



Best Practices

Innovation and Entrepreneurships

1. Objectives of the Practice

The Objective of Practices of innovation and entrepreneurship [IE] of Swarnim Startup & Innovation University is to foster innovation and startup ecosystem into the mindset of the students and create a positive impact on society through various initiatives. These practices are driven as dual certificate course in the university starts with the first year/first semester of the students in all the programs of the University. The University teaches innovation in each semester with its designated course with credits. The aim is to empower students to become proactive, innovative thinkers and capable entrepreneurs who can contribute positively to the economy and society through their ventures and innovations.

The specific Objectives include:

The objective of the Innovation and Entrepreneurship subject in university typically revolves around equipping students with the knowledge, skills, and mindset necessary to:

- Fostering Innovation: Encouraging creative thinking and solution development.
- Promoting Entrepreneurship: Empowering students to start and manage new ventures.
- Developing Practical Skills: Equipping students with tools to identify market needs and create business plans.
- Encouraging Risk-Taking: Building resilience and adaptability in entrepreneurial ventures.
- Facilitating Networking: Connecting students with mentors and industry experts.
- Promoting Ethical Practices: Emphasizing ethics and sustainability in entrepreneurship.
- Preparing for Challenges: Equipping students with knowledge to handle legal, regulatory, and operational challenges.
- Cultivating Leadership: Developing leadership and management skills.

2. The Context

Innovation and Entrepreneurship as hub and spoke model was developed by the University in response to the contextual of grass root innovation and challenging and issues as problem statements observed in the society which can be a great opportunity for the students to work on with new innovative ideas and bring some solutions and inculcate them in to business and hence to contribute into Indian startup ecosystem. The Global Perspective of understanding global trends in innovation and entrepreneurship, including emerging markets, technological advancements and international competition with actual problem statements. To create interdisciplinary approach integrating knowledge from various disciplines such as business, technology, engineering, design, and social sciences to foster holistic innovation.



3. The Practice

Swarnim Startup & Innovation University has implemented several unique practices to address the identified challenges and achieve its objectives. These practices include the following:

- **Foster startup ecosystem and grass-root innovation**
- **Promote Entrepreneurship**
- **Develop Practical Skills**
- **Encourage Risk-Taking and Resilience**
- **Promote Ethical and Sustainable Practices**
- **Cultivate Leadership and Management Skills**
- **Prepare for Real-World Challenges.**

