

Institutional Best Practices

Academic Year 2022-2023

Best Practice - I

1. Title of the Practice:

Strengthening the Research Ecosystem: A Holistic Approach

2. Objectives of the Practice:

Promotion of research and strengthening of research ecosystem is an integrated aspects along with teaching and learning at our institution. It acts as a catalyst in development of the research attitude amongst the learners and faculty to contribute in the overall performance of the institution. Even it has been prioritized as the constructive step to develop research aptitude commensurate to higher education policies. We, at our level framed different policies to create, encourage and make suitable ambience for seamless promotion of research activities at UG, PG, and Ph.D. levels. It has been significantly linked with innovation and creativity of the researchers.

- **The practice has following set of objectives such as,**
 - To develop research interest, awareness and aptitude amongst researchers by following the comprehensive academic plan.
 - To provide infrastructural and learning resources to accomplish research goals.
 - To make effective implementation of research policy at different levels.
 - To commence research oriented syllabi of various courses/programmes intertwined with contemporary issues.
 - To promote research aspects through, 'Aavishkar Research Convention' and Anugoonj- a research journal of National Service Scheme
 - To motivate academic departments for organization of research activities to unfold new areas of their domain
 - To strengthen the healthy collaborations for research activities
 - To provide financial assistance as an institutional accountability
 - To provide opportunity to the researcher for innovations

3. The Context:

Research activities stamped its distinctiveness and uniqueness in the development of the college as one of the leading and growing institutes. Due to its lively presence, the college has embarked on new academic journey, since the commencement of research programmes. In designing and implementing the practice following challenging issues have been addressed;

- Preparation of efficient annual plan of research activities
- Promotion of research knowledge and its basics through different policies and procedures.
- Making infrastructural and learning resources available to quench the academic desires
- Effective and successful implementation of 'Research Policy' of the college as per the guidelines of IQAC.
- Commencement of research programmes having relevance with demands of contemporary scenario.
- Provision of financial assistance to researchers.

4. The Practice

Procedure

Our college promotes the various aspects of the research by creating favourable and appropriate atmosphere, whereby the researchers and departments are motivated to undertake research activities as per the plan. In line with this, in the beginning of the academic year, the 'Research Advisory Committee' convenes the meeting and prepares the plan of action and its effective ways of execution. Thereafter, the notification is displayed regarding the new admissions for Ph.D. at our research centers that includes English, Economics, Hindi, Accountancy, Business Policy and Administration, Chemistry and Biotechnology.

- **Aavishkar Research Convention:** To develop research culture and scientific temper in students' personality is the basic objective of the Aavishkar Research Convention. It is the collective efforts of college to cultivate the research among the students and the teachers. With the help of

‘Research Advisory Committee’ the projects are formulated, improvised and selected at UG, PG and Research degrees. The subsequent mentoring is done by inviting experts in concerned field and students are deputed to University and state level Aavishkar Research Conventions.

- **Anugoonj- community-oriented journal by NSS:** The main purpose of this practice is to connect with the society. With this determination, the NSS volunteers of the college choose and complete community oriented projects under the guidance of the faculty of respective departments and such research work is published in Anugoonj.
- **Research Centres:** Research centres in Hindi, Accountancy, Business Policy and Administration, Chemistry, English, Economics and Biotechnology have been established and also made a provision of funds in budget for their strengthening.
- **Innovation, Incubation and Entrepreneurship Cell:** The College established Innovation, Incubation and Entrepreneurship Cell with adequate infrastructure to foster the culture of innovation among the students and teachers of the college by organizing different activities.
- **Central Sophisticated Instrumentation Facility:** Science Resource Centre supports various research activities of the college with central sophisticated instrumentation facility. Instruments like Gas Chromatography, Atomic Absorption Spectroscopy, FT-IR, UV-Visible Spectrophotometer etc. are made available for the research.
- **Research Funding:** We practiced promotion of research by providing funds for research project under research seed money and procurement of softwares and instruments.
- **Research Software and Databases:** College has subscribed to ‘Ouriginal’ Plagiarism Checker Software, SPSS Research software for Analysis and Capataline databases as analytical research tool.
- **Maker Space:** The dedicated space established by the institution to provide a platform for doctoral students to engage in innovative research and collaborative projects.

5. Evidence of Success

- In Aavishkar Research Convention Research participants presented 48 projects at district level where 20 projects were selected for university round and received overall championship in Raigad zone. College has achieved 01 Gold, 04 Bronze medals and bagged overall Runner-up championship at University level.
- As a community-oriented Research initiative, college has published 21 research articles in Anugoonj.
- The college has provided seed money of Rs. 16,37,000/- to 25 teachers for research projects.
- Faculty have published 92 research articles in journals notified by UGC-CARE list.
- Six (06) Patents and 02 Copyrights by the faculty.
- Six (06) students have completed their Ph.D. degree

6. Problems Encountered and Resources Required

- **Problems Encountered**
 - Challenging task to sensitize research aptitude.
 - Ever-changing nature of study areas.
 - Hectic schedule of teaching learning in semester system.
- **Resource Required:**
 - Self-motivation and enthusiasm among faculty and learners for the research activities
 - Dedicated and skill-oriented faculty
 - The responsibility in providing infrastructure, learning resources and financial assistance.

