

Vidarbha Youth Welfare Society's
INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH
Borgaon (Meghe), Wardha (M.S.)

Best Practices

2020-21

Best Practice 1:

1. Title of the practice:

Green Campus:

2. Goals:

- a) To promote plantation drive in the campus
- b) To promote and adopt a practice of waste management.
- c) To inculcate energy conservation culture among students
- d) To encourage the students for the use of bicycle or 2 wheeler with sharing
- e) To maintain cleanliness in the campus
- f) To provide clean, safe and potable water to all students, staff and guests
- g) To develop and maintain the water management system in the campus
- h) To optimize the operation of electronic equipment

3. The Context:

The environment issue has become a world-wide concern in the past decade being the focus of dimension in variety of forums both at national and international levels. Because environmental problems are rooted in economics and social policies, they occur at all levels from local to global and success requires action by many players over long periods of time. The government is responsible for dealing with these problems and working towards solutions. Accordingly, the government is trying to address this over the years by creating various policies, programs enacting environmental legislation and through interaction with institutions and treaties laws and regulations and expenditures.

Environment is mutual responsibility for society. In order to mitigate the risk associated with waste, it is important that management should always try to identify and evaluate the nature of the risks involved and then try to devise ways and means of managing those risks.

The main objective for the implementation of Green Campus initiative is to reduce the negative environmental footprint on the environment and to explore the possibilities to use renewable energy sources. This practice will help in identification of ways and means to

sustainably contribute and reduce gaps and make the Institute environment friendly. It will ultimately support community to combat various environmental and social issues as feasible. Various efforts are already initiated by Institute towards implementation of sustainable initiative, application of efficient technologies to save energy, plantation etc. College has established Green Campus Committee which has conducted various Environmentally Friendly activities to create awareness amongst the faculty and students to reduce energy wastage and also to society on environment safety and protection. The college building is designed to make best use of day light and avoid the heat in-grace. Blinds are available in office to control unnecessary heat in-grace. The building is situated in such a manner that it is getting the full advantage of good airflow enabling good ventilation. The building has large windows and open space in all directions. During the day time, it is possible to carry out activities without air conditioners and air fans during operational days.

4. The Practice:

Considering the responsibility of the Institution, many programs have already been conducted by IPER for making the campus eco-friendly and the efforts have been taken for energy saving awareness, carbon emission reduction, water sustainability, waste management, tree plantation, rain water harvesting etc. Tree plantation drive has been organized at IPER every year. Poster Competition, Blood Donation Camp, Yoga Day, Swachata Janjagaran Rally etc are some of the key initiatives of the Institute for encouraging sustainable behaviour via education campaigns. More than 60 % students and 90% staff of the college commute by their own 2-wheeler and sharing basis. More than 25% students reside in hostel within the college campus and rest of the students of the college commute by walking. It shows sustainable behaviour of staff and students for peers and community. Students participate in activities conducted by college on environment and sustainable development.

The major source of energy is electricity followed by usage of diesel in the generator as back in case of failure of grid electricity. Students and staff are aware of these sources of energy which are utilized by the college and has created awareness among them to reduce energy wastage. The usage policy of photocopiers, fax machines and other equipment users is power on when in use and power off when not in use. There is no idle power consumption. The college timings are from 9.30 AM to 5.30 PM. Thus, requirement of daytime lighting powered by electricity is limited. Energy efficient lighting system is followed by the institute. Thus, LED's are considered for installation as night lights and security street lights by the college. The college avails the sensor-based lighting arrangements to control the night illumination. There is a significant decrease in the consumption of grid electricity from 154

KV to 54 KV as per the energy bill. The source of water is well and bore well which is utilized for drinking after purification, in the wash rooms and for cleaning purpose. The waste is given to the Municipality for disposal. The urinals are flushed periodically and manually. The rain water is harvested over the college building. The college has installed sprinkler and drip irrigation systems for gardening. The college has also laid the cement blocks. This enables the rain water falling on the cement blocks to flow and get harvested.