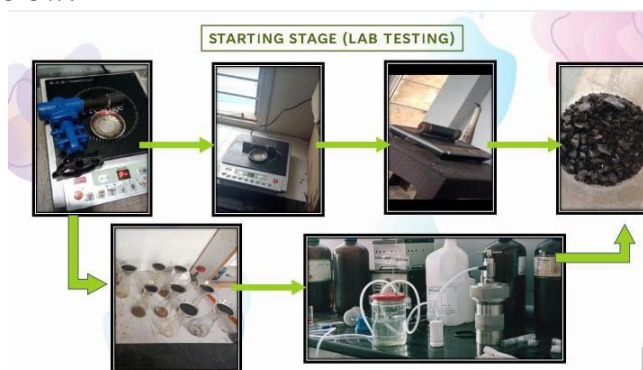
4. Evidence of Success

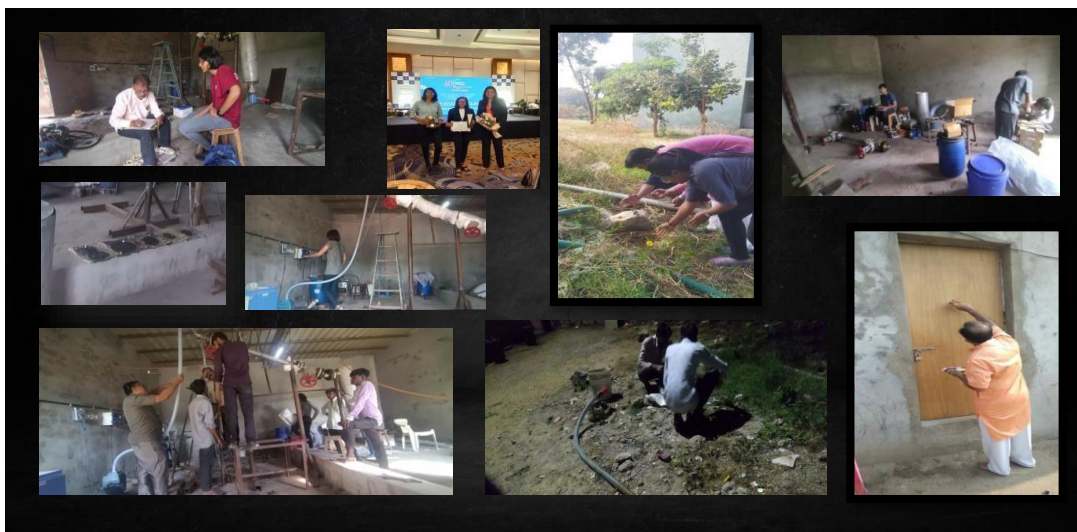
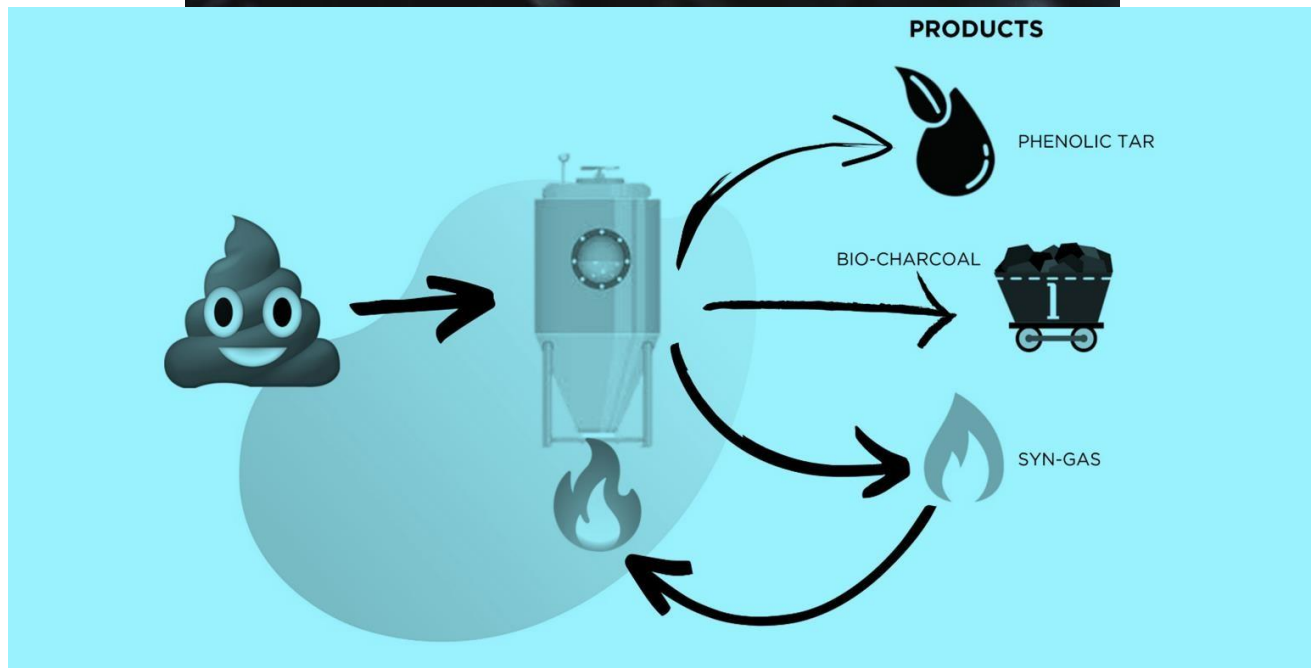
The Best Practice of the Swarnim Startup & Innovation University has achieved tangible and measurable success, as indicated hereunder of Innovation and Entrepreneurship as best practice as hub and spoke model. We have inculcated the syllabus in all the streams with complete approval from the Board of studies. Here with this document the BOS with entire credits of syllabus is briefed.