Best Practice - II

1. Title of the Practice:

Green Practices: Our Initiative towards Environmental Consciousness

2. Objectives of the Practice:

The college is located in the city of 21st century, New Panvel, a node developed by CIDCO Ltd., Maharashtra. CIDCO has allotted 05 acres of land on lease, of which 2.5 acres for college building and 2.5 acres for playground. CIDCO also allotted us 1.5 acres of land on lease, exclusively for development of botanical garden. We have developed our campus with green initiatives towards environmental consciousness.

- **The practice has following set of objectives such as,**
 - Transformation of barren/messy land in green campus
 - To balance the environment by tree plantation
 - To aware the students and neighbourhood communities on environmental issues
 - To demonstrate institutional accountability towards the society
 - To maintain cleanliness in campus
 - To formulate and execute green campus policy

3. The Context:

Our main focus behind Green campus initiatives is to ensure the sustainability of environment. Industrialization and urbanization has led to environmental degradation in terms of industrial pollution. In spite of the deteriorating status of the environment, study of environment has so far not received adequate attention in academic programmes. Recognizing the importance, our college has made an effort to implement this program by incorporating environmental courses in the syllabi, organization of conferences and training programs for students and staff and implementation of interdisciplinary research projects in the field of life science. More emphasis is being given on the proper infrastructure development, so as to continue and maintain the green practices.

4. The Practice

To set an example and inspire all stakeholders to opt for environment friendly alternatives, college has initiated the following practices:

- **Academic initiatives:**

As an autonomous college, we have an authority to launch environment humanities skills and design a syllabi according to the future generation needs. Our College offered environmental studies courses at UG level which infused theoretical and analytical knowledge and skills essential for exploring and addressing various environmental issues. Green practice plans were also discussed and implemented efficiently. Various departments of our college organize green practices to target the burning issues of the environment.

- **Extension Cells initiatives:**

The various extension cells of the college like NSS, NCC and DLLE give emphasis to organize regular campus cleaning campaigns, awareness programmes on emerging issues for environmental education. The NSS and NCC units are engaged in regular green initiatives like plantation drives, soil conservation and environmental awareness programmes within the premises, neighbourhood and adopted villages in order to maintain a healthy and green environment.

- **Organization of Co-curricular activities:**

The college always encourages to learners and faculty to undertake different projects and organize seminars on environment related issues through various co-curricular activities.

- **Environment Friendly alternatives:**

- The College has installed 462 solar panels generating electric power of 150 KW at 36.72 V per month.
- The infrastructure for vermicomposting has been successfully installed with four beds. The solid wastes generated from the college canteen are used in vermicomposting pits to generate compost which is used in college gardening purpose.

- Effluent Treatment Plant regulates adverse effects of effluents and helps in the environment conservation. Efficiency of the unit is 95% and collected effluent is reused for gardening purpose.
- The waste generated from canteen on daily basis is used for biogas production and the gas is used in laboratories
- The campus harbours well fenced botanical garden with variety of plant species including medicinal plants.
- Repairing and recycling of laptops, computer hardware, projectors is encouraged and executed frequently. Some departments use overhauled computer peripherals and laptops as a part of this process. Disposal of unusable hardware is done through buy-back policies and the money is utilized to get new and upgraded equipments.
- During rainy season, with rain water harvesting system, we collect the roof rain water through filter fitted pipes in a reservoir and use it later during fire drill, washing the roads and gardening purpose.
- Our college maintain plastic free and clean campus.
- Sensitization of ‘Green Practices’ among the students.
- Department of Physics has taken the initiative to distribute solar study lamps to students of tribal village.

5. Evidence of Success

Large number of participants in different awareness programs organized by our college is really appreciable. The waste disposal management initiative taken by our college is yielding very good results. By installing solar panel, college saves from the monthly electricity bill. ISO 14001 certification for Environment Management System and Green Audit certification at highest level III. The canteen waste is used effectively for biogas production. The laboratory effluent is treated properly and water is used for gardening purpose. The compost from vermicomposting unit is used for the botanical garden of the institution. The college campus is maintained clean and green.

6. Problems Encountered and Resources Required

- The main problem encountered in the green campus initiative is development and maintenance of proper infrastructure for the green practices. It must have the comprehensive approach right from home.
- Green practices should be considered as a necessity in institution and separate funds should be allotted for this.
- Implementation of the green practices needs series of awareness programs to educate more people and train them for it. Going green not only needs investment in terms of money but also a strong will from all the beneficiaries.

7. Notes (Optional)

The college has worked as a team consisting of teaching, non-teaching staff, students particularly NSS volunteer and NCC cadets as well as daily labour for effective implementation of green initiatives. Development of botanical garden and plantation of different trees and plants with lawn created beautiful ambience at our campus.