

Best Practices 7.2.1

1. Best Practice: Innovation Ecosystem

Goal:

- To foster the startup and innovation ecosystem on campus while establishing connections with regional and national ecosystem enablers.
- To make it possible for the institute to actively involve staff, faculty, and students in entrepreneurial and innovation-related activities
- To enhance critical thinking ability to inspire faculty members and students with an entrepreneurial spirit.
- Creating an ecosystem for innovation and incubation by making resources at the Institute available.
- Strengthen the intra and inter-institutional linkage with ecosystem enablers at different levels.
- To mentor young minds in their quest of innovation and entrepreneurship by faculty mentors
- To enhance the appropriate mentoring skills of mentors.
- To increase mentors' ability to mentor students in IPR, innovation, and entrepreneurship through a series of training programs and designate the mentor as Innovation Ambassador.
- To serve as an Innovation Ambassador and perform the role of mentor in the planning of various programs concerning innovation and entrepreneurship and to educate faculty and students about these topics.

The Context:

As per Ministry of Education, Govt. of India initiative many colleges are forming policies and developing innovation centers and start-up ecosystems to promote entrepreneurial ideas and products that contribute to societal change . The purpose of adopting innovative ecosystem is to encourage student and faculty to create an active flow of information and resources for ideas to transform into reality. Various platforms of innovations formed will help the students and faculty to meet and interact famous business leaders and distinguished academicians. and create a space for Collaboration, Co-creation, Business Relationships and Knowledge Exchange. Student will get opportunity of mentoring by by industry professionals.

The aim is to provide conducive environment for promotion of Innovation and Incubation for students and faculty and to encourage them to actively involve in the application of Technology for societal needs.

The PHCET aim to develop innovative ecosystem to encourage the students and faculty to convert their Ideas into Technological Innovations and involve in research activities like

publishing research work, patent filing and participating in various projects, business plan competitions. Also, to extend an opportunity to acquire skills for commercialization of their product and to involve in startups.

The Practice:

PHCET has established Institution's Innovation Council (IIC) as per the guidelines of "MoE'S Innovation Cell (MIC)" in the academic year 2020-21. The initiative was to create a vibrant local innovation ecosystem, start-up supporting mechanism, establish function ecosystem for scouting ideas and preincubation of ideas and to develop better cognitive ability for technology students. Since then, PHCET, IIC is actively involved in organizing and conducting various seminars, workshops, Idea competitions, Hackathon for school children's etc. for our students and faculties.

PHCET has established IIC comprising members from Industry and Interdisciplinary departments. Each member contributes to fulfil Vision and Mission of IIC established at the institute conducting expert webinars, Workshops, Field visits, Add-on programs for students and faculty of PHCET.

National Innovation and Start-up Policy-2019 (NISP by MHRD's (Now, Ministry of Education) Innovation Cell (MIC) and the All-India Council for Technical Education (AICTE)) for faculty and students of PHCET is initiated. PHCET has dedicated research facility to strengthen innovation and entrepreneurship skills of students and faculty. Research facilities include R&D lab with 3D printing, laser cutting facility, software lab, component library, workshop. These facilities are provided for rapid prototype Designing, Assembly and manufacturing, Testing of pilot design.

A significant number of R&D activities are being carried out by faculty members and students of PHCET. Most of these research findings how to translate into consumer goods, benefiting society in general. Necessary support is provided for Documentation, Publication of Research Papers and also for obtaining patents.

The entrepreneurial ecosystem at PHCET will play a key role in identifying, mentoring, nurturing the innovative and entrepreneurial potential of students, faculty and staff and transforming them into start-up entrepreneurs by provided avenues of funding, investment opportunities and networking support to make the innovation and venture successful.

Under IIC different activities related to I&E and IPR are conducted including design thinking, problem solving. Also, teachers are nominated for basic and advanced Innovation Ambassador Training Program promotes innovation at the core of the New Education Policy. The beneficiaries of these training programs will join the network as "IIC-Innovation Ambassador" and perform the role of mentor in their respective IICs, will provide support to other IICs as resource person in organizing various programs related to innovation and startup.

We celebrate various days like National Technology Day, World Intellectual Property Day, World Earth Day, Azadi Ka Amrit Mahotsav, World Entrepreneurs Day, World Environment Day etc. We actively participate in YUKTI – National Innovation Repository (NIR) to build a system to repository of ideas, innovations and start-ups developed at PHCET, IIC.