With this we have some examples of the student startup entrepreneurs as below:

- Wetcoal – Ms Devanshi Soni
- Kala house – Drushti Jain
- One space – Haresh Valand
- Tepals Pharma –
- Saffron Farming – Dabhi Mayank & Sahil Ninama
- Purify Drinking bags –

The detail example of the student got information and motivation for the startup and entrepreneurship from our IE teaching practice. The details of the innovative startup project Wetcoal detail are as below:





Equipment		Amount
Pumps	Hydraulic pump, sludge pump , vacuum pump	56800
Mixture	With 80 rpm	17430
Flange		28000
Valve	Butterfly valve ,gate valve , pin valve, safety valve	122710
Pipe	Ss pipe	62930
Reactor, flash tank , hammer mill	Pressure handling machine	91700
Separator	Filter press	50000
Dryer	Paddle dryer	14230
Fabrication	Plant setup (including valves nozzle etc.)	50000
ceramic heater	Heating	50000
Gauge	Pressure , & Temperature gauge	22000
Insolation & transportation		18000
Total amount		583800



5. Problems Encountered and Resources Required

The management of the biowaste where the drainage system is not available is big challenge. The sump is not always the solution. Also, the carbon emission from the biowaste is also a major concern in the today's environment impact. The main resources required for the execution is the raw material of biowaste. The raw material is used from sump and can be treated in to the plant. Another resource is machinery to give the treatment to the biowaste.

6. Notes

- **Impact and Adaptation:**

Swarnim University's best practices serve as a model for other institutions aiming to promote research, entrepreneurship, and grassroots innovation. These practices can be customized and adapted to meet the specific needs of other institutions.

- **Project-Based Learning (PBL) Approach:**

The university also implements PBL courses, offering students opportunities to execute DIY projects using Arduino and Raspberry Pi embedded boards. These projects foster interdisciplinary collaboration, skill development, and hands-on experience with tools and instruments.

- **Key Components:**

- Interdisciplinary Collaboration: Encourages collaboration across departments.
- Skill Development: Enhances teamwork, project planning, and research abilities.
- Exposure to Tools: Provides hands-on experience with various tools like Arduino boards, 3D printers, and PCB printing machines.
- Comprehensive Curriculum: Includes courses like Arduino using Embedded 'C' and Raspberry Pi using Python, with practical project work.
- Innovation Laboratories: Two dedicated labs provide necessary resources for students' innovative projects.
- Evaluation Process: Projects are evaluated based on programming lab tests, presentations, demos, and final exhibitions, ensuring a comprehensive assessment.
- Innovation Project Expo: A two-day expo showcases student projects, with industry experts evaluating the top 100 projects for innovation, technical complexity, and real-world application.

- **Achievements:**

In May 2023, students set a new record for the "World's Largest Innovation Expo by 2600 Freshmen," recognized by the World Book of Records, UK. This achievement highlights the success of the PBL approach in fostering innovation and practical application.

Conclusion

Project-based Learning using Arduino Boards with embedded C and Raspberry Pi Boards with Python at PU provides a fertile ground for Innovation, Creativity and Practical-application of Knowledge. By offering students the opportunity to execute their projects and engaging them in interdisciplinary collaboration, the University prepares its students to become innovative thinkers and problem solvers. With State-of-the-art Innovation Laboratories, Comprehensive Evaluation Processes, and recognition of exceptional achievements, this Project-based Learning-approach has been a resounding success.





Best Practices

Community Outreach-Social Program

Objective: Empowering Rural Communities through Healthcare and Awareness Initiatives

To foster human development, global health, and social justice, focusing on rural upliftment is essential in reducing the disparity between rural and urban regions. Swarnim Startup and Innovation University (SSIU) took a significant step toward rural development by adopting villages and prioritizing health, hygiene, nutrition, and sanitation.

In line with the **Alma Ata declaration of 1978**, which emphasized the goal of “Health for All,” SSIU adopted five villages in 2019 and three more in 2023, with the aim of empowering these communities. The adopted villages are:

Sr. No.	Name of Village	District	State	Remarks
1	Tintoda	Gandhinagar	Gujarat	NA
2	Saij	Gandhinagar	Gujarat	NA
3	Dhamsana	Gandhinagar	Gujarat	NA
4	Nardipur	Gandhinagar	Gujarat	NA
5	Sonipur	Gandhinagar	Gujarat	NA
6	Arsodiya	Gandhinagar	Gujarat	Adopted in 2023
7	Sertha	Gandhinagar	Gujarat	Adopted in 2023
8	Uvarsad	Gandhinagar	Gujarat	Adopted in 2023

This initiative aligns with the **National Rural Health Mission (NRHM)**, which aims to make public health services accessible to rural communities, promoting ownership of healthcare services and ensuring quality care.

