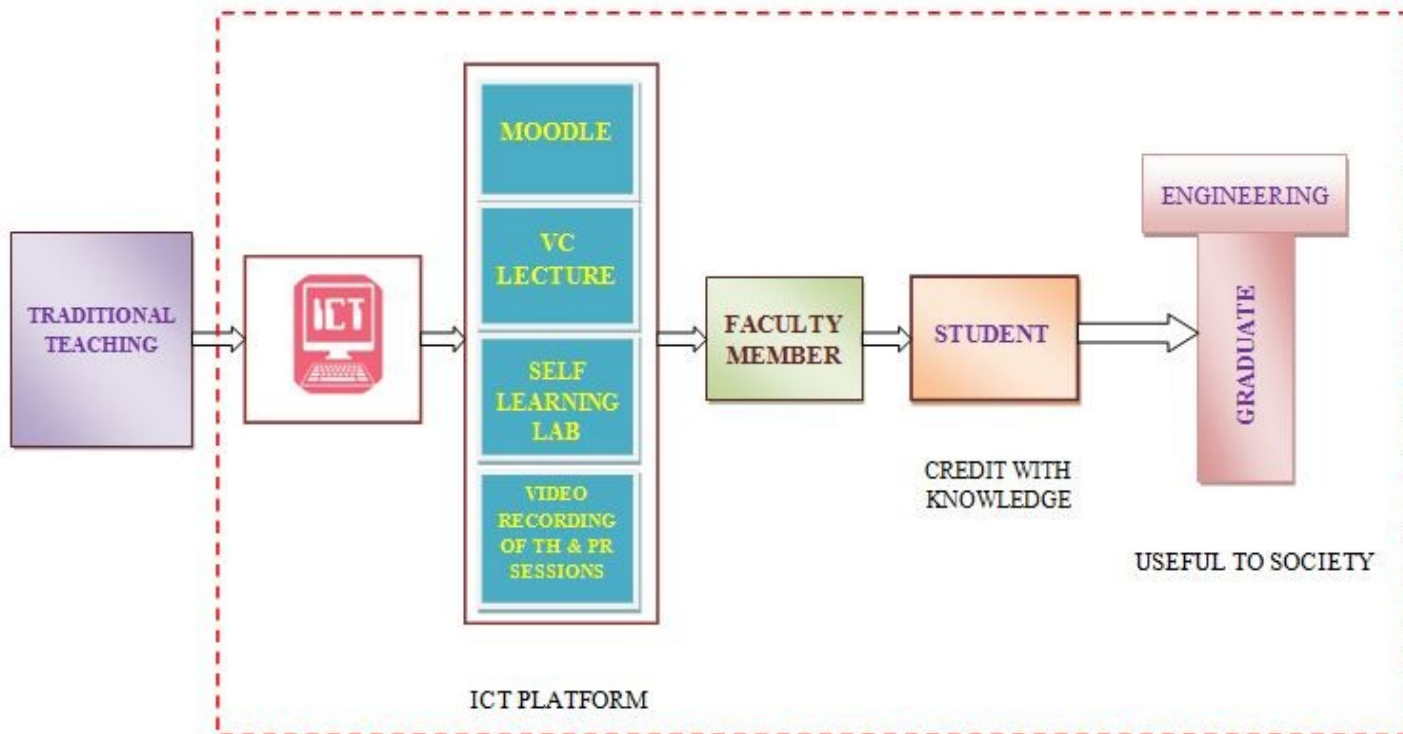videos, virtual labs, e-books and relevant learning materials.

The provision of smart board is also made available at selected locations in each department of the institute. Institute has seminar hall equipped with video conferencing facility for delivering online lectures. This will in turn boost the confidence and enhance the learning ability of the students.

- **Evidence of success**
    - [Learning Management System](#) on Moodle
    - Online Lectures and Practical Recorded by Faculties
    - Utilization of self-learning lab
    - YouTube link
    - QR Codes for Lab Setups
    - DCD Facility available in Campus.

- **Problems Encountered and Resources Required**
    - Faculty need to be trained
    - Extra efforts require for development of ICT based learning material.

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TRADITIONAL          ICT          MOODLE
TEACHING                                              FACULTY          STUDENT          ENGINEERING
                                  VC                  MEMBER
                                  LECTURE                                               GRADUATE

                                  SELF
                                  LEARNING
                                  LAB                                  CREDIT WITH
                                                                       KNOWLEDGE
                                  VIDEO
                                  RECORDING
                                  OF TH & PR                           USEFUL TO SOCIETY
                                  SESSIONS

                   ICT PLATFORM
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DIGITAL TEACHING LEARNING RESOURCES MODEL