The college premises is kept clean. Thus, the chances of litter polluting water table are negligible. There is a culture of the two-sided printing. Paper is not wasted. The college has also started calculating the carbon footprint from 2020-21. The class room and labs are well ventilated and spacious. This minimizes suffocation to students by improving air changes and hence the air quality. Institute has taken initiative towards plastic free campus. The students are encouraged to use waste bins which are placed in the college. The internal correspondences and various functionalities are taken care by the electronic means like emails, sms etc. E-waste is stored into the scrap bin and is given to the agency for proper disposal. MOU of E-waste handling is executed. The plant waste is composted in house. Vermi culture compost is obtained from waste leaves. The liquid waste from lavatories and other sources are disposed through sewer line. The chemical waste is neutralized in the labs and flown or dumped into the soak pit. Cellulose and paper waste is stored in a particular place and when appropriate amount of waste is accumulated, a tender is released and quotations are requested. The waste is handed over to the agency which quotes highest price. The biomedical waste is incinerated in the machine and the ash is buried in the ground. The college campus has several trees i.e. college garden and a botanical garden with various rare and medicinal important species. Every year plantation programme is carried out in the campus as well as outside the campus. Students are also involved in plantation programme in surrounding locality. There are 1998 fully grown trees as well as shrubs in the campus.

5. Evidence of success:

- a) Adequate awareness among the students, staff and other stakeholders is developed and reflected from their behaviour.
- b) Green cover is substantially increased in and around the Institute.
- c) Negative environmental footprint is significantly decreased as per the observations of Green Audit 2019-20.
- d) The use of efficient LED based lighting is increased in the premises of the Institute
- e) The college has successfully completed the Green Audit from session 2017-18 by Energy and Green Audit Team, Sustainability solution, Nagpur

- f) Table water level is significantly increased in the area of the Institute as evidenced by the level of well and bore well.
- g) Clean and potable water is available to staff, students and guests.
- h) The campus of the college is now plastic free
- i) E-waste, plant waste, sewage waste, chemical waste, paper waste and biomedical waste are not dumped in the Institute premises and are disposed of regularly according to the developed procedure.

6. Problems encountered and resources required:

- a) Need to calculate the water footprint to compare its performance with national and international consumption standards
- b) Need to install the Solar PV system (renewable energy) for further reduction in the energy bill of the Institute.
- c) Need to equip students and staff washrooms with the proximity sensors to control the lighting arrangements.
- d) During the lockdown period (Covid-19 Pandemic), it was difficult to maintain the cleanliness due to shortage of manpower.
- e) The 2 star AC need to be replaced by at least 3 star AC for reduction in energy consumption.
- f) Need to install rain water harvesting system on the auditorium as well as hostel.
- g) Need to replace existing conventional taps with automatic faucets and dedicated flush at urinals in place of periodic manual flushing.

Best Practice 2:

1. Title of the practice:

Effective teaching strategies

2. Goals:

- a) To make effective teaching and effective students learning and to create more fun for students.
- b) To create an active learning environment and to improve the attention of the students.
- c) To enhance motivation of students to learn and to promote collaborative learning.
- d) To help students to organize their knowledge and to progress on the right track.
- e) To help students to grow individually and meet deadlines.
- f) To push the students out of their comfort zones by understanding their strengths and weaknesses and giving responsibilities accordingly.
- g) To help students to productively manage their time.
- h) To accelerates professional growth of a teacher by improving teaching skill and attain teaching excellence.
- i) To produce good quality output for the profession and ultimately for the society.

3. The Context:

With a dynamic environment, the classroom brings together students from various abilities and personalities. To involve students in high-density reading and writing instruction, a teacher requires to have the ability to deal with each and meet students' individual needs.

Teaching strategies refer to the techniques teachers use to deliver their lessons. Effective teaching strategies help students become actively involved in the learning process. When done right, effective teaching strategies also support students in reaching their learning objectives.

Teaching students come with a lot of responsibilities and challenges. Keeping students involved in their learning process and making it interesting all the time is something that effective teachers constantly strive for. Since verbal lectures, blackboards and textbooks are not sufficient to keep today's students actively engaged, teachers need to adopt the best practices in teaching.

Adopting new and effective teaching strategies makes it easier for students to absorb their lessons. It also stimulates young minds to be creative and come up with innovative solutions.

