Vighnaharata Trust's

Shivajirao S. Jondhle College of Engineering & Technology, Asangaon

Practice I:

Title of the Practice: Faculty Professional and Personal Development Programme **Goal:** The aim of the faculty development programme (FDP) is to promote campus-wide excellence in teaching which supports the professional development of faculty members in their careers and enhances quality of teaching. The further aim of the practice is to

- make faculty skilled in latest technologies
- make them integrate more technology onto their teaching
- orient faculty to institution's vision
- expand faculty roles and renewal of teaching skills
- help for making quality and concern in the education
- Improve research skills with quality work.

The Context: Following are the challenges faced in designing and implementing of the practices.

- The institute being at remote location far from city area makes us little difficult to arrange resources such as eminent resource persons from reputed institutes and industries.
- 2) Getting sponsorships and collaborations for arranging FDP /STTP is difficult for our private, unaided institute.
- 3) To motivate the faculties to attend these programmes to improve their skills in order to meet expectations of different stakeholders.
- 4) Due to academic tight schedule, we are restricted to sponsor our staff members to attend professional programmes at other institutes as well as to send the staff to other cities especially during the semester.

The Practice: The STTP/FDPs through our IQAC are being conducted preferably during vacations without disturbing the academics. The programmes are usually self-sponsored as the AICTE/University encourages self-sponsored programmes. AICTE/ISTE approves for conducting such programmes for the benefit of staff members particularly to adopt new teaching skills by staff members. The programmes are given wide publicity through social

media, printed brochures, posters etc. We encourage online registration for the participants so that it is easy for them to apply. The institute has sufficient infrastructure facilities. The eminent resource persons from reputed institutes and industries are invited to deliver the lectures. Detailed study material is provided in the form of soft and hard copies to participants. During STTP/FDPs the industrial visits are arranged for the participants to give them exposure to the current practises/scenario/issues in industry.

Our institute is a **Local centre** for NPTEL courses run by IITs/IISc. Faculty coordinators are appointed for promoting, encouraging and motivating our students and staff to enrol and complete the course.

Our institute is a **Network Centre** of IIRS in conducting outreach programmes. IIRS conducts theme oriented online courses and monthly webinars on recent topics on geospatial technologies and its applications. Faculty members and students are encouraged to actively participate in these programs. The e-learning courses are self-paced and learner centric and meant for both faculties and students to enhance their knowledge in remote sensing and geospatial technology using online simulated learning contents.

One of the Institutes in our campus is the **Remote Centre** of IIT, Bombay. Through this FDPs are being conducted and our faculty members get opportunity to attend FDP/STTP/Training run by IIT, Bombay.

Our institute is a **Mentee Institute** coming under AICTE MARGARDARSHAN scheme and our **Mentor Institute** is VJTI, Mumbai. This programme is meant for exchange of knowledge and other benefits for our faculty members and students.

Institute also sponsors faculty members for higher studies such as Post Graduate and Doctoral Programmes. The faculties are encouraged to do consultancy for professional development.

To improve the teaching quality every Department has got Advisory Committee through which suggestions/ improvements for enhancing the quality are obtained.

Evidence of Success: Three main targets of faculty development are

1) Instructional development

2) Personal development

3) Organizational development.

Instructional development includes practices such as curriculum development in teaching skills and training. Personal development generally involves activities to encourage faculty growth, also their mental health such as yoga and recreational activities. Organizational development is for advancing the institutional environment for teaching and decision making and includes activities for faculty members. Developing managerial skills and team work attitude would be important components of organizational development.

The outcomes of these faculty development programmes are closely monitored. Following are the success of these programmes.

- High satisfaction with STTP/FDPs
- Attitude towards the Teaching-Learning process
- Gain in knowledge and skills
- Changes in teaching pedagogy
- Improvement in students' learning
- Faculties are being sent for higher education
- Yoga & Meditation sessions conducted for physical and mental health
- AICTE-ISTE approved STTP conducted
- Organised National Conference
- Staff successfully completed FDP through our remote centre of IIT, Bombay

We had set targets for our activities as below.

- Arranging quality resource persons relevant to the topic.
- Resource persons from reputed institutes like VJTI and other institutes under Margdarshan scheme. Through our mentor institute VJTI, Mumbai we are able to get experts as resource persons from industries as well.
- Motivate staff to enrol for Swayam / MOOCS courses

Problems:

- Financial constraints as it is a private, unaided college
- Increasing diversity of students with varying age, aspirations, cultural, and academic backgrounds. Effective and efficient faculty must be available to support those students who have got diverse learning needs, and develop appropriate teaching strategies for a wide range of learning environments. Through STTP/FDP we encourage faculty to upgrade their skills.
- We find little difficult to bring eminent resource persons from reputed industries/ institutes as college is located far from city/airport.

Practice II:

Title of the Practice: Teaching -Learning practices

Goal: To impart quality Education

- 1. To implement activity based, team based and student based learning
- 2. To take feedback in the process of Teaching -Learning
- 3. To arrange Technical quiz and improve Institution industry relation
- 4. To improve the participation of students in various online learning courses like Swayam: NPTEL etc.

The Practice: Activity based Learning: Students are assigned analysis and evaluation of classroom and content, and to create an environment where students are more engaged in presentation Technical Quiz: To get in-depth knowledge in subjects, technical quiz is conducted in each subject which helps students to have specified learning. Students do mini projects, major projects. Students are motivated to participate various technical competitions like SAE-BAJA, Hackathon, attending conferences, paper presentations and publications etc.

Mentoring aims to give practical advice, encouragement and support to students, increase their social and academic confidence.

Department has developed a laboratory and started skill development program, Vocational Educational Training (VET) etc. for all students.

Industrial visit, feedback, ICT, Project based learning, Internship, MOU's, Paper Presentation, e-Journal, e-Books, Swayam: NPTEL, and activities under Margadarshan-VJTI, Mumbai

Time to time suggestions by IQAC, Institute Advisory Committee and Departmental Advisory Committee for improvements is discussed and put up for approval from Governing Council & Local Managing Committee for implementation.

Evidence of Success:

Activity based learning is classroom activity all staff implemented in their teaching.

Access to E- Journals, E-Books & National Digital Library

240 students successfully completed Internship.

221 enrolled for Swayam-NPTEL online courses.

Overall college result improved considerably.

Students fabricated ATV and participated SAE BAJA competition at various national levels.

Students also participated Hackathon at national level.

Watching various Live sessions by AICTE, MHRD etc.

Problems:

Since our college is in rural area student admission are decreased as compared to previous year and overall admission scenario is not good.

Limited Industrial area in the vicinity to place students for Internship.

Find difficult to bring reputed companies for placement