BEST PRACTICE(1)

1. TITLE OF THE PRACTICE

PROJECTS ON ENVIRONMENTAL PROBLEMS AND ISSUES.

2. OJECTIVES OF THE PRACTICE.

1. To orient student teachers with planning, designing and conducting of environmental awareness projects, activities, and case studies in local contexts.
2. To expose student teachers to different kinds of community projects in the locality.
3. To build and disseminate awareness of environmental issues at local level.
4. To develop relevant skills and attitudes towards environmental concerns among student teachers and the community.
5. To promote awareness about the harmful effects of the use of non-biodegradable substances on the environment.
6. To encourage Recycling and Reuse of waste material and Reduce consumption.

Underlying Principles/Concepts Of The Practice.

One of the main principles of the practice was to produce learning outcomes which include environmental consciousness, and also the commitment and capacity to act on environmental matters among the community. The practice was carried out to work toward long-term sustainability through the integration of education and communication capacities within local community and also recognise the complexity of environmental issues and the need to develop solutions collectively, in processes where everyone had something to learn and something to contribute. It also aimed at building networks of environmental education and stimulating environmentally positive practises by organizing workshops, seminars and group discussions in schools, colleges, churches, village, town, and undertaking of awareness drives in various locations.

3. THE CONTEXT.

Educational institutions are the places where the contact with the society is more, and thereby bring remarkable changes in the mindset of the public. Moreover education in general and the teacher education in particular have a special role to play in building awareness of sustainable development among the prospective teachers. Teacher's knowledge and understanding of environment and developmental issue and level of commitment, attitude and devotion could determine the future of the society and its development.

Though teaching and learning must begin to reflect environmental issues, there is an emerging consensus that institutions must also model sustainable practices. Such education contributes strongly to sustainable development by training and expanding prospective teachers' minds in researching solutions to the environmental challenges. After completing their training course, the student teachers can become environmentally literate and disseminate knowledge to the masses

and as they get dispersed from the institute into their specific career, they take with them not only the theoretical aspect but the practical applications, the green practices and approaches they were involved with at the institution and take initiatives in stimulating and guiding the sustainable use of natural resources.
Therefore with this view, the student teachers undertook different activities and projects towards reviving and inculcating the essence of "save environment" for the local community. Its aims and objectives were to create awareness to the communities in the field of pollution, conservation and recycling, use and propagating environmental education by highlighting on environmental issues and problems to bring about considerable change on environmental issues and problems.

4. THE PRACTICE.

The teacher educator-in-charge assigned the student teachers to look carefully at the environment in and around Kohima, and make a list of factors that negatively affect its environment and sustainability. Problem areas were identified from the local context and according to their area of interest the student teachers selected different themes for the practical work.

Pollution

To understand how pollution impacts an ecosystem, the student trainees selected a stream in the neighbourhood (Secretariat Area) Kohima. Through this study it was found that the sewage-contaminated water caused eutrophication, and consequently affected the aquatic life in the stream.
The main features covered in this survey were:
Name of the pollutants: oil, unwanted items, car parts, fuel containers, paint cans, detergents lead, sewage water, toxic waste etc.
Possible source of the pollutants: automobile repair shops, garbage or rubbish and domestic sewage dumped by the people in the neighbourhood.
Control and prevention of water pollution: The student teachers gave awareness to the community on the effects and prevention of water pollution specifically stressing on how it affects aquatic organisms.

Recycling

Compost Heap For College Vegetable Garden And Potted Plants.

This was a project carried out collectively by the faculty and the student teachers. A spot was located in the college campus that receives a lot of direct sunlight to help keep the compost pit have the right temperature. A hole was dug in the ground outside the science lab away from the classrooms to avoid emission of unpleasant smell as it decomposed. Over time, throw away materials like vegetable scraps, fruit wastes and grains, grass clippings, leaves, vegetable stalks and seeds, used magazines and newspapers, etc were added. Scraps from the College and SCERT canteen and nearby shops were also collected from waste bins distributed to them. Once the organic scraps to the compost pit were added, the pit was backfilled with soil. The pile was turned every 3 weeks, watered regularly for about 3 months and the compost was reused as a nutritious supplement for the vegetable and potted plants in the college. This method came at no cost. With very little effort and little extra labour for digging, it was a truly remarkable experience. This project helped highlight the benefits of viewing organic residuals as resources rather than waste.

Making and distribution of Paper Bags to nearby shops.

Making of paper bags was undertaken to reduce the impacts of the waste that community produce. A good number of paper bags were made with old newspapers and distributed to the grocery shops. The student teachers also highlighted the problems and the harms of using plastic bags in depth.

