



Sipna Shikshan Prasarak Mandal's
**SIPNA COLLEGE OF
ENGINEERING & TECHNOLOGY,
AMRAVATI**
Accredited by NAAC with Grade 'A' | NBA Accredited
IAO Certified | ISO Certified



Best Practices

1. TEJOMAY: 220 KW On-Grid Solar Power Plant

Objectives

1. To minimize electricity bill.
2. To build carbon-free ecosystem.
3. To shape the next frontier of clean energy.
4. To minimize the impact of the energy sector on the environment from source to use

The context:

As the yearly power consumption of the institute was more than Rs 40 lacs, we need to search for an idea which minimize the expenses on electricity as well as environment friendly. For the same we have planned for the on-grid solar power plant which not only cut down the electricity bill from MSEDCL, but it also contributes towards the ecofriendly environment. The institute has installed 220 KW on-grid photo-voltaic Solar Power Plant at the rooftop of the buildings. TEJOMAY- Solar Power Plant was inaugurated at the brilliant hands of Hon. Shri Madanji Yerawar, Energy Minister of State. The first solar unit of 60 kw was installed in January 2016. The installation was added with 100 kw in August 2017 which was further extended in December 2018 by 60 kw.

The Practice:

This 220 kw Solar Power Plant generates 880 kw (Units) per day. Up to November 2021, a total of 11,91,301 kwh (units) of electric energy is generated which in turn avoided the emission of 700 Tons of CO₂ in the air. Thus, it is helpful in keeping the mother planet greener. From the statistic maintained by us, it was noted that out of total energy consumed we used 60% of solar energy.

Evidence of success:

We have maintained the statistics record before and after the installation of solar plant. It is observed that our electricity bill has been drastically dropped and we are utilizing 60 % of the total energy generated by solar power plant.

Problem Encountered and Resources required.

1. In cloudy climate, the generation drops.
2. Accumulation of dust on solar panel reduce the power generation. This is overcoming by periodic maintenance by cleaning the solar plate.
3. Some of the solar panels have been damaged due to riot by monkey on rooftop.

2. Teacher Guardian Scheme

Objectives of the Practice:

- 1) To motivate the students for better and better Academic Performance
- 2) To motivate the students for Professional Excellence
- 3) To motivate the students for Higher Studies and Research
- 4) To motivate the students for successfully getting Professional Employment
- 5) To motivate the students for at least one Extra Curricular Activity
- 6) To solve all types of problems faced by the student.

The Context:

We as a 'Sipna Parivar' has introduced this scheme to have one to one interaction with students for a batch of about 20-22 students, a teacher is assigned the role of Teacher-Guardian. Teacher Guardian works as a friend, philosopher, and guide for these students. He/she keeps the trail of every student's day-to-day activity, and other related information of students. He/she encourages the students to participate in co-curricular & extracurricular activities He/she gives academic feedback to the parents/guardians regularly. He/she also counsels the students to solve difficulties encountered not only in college campus but in their personal lives too.

Teacher guardian acts as a mentor to students and offers them emotional and academic support along with motivation. The teachers of the institution take up the responsibility of safeguarding and nurturing the newly admitted students.

The Practice:

This scheme is implemented effectively for First Year to Final Year students for the better coordination and communication between staff-student and staff-parents. For every twenty to twenty-two students, one teaching faculty is allocated as a teacher guardian. The respective faculty takes continuous follow up of academic, curricular, and co-curricular development of every student and identifies students having good, average and poor performance. The teacher guardian makes calls and inform about the same to respective parent and also called them for counselling if required.

Evidence of Success:

Few of the evidence of success are quoted as example:

- Due to motivation at the time of TG meeting student understands the concept of Professional Excellence, Professional Employment. Students get aware of all the available opportunities for Higher Studies & Research.
- When students face difficulty in understanding the subject, the concerned staff members were informed and counselled by the Head of Department for improvement.

Problems Encountered and Resources Required:

Initially the students were hesitating to speak about the problems then TG made them speak out by talking with them in informal way.

3. Sipna Nature Club



Objectives of the Practice: To work for and conserve nature through all aspects by carrying out various activities involving students and maintain the ecological balance.

The Context: The most challenging issue was the establishment & to start nature club in technical institute. Student's involvement & creating a sense of duty to care for the Earth was the difficult task.

The Practice: The most renowned activity of club is green sapling in earthen pot and jute cloth holder with motivating messages to welcome the guest instead of bouquet. In spite of technical institute we are giving importance to eco-friendly activity.

Evidence of Success : The most renowned activity of club is green sapling in earthen pot and jute cloth holder with motivating messages to welcome the guest instead of bouquet is not only appreciated by college but also by external guests, Ex-Chief Minister Hon. Devendra Fadnavis & renowned actor Subodh Bhave. Many people were inspired & start using green sapling in their personal programs also.

Problems Encountered and Resources Required: When we have planned for above activity, first problem was, that who will take the initiative, interested students, difficulty to collect resources such as efficient potter to produce good quality, proper sized pots, painting of pots. Second problem was which type of saplings should select.

Notes: Along with above activity, Plastic Eradication Drive is another activity of nature club in which nature club members have take lot of efforts & worked from ground level. One thing I should mention here we have spread awareness in various schools by conducting guest lecture & practically also.