

7.2.1 Two Best Practices

1. Title of the Practice:

NOISE POLLUTION MONITORING & CONTROL

Goals:

- To percolate the message of environmental protection and conservation
- To minimize the gap between the laboratory and the field.

The Context

The control measures are very essential by increasing the vegetation cover, by arranging awareness programs in the society, strict implementation of environmental laws and using protective devices.

The practice:

During the years 2008, 2009 and 2014 the project was carried out for which three main festivals were identified during which the analysis was done. The project is a part of environmental education in an informal way. In the city of Amravati five most populated areas and squares with heavy traffic load were selected as sample stations. The Environmental Science Department of the college was the first to undertake such an activity which provided direct exposure and involved students' interaction to create live awareness. The paper that was presented in Avishkar Daily analysis was shown on local RCN Channel.

Evidence of success:

Noise pollution levels during the festivals were much higher in comparison to the standard limits. The noise levels due to DJs and sound systems were controlled and reduced to some extent as compared to those of the three previous years. Local government agencies have implemented some stringent measures to combat with the noise pollution problem. The DJ noise level limit has been fixed at 120 dB, with a time limit up to 10.00 pm at night. After the given time limit noise disturbances if created are liable for punishment and penalty.

Problems Encountered & Resources Required:

- Public negligence and criticism faced by the students.
- Activity not taken positively by the traffic police and common people.

Note (Optional): Awareness programme, Air, Water and Soil Monitoring and Analysis

2. Title of the Practice:

Design and Assembling of Experimental Kits

The Context:

- Designing and Assembling of Experimental Kits through the involvement of teachers, staff and students is a routine practice of the department.
- Through this activity department has not only saved money but has provided an opportunity to advanced learners to learn more about electronic and electrical devices.

Goals:

- To impart hands-on training of experimental kits design.
- To prepare low cost and user friendly kits.
- To identify the required electronic component of perfect ratings, make, perfect value (for e.g. active device like F.E.T., MOSFET, SCR, Transistor, inductance, capacitance of desired value)
- To identify the components from e-waste for its reuse in the experimental kits designing.
- Contribute to reduce the global problem of e-waste management.

The practice:

Through this activity the student can set up his own repairing unit at his own household. If he extends his unit, he can provide the employment opportunities to few of his colleagues and friends.

The students are encouraged to use the components/ devices from the e-waste produced in the college campus. The following sources of e-waste are identified by the teachers and students for their use in experimental kits, such as discarded cameras, CD players, TVs, radios, drillers, fax machines, photocopiers, printers, toners, ink cartridges, batteries, re-chargeable batteries, digital calculators and clocks, CRT monitors, electric solders, computer mother boards, SMPS, UPS, electronic machinery such as oven, fan, air-conditioner, iron, heater and laboratory electronic equipment's, etc.

Evidence of success:

- Students show keen interest towards equipment/kits repair and assembling.
- They identify the fault/defects in the circuits, components.
- Defect in the connections, wrong components or faulty components.

- Students understand the value and importance of reuse of components from e-waste.
- Reduction in expenditure on loose components by 10% of annual budget.

Problems Encountered & Resources Required:

None.