Making of Doormats

The student teachers collected pieces of fabric from tailoring shops in and around Kohima and made different designs of doormats by recycling the pieces of fabric with the objective to protect the environment. They were also given awareness on how they could minimise their contribution towards environmental pollution and how effects of climate can be reduced by avoiding burning of waste cloth which releases carbon dioxide into the air.

CONSERVATION

Conservation of Trees.

The student trainees as part of their practicum on Environmental Education conducted a small survey of firewood and its consumption which was carried out in few households in Kohima. Households to be surveyed were randomly selected. It was found that maximum of the population surveyed depended wholly on firewood for cooking. Awareness on sustainable management and for reduction of wood consumption, consequences of small-scale tree cutting and tree planting and also precautions to be taken to economize firewood consumption were given.

Study on Conservation of Wild Life in Chizami Village, Nagaland.

With an objective to educate the local people and encourage responsible community participation in conservation initiatives, some student teachers conducted a study and investigated various aspects of hunting practices in Chizami Village, Nagaland. The study recommended the need for legislation and implementation by the village elders, to take initiatives to stand for conservation and education, build awareness and creation of livelihood options for hunters in the village. It pointed the need to reconcile hunting with wildlife conservation, to see the engagement of local communities in alternate livelihoods and in particular measures to assist the hunters in their profession.

Study of Medicinal Plants And Its Conservation In And Around Kohima.

The student teachers conducted a survey of medicinal plants through discussion and informal interviews by interviewing local healers, village elders, and farmers. Different people provided vast information regarding medicines and traditional health care practiced by them.

With their help the student teachers identified a total of 24 (twenty four) species of medicinal plants used by the locals in and around Kohima. Through this study it was found that the prescriptions were orally administered or locally applied. The scientific names, plant parts used and medicinal uses/ information were recorded and exhibited by the student trainees in the college.

Awareness Drive On Dangers of Consuming Smoked Meat.

Consumption of smoked meat has been linked to high prevalence of NPC (Nasopharyngeal Cancer). In a study done in 47 known cases in Nagaland, smoked meat was found to be a risk factor for NPC.

As a part of an environmental education project, the student teachers armed with this knowledge, carried out a study in a few households in Kohima. The goal was to obtain information on the quantity of smoked meat consumed per household per month and how the hazards caused by it can affect the health of the local consumers. The study found that each household consume about 20 to 30 kgs of meat per month which is rather high. It was also found that only few people understood that eating smoked meat can cause cancer. Therefore awareness on the dangers and risks of consumption of smoked meat was also highlighted.

Constraints/Limitations of the practice.

While there were significant and positive improvements in environmental awareness and education among the people, there were considerable challenges. Time, money and resources were the main constraints of the practice.

5. EVIDENCE OF SUCCESS.

There was positive feedback from the student teachers and community members. Further the community also got involved and even urged the village council particularly in Chizami to propose environmentally sustainable and beneficial projects. Through this practice a number of environmental and sustainable practice issues which were unrealized earlier came to light.

6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED.

Some of the problems encountered and resources required in carrying out the different projects was that local interest and capacity to address environmental problems, specifically more locally driven environmental strategies were lacking. There was not much local initiatives, including perhaps how best to define environmental problems and issues in the local context. Some of the projects were too difficult or too expensive to monitor well enough to support the programs initiated. The availability of time and capacity of some student teachers limited the programmes, projects and campaigns that could have been implemented. The student teachers' understanding of environmental issues was limited and as a result they were unable to envision the many ways in which their understanding could have been related to an environmental framework. This situation existed because teacher training and assistance were minimal, and very few materials had been collected to aid or inspire teachers. Other important factors that affected the project success were that there was a lack of insight into the effectiveness of the specific programmes and it was difficult to determine where they have been successful in achieving the desired impact. In addition to that, many people particularly at the local level had little or no knowledge about sustainability of environmental resources. For instance, when the shopkeepers were asked whether they agreed that plastic bags caused environmental pollution, they replied with a positive note. But when their effort towards the environment was asked, they were speechless. Consequently, all these factors limited the impact of the projects carried out. There is therefore, a significant need for an environmental awareness, education and training impact study to assess effectiveness and make recommendations for improvements.

7. NOTES.

As environmental sustainability is becoming an increasingly important issue for the world, the role of educational institutions in relation to environmental sustainability is more prevalent. Given the influence that a teacher has over the future generations, Teacher education institutions in particular should invest in greener campuses, greener curricula, and ways of engaging staff, students and community. Educational institutions should come up with innovative ways of harnessing the energy of their students and resources of the communities in which they are located and effective Environmental Management Systems (EMSs) must be adopted so as to manage and assess an institution’s impacts on the environment.