Evidence of Success:

According to the IIC activity calendar, a variety of activities are effectively carried out. IIC has held seminars on IP management for startups, Design Thinking, Critical Thinking, and Innovation Design, as well as patent filing from professionals in the field. In addition, activities like hackathons, exhibitions, poster presentations on innovations, business plan competitions, and speeches by successful entrepreneurs are planned to encourage, support, and foster research, innovation, and entrepreneurial potential among faculty members and students.

The various activities conducted under IIC helped students and faculties gain expertise in the specific program themes and also encouraged them in aspects of research and innovation boosting their confidence.

Upon receiving Innovation Ambassador training, various faculties conducted activities for students and faculties based on program themes: Design thinking, IPR/ R&D and Innovation, Entrepreneurship, Innovation and Design thinking.

Based on the evaluation IIC of the PHCET rated with 2 star in calendar year 20-21 and with 3 and half star in calendar year 21-22.

PHCET (ARI-C-34105) has gained All India rank in Band C (rank above 50) (Private or Self-Financed College/Institutes) in ATAL RANKING OF INSTITUTIONS ON INNOVATION ACHIEVEMENTS (ARIIA) 2020.

PHCET is positioned in the band of 151-300 in the innovation category under NIRF ranking framework in 2023.

Problems Encountered and Resources required:

Time management to work on research and innovation ideas

2. Best Practice: Student empowerment through mentoring and meditation

This best practice has 2 modules.

1. Mentoring

Goal:

- To monitor the student's regularity and performance

- To motivate students and develop the confidence to take up challenging tasks and help the society in nation-building.
- To counsel students for solving their problems/ traits and boost confidence to improve their quality of life.
- To ensure that the parents/guardians know about the performance and regularity of their wards.

The Context:

The Teacher Guardian Mentoring Scheme (TGMS) aims at enabling, fostering, and nurturing constructive and positive interaction, guidance, and mentorship of students by faculty. The mentor-guardian program operates to facilitate the dialogue between mentors and their respective mentees. The mentor offers them emotional and academic support along with motivation.

The Practice:

TGMS is one of the finest practices which is followed in PHCET. The motto is to empower students to face the challenges in their professional and personal lives. TGMS helps to keep track of student progression through a 4-year course. These sessions help students to identify what is harder and more important in their professional lives. This will help them to respond better in every challenging situation. Every mentor is assigned a batch of 15 -20 mentees. Mentoring sessions are scheduled once every week for each batch. One-to-one interaction with mentees helps mentors to know their mentees better and a bond of trust is built between them. During the interaction, they will get to know the academic challenges, personal difficulties, and any other issues so that they can assist them in tackling the situation effectively. Mentors will also understand the strengths and areas for improvement for each mentee and they can support them. During the interaction, mentors can help the students to bridge the gap between theoretical understanding and real-life scenarios too. A teacher guardian maintains all records of students and monitors the academic and extracurricular performance of his/her mentees. Through this program, at every step, it ensures that the students are confident, disciplined, and motivated.

Evidence of Success:

- Weak learners were found with improvement in attendance and grades
- Advanced learners are found to excel very well in higher studies and grab higher positions in MNCs and other organizations of repute.
- Different forms of leadership qualities evolved and students were found to work in leading positions at the managerial level.

Problems Encountered and Resources Required:

- Initially some mentees were not ready to discuss their issues.
- Due to lack of participation students were not able to find their voice.

- The institute has appointed professional counsellors to resolve severe cases.

2. Meditation

Goal:

- To increase self-awareness
- To improve emotional stability
- To reduce stress and Anxiety
- To promote happiness and Positivity

The Context:

Students are guided on meditation and yogic techniques, a simple rejuvenating method to detox the mind and heart. Students learned the role of various techniques and asana that predominately help our mind to be in control of all emotions.

The Practice:

PHCET has signed a center and MoU with Heartfulness Institute, which is a non-profit organization offering this method in over hundred and fifty countries throughout the world and to academic institutions, schools, colleges, universities, government organizations, and corporations.

Every year students are trained by a meditation trainer by arranging a 3-day meditation program. Day 1 started with meditation with closed eyes letting go of stress and complex emotions and feeling light and refreshed. Day 2 started with relaxation and discussed doubts related to the previous day's meditation. The second part of mediation is introduced to students through animation video. After discussion, practice sessions are conducted for students. 3rd Day includes Prayer and the importance of meditation with scientific experiments. Further explained how meditation is an excellent technique to strengthen the core and improve concentration.

Evidence of Success:

Meditation helps students tackle issues related to studies. Many students have informed their mentors about changes observed after practicing meditation regularly. The positive impact observed by practicing different postures and breathing techniques to relax the mind has also helped faculty to perform better and handle the daily

Problems Encountered and Resources Required:

Students must commit the daily time required for meditation to achieve the expected results.