4. The Practice:

At the beginning of the session, an academic calendar consisting of holidays, events, tests and examinations were prepared, keeping in mind the academic calendar of Parent University and the students, teachers and parents are made aware of it. This allows the teacher to plan their teaching schedules. A lesson plan was prepared by individual teachers after the syllabus allocation. The textbooks and reference books were suggested for topics covered. A Course hand-out which contains information regarding the calendar of events, curriculum and a question bank was given to the students from time to time. During the course of the semester, study materials were given to support the online teaching. A time table was prepared in consultation with all the teachers. Subject-wise workload was distributed to faculties by the Head of the Department. Regular classes and practical were conducted as per timetable and teaching program was started from the very first day of the session.

At the beginning of session, the basic concepts and fundamentals of each subject were taught to the new entrants i.e. B. Pharm I, M. Pharm I students. Extra/ Remedial classes of each subject were also held for the better understanding of the subject. Personal difficulties of students were solved through teacher-students interaction in cluster meetings. Subject difficulties of students were solved in extra classes, as and when required. Efforts were taken through curricular, co-curricular, extra-curricular activities and sports for their all-round development. Teaching plans were regularly monitored by head of the concerned department and Principal. All the faculty members recorded their daily activities (class, extracurricular, details of staff meetings) in their work dairies. The academic diaries are helpful in preparing annual academic planning and daily accountability. Exam dates were included in the calendar of events and the same were communicated to the stakeholders at the beginning of the semester.

For the purpose of continuity and learning that endures, teachers asked inquiry questions to put all the past lessons into context. It gave an accurate picture of where students stand and which areas need to be re-visited. It was observed that students can learn better if audio-visual aids are used in teaching learning process. Use of this aid creates a significant impact on learners. Hence in addition to chalkboard, teachers of the IPER started use of PPTs and short videos both at undergraduate and post graduate level since many years. In a world where information is easily accessible to all, sometimes it is very boring for a student to sit through a PPT. which is loaded with text and information. Hence an image, a keyword, graphical representation, tables, flow chart and video are used for preparation of PPTs to stimulate an insightful class debate. Many undergraduate students were found unable to process words but suddenly began to understand a complex idea through the right images.

Due to Covid-19 pandemic and continuous lockdown, the IPER has completely shifted its teaching, learning and examination from offline to online mode with licenced Moodle based Cisco-Webex learning management software (LMS). Theory classes, practical, sessional examinations, class test and unit test were conducted by online mode for B. Pharm. and M. Pharm. throughout this academic session. Syllabus and study materials were made available on Moodle 24 x 7 for students.

Collaborative learning is also promoted among the students by forming the groups of four to six students. It helps them to attain higher thinking, delegating roles, and tackle complex issues together. It thus developed various skills through discussions, teamwork, and activities. Various assignments, project work and other activities were given to the students to help each other and compete in a group. Open discussions were regularly held in the last ten minutes to foster communication and eliminate the challenges.

Regular assessment of students was carried out throughout the year to maintain a positive classroom environment that motivates them to perform better academically. It also helped to accelerate the learning pace of the students by determining what they are excelling at and what part of their curriculum do they need to focus on

Students' feedback is as important as the teacher's feedback for the Institute because it allows understanding their point of view on the teaching style, approach, and overall learning experience. Hence students are always encouraged to share their feedback which helps the teacher to mold his/her teaching strategies and improve wherever required. It also teaches the students to find loopholes, discuss their problems, and learn to be expressive.

These learning strategies motivate students by improving their engagement, capturing their attention and encouraging them to focus on not only remembering course material, but truly understanding it.

5. Evidence of success:

- a) We were successful in pushing the students out of their comfort zones by understanding their strengths and weaknesses and giving responsibilities accordingly.
- b) These learning strategies allowed students to make meaningful connections between concepts learned in class and real-life situations.
- c) It became easier for teachers to better monitor and assesses student performance through different methods of evaluation.
- d) These strategies helped students to gain a deeper understanding of course material and encouraged critical thinking, beyond basic retention and surface understanding.

6. Problems encountered and resources required:

Many teaching learning strategies were developed by the teachers since many years. But due to Covid-19 pandemic, only online teaching mode was used for this academic session. Therefore no face-to-face interaction with students was possible during the course of study. One of the biggest challenges during online teaching learning was the struggle with focusing on the screen for long periods of time. Another key challenge was the internet connectivity. There was a lack of continuity in teaching and learning due to inconsistent internet connection