

Best Practice: 1

1. Title of the Practice: Green learning environment- “Teach with Nature”

2. Objectives of the Practice: Inspire environmental and conservation stewardship by engaging students and the community in outdoor activities that connect them with natural surroundings. Encourage responsible natural resource use and a lifelong love of the outdoors. Build an environmentally conscious and literate citizenry. We have been exploring and exploiting our natural resources to the maximum extent possible. Now a time has set in indicating the disastrous consequences of overexploitation in a mad rush to fulfill our unquenchable desires and greed. This planet earth is the only known habitation for human beings. We advanced in various aspects of science and technology at an alarming speed. Now we are at a crossroads and have to ponder for a while about the future. If we continue our exploitation of natural resources without a rule and rhyme, we have to face the disastrous consequences and nature will boomerang at a certain point in the future. To avoid this calamity, we have to change our attitudes and adopt a nature-friendly attitude. We have to change our mindsets and habits. As habits die hard we have to struggle much to induce the principle of ‘live with nature’ in young minds. This can only be done in educational institutes. Nowadays technical education is playing an important role and it would be better to train these students on sound lines of green learning.

3. The context: Teaching in Nature is a structured approach to professional development in Outdoor Learning. It supports groups of educators to work together to use a nearby place that is special for nature to plan, implement, and evaluate challenging and fun outdoor learning experiences for their pupils. It combines collaborative, practical, and online approaches to support teachers through the next stage in their outdoor learning journey. It matches the experts on the curriculum (e.g. teachers) with the experts on the natural heritage. In the changed context of eco-consciousness, we have switched over to new approaches and methods. Here the principle of ‘**Green Learning Environment- “Teach with Nature”**’ plays a major role.

4. The Practice: The environment plays a significant role in the process of teaching and learning. In India, we had a rich tradition of the Gurukula System of education for many years where students used to learn things from their teachers squatting before them in the Ashramas made of thatched huts. The huts meant for classrooms were naturally ventilated. In summer it will very cool inside those thatched classrooms. There was no need for artificial lighting or artificial air systems like fans or A. Cs etc. The huts are very cost-effective, and they can be built by raw materials readily available in the surrounding nature. These huts don’t have acoustic problems. We can maintain them at a low cost. As they are eco-friendly there will be no problems relating to health. They provide a natural atmosphere for learning and teaching.

Our College is situated in lush coconut fields full of greenery. It consists of vast land where we can follow this type of education. We can have many thatched classrooms in the gardens where we can carry out teaching. At times the teaching in these classrooms in the changed atmosphere which is entirely different from routine classrooms is inspiring and interesting, the students enjoy learning things with great interest. A change from confining in a classroom makes the students feel happy. As the hut classrooms were situated at different places one far from the other there will be no much disturbance in the teaching and learning process. The teachers need not waste much of their energy to check the noise or disturbances from other classes. In the absence of unnecessary diversions, students can concentrate much on the subject and the teacher can feel at home in such a classroom atmosphere. There was no need to spend money on artificial lighting or artificial air systems like fans or Air Conditioners etc. The huts are very cost-effective, and they can be built by raw materials readily available in the surrounding nature. These huts don’t have acoustic

problems. We can maintain them at a low cost. As they are eco-friendly there will be no problems relating to health. They provide a natural atmosphere for learning and teaching.

During summer the frequent current cuts cause great irritation to sit in closed rooms. In that case, hut classrooms provide much relief to the students. We need not spend money on the aeration facilities, and we can save electricity. The fresh cool breeze from the gardens is refreshing. Every year we can reconstruct the thatched huts and debris can easily be disposed of as it decomposes, and such types of structures are eco-friendly. It is very easy to construct or to repair these huts within a short time.

5. Evidence of success: It is evident from the above that the environment plays a beneficial and significant role in the teaching and learning process. In our Indian tradition, this system of education where students learn things from their teachers in the Ashramas made of thatched huts is in vogue. The huts meant for classrooms were naturally ventilated. As the huts are surrounded by green plants, they pump sufficient oxygen for the students to inhale. As the huts are made of thatched material, there will be no radiation, and the atmosphere inside the class will be pollution-free. The huts which are in pyramid shape are better for carrying out meditation and education. That is why our temples and prayer halls will be built in a pyramid shape. Students studying in pyramid-shaped thatched houses will have much concentration. This concept of carrying instruction under trees and in huts was followed by Rabindranath Tagore at Shantiniketan with much success. Many took inspiration from it and started such types of educational institutions.

Our College is situated in lush coconut fields full of greenery and it consists of vast land where we can follow the Shantiniketan type of education. We can have many thatched classrooms in the gardens where we carry out teaching at times for a change. This may not be possible for some institutions located in cities and congested areas. As our institution is situated far from the madding crowds, teaching in these classrooms in a serene atmosphere will be inspiring and interesting, which is entirely different from teaching in a maddening atmosphere.