Context

Rural communities often lack essential healthcare, education, nutrition, and sanitation services, resulting in difficult living conditions. SSIU's adoption of these villages aims to bridge this gap by providing regular medical camps, educational resources, nutrition programs, and sanitation improvements. These initiatives seek to enhance the quality of life and create sustainable development in the villages.

Key Initiatives:

- **Healthcare:** SSIU conducts regular medical camps, providing necessary health services and medicines to the local population. Health awareness camps are organized on special health days, educating the community on preventive care and health risks. Additionally, our students, under faculty mentorship, engage directly with villagers through door-to-door surveys, establishing strong relationships and gaining insights into local health issues.

- **Nutrition and Sanitation:** Food distribution programs promote better nutrition, while sanitation improvements focus on installing clean water facilities and waste management systems.
- **Education:** SSIU supports local schools by providing educational resources, raising awareness about health and hygiene, and fostering learning opportunities.

Practice

The village adoption program follows a structured approach that includes health, hygiene, education, awareness, nutrition, and sanitation. Medical camps are organized periodically, offering free healthcare services and medicines. Special camps are held on significant health days, where locals are educated on preventive measures and risks, and preventive medicines are distributed.

Awareness campaigns on social issues and health risks are conducted through rallies, educating the population on signs, symptoms, and preventive strategies for common illnesses. During health crises such as the COVID-19 pandemic and the Chandipura virus outbreak, SSIU provided medicines, preventive care instructions, and established a COVID center at the university campus.

Additional Activities:

- **Nukkad Natak (Street Plays):** Performed to raise awareness about health and hygiene.
- **Dental Kit Distribution:** Kits are distributed to promote oral hygiene.
- **Public Gatherings:** These gatherings offer opportunities for community interaction and education on health issues.

Training and Exposure for Medical Students

To enhance medical students' competencies and broaden their awareness of public health issues, the program provides them with direct exposure to rural healthcare challenges. This hands-on experience allows students to better understand community health dynamics, build relationships with local populations, and develop the skills needed to provide compassionate and effective medical care.

Evidence of Success

Since the program's inception in 2019, there has been a notable improvement in the health and well-being of the adopted villages. Regular medical camps have addressed immediate healthcare needs while also empowering the rural population to take charge of their health. The program has demonstrated the transformative impact of community-driven healthcare initiatives on rural health outcomes.

Photographs and data from the camps serve as evidence of the program's success and the positive change brought about in the community.

Challenges and Resources Required

Challenges Encountered:

1. **Lack of Medical Facilities:** Limited access to healthcare services and medicines posed a challenge in the villages. Many villagers were unaware of the government-provided health services, so SSIU organized awareness programs to inform them of available resources.



2. **Building Trust with Locals:** Initially, establishing rapport with villagers was difficult. To overcome this, students conducted door-to-door surveys and interacted with families, fostering familiarity and trust.
3. **Finding Suitable Locations for Camps:** Setting up medical camps in the villages was challenging due to the lack of infrastructure. However, with the help of local Sarpanches (village leaders), appropriate spaces were made available for these camps.

Resources Required

To continue and expand these initiatives, certain resources are necessary:

- **Medical Supplies and Medicines:** Regular replenishment of medical equipment and medicines is essential to sustain the health camps.
- **Healthcare Professionals:** Increased involvement of healthcare professionals, such as doctors and nurses, is required to ensure that all health camps are adequately staffed.
- **Transportation and Logistics:** Efficient transportation is needed to ensure that medical teams and supplies can reach remote villages.
- **Awareness Materials:** Educational materials, such as pamphlets and posters, are essential for raising awareness about health, hygiene, and nutrition.

Conclusion

Through the village adoption program, Swarnim Startup and Innovation University is making a significant impact on rural communities by addressing critical health, education, and sanitation needs. These initiatives empower individuals, foster community growth, and create a sustainable model for rural development. By focusing on healthcare, education, and awareness, SSIU is working toward its mission of uplifting rural communities and ensuring a healthier, more informed society.

This holistic approach not only benefits the villagers but also enriches the learning experience of our students, preparing them to face real-world healthcare challenges with empathy, skill, and a deep understanding of public health.

