

## **BEST PRACTICE- 1**

**Title of the Practice:** Research promotional policy to improve R&D Activities

### **Objectives of the Practice**

- Encouraging faculty members to focus on research activities, aiming to publish articles in well-regarded international and national journals with measurable impact factors.
- To initiate collaborative research initiatives with counterparts at esteemed national and international universities.
- Motivating faculty members to submit proposals and secure funded projects from diverse funding agencies in both India and abroad.
- fostering efforts to obtain patents and engaging in consultancy projects sponsored by governmental and non-governmental organizations.

### **The context**

Establishing a research-oriented ethos within the institution posed a significant challenge. Enhancing the institutional environment through the promotion of a research culture, ensuring the availability of necessary infrastructure support, and securing grants from diverse funding agencies for sustainability were key hurdles. Additionally, fostering collaboration at local, regional, and global levels remained a major priority for the institution.

### **Practice:**

PVPSIT's Research and Development (R&D) cell operates under a dedicated research committee, overseeing the planning, execution, and monitoring of research activities on a quarterly basis. The key focuses include:

- Encouraging faculty members to engage in research aligned with societal needs and industry demands.
- Expecting faculty to secure funds to support their research endeavors, publish in Scopus or SCI journals, and establish research units.
- Promoting and nurturing research capabilities among students is another important goal.

### **Evidence of Success**

Starting from the academic year 2018-19, incentives for publications in Scopus indexed journals were set at Rs. 5,000, while SCI papers with an Impact Factor (IF) greater than or equal to 1 received Rs. 8,000, and those with an IF less than 1 were granted Rs. 6,000. To further encourage faculty to enhance the quality and quantity of publications, the incentive scheme underwent revisions in March 2023. The updated scheme introduced incentives based on the Q ranking for Scopus publications, ranging from Rs. 8,000 to Rs. 5,000, corresponding to Q1 to Q4. For SCI indexed journals, publications with a Web of Science (WOS) Impact Factor greater than or equal to 1 were eligible for an incentive of Rs. 15,000, while those with an impact factor less than 1 received Rs. 12,000.

This revamped incentive structure significantly contributed to an increase in the number of high-quality publications. In the academic year 2022-23, there were a total of 53 SCI and 143 Scopus Journal papers, a notable rise from the 6 SCI and 59 Scopus Journal papers in the academic year 2018-19. The total incentive disbursed amounted to Rs. 4.38 lakhs, marking a substantial 415% increase compared to the Rs. 0.85 lakhs in the AY 2018-2019.

The impact of the incentive scheme on faculty motivation and research productivity is apparent in the publication trends. In the academic year 2019-20, the total number of SCI and Scopus Journal publications stood at 65. This figure progressively rose to 116 and 196 in the subsequent academic years 2021-22 and 2022-23. With the implementation of the enhanced incentive scheme, the number of publications experienced a remarkable increase to 196, nearly three times higher compared to the AY 2018-2019.

### **Problems Encountered and Resources Required**

- The management covered the expenses for the incentives provided.
- Projects submitted to funding agencies face delays in approval. Paper publication in some refereed journals also experiences time delays.
- Encouraging more faculty members to engage in research and promoting the research projects conducted by undergraduate (UG) and postgraduate (PG) students is essential.
- Enhancing research facilities and establishing separate research and development centers involve significant financial commitments.
- Establishing collaborations with industries is challenging and remains an ongoing process.
- Securing funding from both government and non-government agencies is becoming increasingly difficult each year.

## BEST PRACTICE -2

- 1. Title of Practice:** To foster students' self-learning skills via certification courses and to provide training that enhances their employability skills.
- 2. Objectives of the practice:** The online certification program aims to boost students' self-learning capabilities, increase domain-based certifications, and improve employment prospects. It encourages lifelong learning, focusing on building each student's career profile. The skill training program is designed to equip students for the recruitment processes of IT and Core companies, incorporating insights from both job seekers and placement providers. Implemented through internal and external resources with expertise in student grooming, the program emphasizes technical training, communication skills, and life skills to enhance employability. It ensures holistic development, adding value to education for academic and career excellence, and provides targeted training for success in campus recruitments.
- 3. The context:** The rapid pace of learning and technological advancements have resulted in the development of online platforms for students' skill enhancement. MOOC courses help students improve their engineering and soft skills, which helps them achieve their career goals. In addition to job-specific skills, recruiters also value general skills, often referred to as "employability" or "soft skills." Employability training at PVPSIT focuses on identifying and enhancing students' general skills, combining them with increased self-awareness to prepare for successful placement. The institute prioritizes grooming students, and this emphasis is reflected in the outcomes. Recognizing the diverse student backgrounds, tailored training programs play a crucial role in shaping their personalities and overall abilities. These programs, designed to meet the needs of lateral entry students, ensure equal opportunities for recruitment in areas like product development, consulting, and service-based businesses.
- 4. The practice:**

Students frequently pursue certificates to gain an advantage in their chosen professional field, as these certificates can serve to acknowledge and augment their capabilities in the relevant field. Students registered and earned certificates from AY 18-19 to AY 21-22. Starting from the academic year 22-23, the online certification course has become a mandatory component of every student's curriculum, with credits allocated accordingly. Weekly assessments are overseen by the respective course mentors, and the marks from the final assessment contribute to credit allotments.

The training program encompasses the following practices:  
Preparation for aptitude tests, refining self-introduction skills, developing communication and interpersonal abilities, enhancing problem-solving expertise, refining presentation skills, participating in group discussions and mock interviews that encompass various question types and assess behavioral competence.

## **5. Evidence of Success:**

We take immense pride in the commendable overall performance and ranking of our college as recognized by platforms like NPTEL. The evidence of our success is apparent both qualitatively and quantitatively. Students not only comprehend but also extensively develop their knowledge across various domains, facilitating the realization of their career goals. Starting from the academic year 2018-19 to 2021-22, over 1300 students voluntarily registered for MOOC courses. Subsequently, with the incorporation of online certification courses as a mandatory component, the trend continued to soar. In the academic year 2022-23 alone, more than 1500 students registered for MOOC courses, marking a significant increase over the previous four years. This substantial enrollment reflects the students' commitment to expanding their knowledge base and skills, contributing to their academic and professional success. The emphasis on MOOC courses has proven to be a valuable asset in aligning students with their career aspirations and fostering a culture of continuous learning within our academic community.

Starting from the academic year 2022-2023, the training program has been extended from the second year to the final year to enhance employability skills. However, in the academic years 20-21 and 21-22, the training program was organized for both pre-final and final year students. In the academic years 19-20 and 18-19, only final year students received the training.

The early introduction of training has demonstrated its impact on the number of job offers. In comparison to the academic years 18-19 and 19-20, which had 606 offers, the early placement training resulted in an average of 1006 placement offers in the next three academic years, representing a remarkable 67% increase.

The focus on quantitative aptitude, reasoning, and verbal communication preparation has equipped students well for competitive examinations. The increased confidence levels and improved body language have played a significant role in their success.

### **Problems Encountered and Resources Required:**

- Payment for final certificates is found a bit difficult among a few students. Encouragement scholarships can be provided by the online certification platforms for maximum participation.
- Continuous motivation and support are essential to encourage active student participation in activities.
- Occasionally, training programs need to be conducted consecutively, necessitating adjustments to the curriculum timings.
- Given the rapid pace of technological change, students need to stay well-informed about recent industry advancements.
- Placement companies often have diverse criteria for student selection. To standardize this, specific training covering a wide range of criteria has been implemented.