6. Problems encountered and resources required: Financial resources and changing the mindset of students are two major problems in implementing ‘Green Learning Environment- “Teach with Nature.” and we have to overcome these problems. We motivated our students as our college is situated in lush coconut fields full of greenery. It consists of vast land where we can follow the Shantiniketan type of education. We can have many thatched classrooms in the gardens where we carry out teaching. A changed atmosphere will be inspiring and interesting, which is entirely different from routine classroom situations. The students are being trained to enjoy learning things with great interest in the hut students and concentrate much on the subject. Our college management is ready to spend the needed amount for the uplift of the college and better service to the student community at large. They have been doing much in the field of technical education and they are ready to take up new ventures like this.

7. Notes(optional): Our college campus is spread over nearly 25 acres of coconut garden and full greenery. We want to utilize this unique opportunity of having a vast tract of land full of greenery at our hands. Keeping all the above things in mind to feel close to nature and the outdoor environment and to create a **‘Green learning environment’ and to ‘Teach with Nature’** we have developed 07 thatched huts for a congenial teaching and learning environment. Students can sit there, do their project work, interact with the faculty members, and also discuss themselves. The purpose of “Teach with Nature” is to create a traditional learning system and “out-of-the-box thinking” among the students and also to give live examples. Learning in the lap of nature gives the students an all-ameliorating experience and enriches one’s capabilities to learn things properly and profitably.

Best Practice: 2

1. Title of the Practice: Employable skill-based education:

2. Objectives of the Practice:

As per the motto of the central government to develop skills among the students of India, a comprehensive program 'Skill India to train and develop industrial, and entrepreneurial skills among the students was launched on this campus.

The main objective of this program is to strengthen the technical knowledge of the students. This training ensures that students attain the scope of their career in both their core and in the IT industry. The session starts from the very first year of their curriculum and exists until their placements in the final year.

1. Includes: Python, Data Analytics, Java C, Revit, Revit- MEP, AutoCAD, IoT, VLSI, Robotics, Tutorials, and related programming lab practice problems.
2. In addition to the languages within the curriculum, the newer batch gets to learn the additional language – Python, which happens to be growing and on-demand in the market.
3. Timed programming tests, to serve as a mock test for the actual placement process.
4. Related analytics and Metrics for Training and Placement by the department as well as associated faculties.
5. Students will get individual performance reports. The Technical Association Activities of each department are integrated with the curriculum within the timetable. The office bearers are nominated and the planned activities are conducted regularly throughout the semester.

3. The Context: There are many gaps between the requirements of the industry and acquired abilities of fresh graduates from engineering colleges. To bridge this gap the students must be equipped with various types of skills.

4. The Practice: The activities start with the first working day and close with a Valedictory in every academic year. The technical competencies of the students are identified in conducting various competitions and quizzes. The guest faculty are invited for talks or to conduct workshops. A Valedictory is conducted during the end of the academic year and the distribution of certificates on that day program. In our college, we have a separate cell to train the students in 'Employable skills' and students make the best use of it.

5. Evidence of success: The technical competencies and diverse talents of the students were brought to the forefront and were encouraged to take part in national-level competitions. Some of

the students explore their areas of interest to present papers in Intercollegiate Technical Competitions.

- Knowledge in many programming languages from the basics
- The fundamental concepts of the language get stronger
- Performance evaluation for each student at the end of the session
- Course completion Certificate will be provided after each course
- Students will be well-trained in core concepts and will be ready to face the interview by the time they reach their final year'.

Learning (Code Tantra) that helps to practice codes at any time; training in many programming languages; test cases that match real-time problems; training based on core concepts; performance evaluation

SALIENT FEATURES: The salient feature of the skill development includes: -

Online test at the end of each session and Course certificate.

6. Problems encountered and **Resources Required:** Budgetary Allocations made

7. Notes (optional) :

What is the way forward towards a skilled India?

We often hear industries complaining about graduates not being job-ready and academicians speaking about the nonexistent help of industry in preparing the workforce of the future. The best way to involve industry during the education of the students is to integrate classroom learning with on-the-job learning. This will provide adequate opportunities to all stakeholders to understand each other's capabilities, and strengths and help in strengthening weak areas.

Subjects such as Behavioral skills, Communication, IT, Teamwork, Analytical ability, etc. can be developed from secondary classes for students and they can then be introduced to trade-specific skills from class nine which can be continued right through the graduation years and beyond. Learning new skills and gaining knowledge is a lifetime activity. This is not something to be set aside for years of higher education.

We aim to foster a set of skills in budding engineers to improve their employability. Our main aim is to inculcate certain skills through training.

The salient features of employable skill-based education are:

Vocational skills need to be aligned very closely with the education system and need to begin in the early years of education.

Every student should be exposed to a few basic skills and a few specialized ones which they can choose to learn as they go along the education path.

The initial few years should be spent providing an overview and preparing the students on what skill sets they want and will be good at.

Gradually, teach them a particular skill over the next few years, such that when he/she completes graduation, they are ready for employment in the given sector.

Traditionally, we have been teaching mostly through classrooms but the methods of learning across the four classrooms viz. On-campus, On-site, Online, and On-The-Job should become the route to learning. A schedule and structure for the duration of each classroom can be put together tailored to the students on the basis of their class, skill sets, and background.