

## 7.2.1

### **Innovative Practices related to Academics**

1. **Title of the Practice:**

Innovative Practices related to Academics\_

- i. Academic Practice to Carefully Identify Fast and Slow Learners
- ii. Strategic Planning for Academic Progress
- iii. Motivation for Innovative Practices

2. **Objectives of the Practice**

Established with a specific mandate –

- To fetch 10<sup>th</sup> class students (with pass percentage), in main stream of technical education (ICD Program),
- Promotion of eligible students to UG (BE) program (through LEET), and
- Sink/Coordination with students admitted through JEE (Mains)

Therefore, it becomes a need to give vital importance for the progress monitoring and overall development of the students.

In view of above, the OBJECTIVES of the Practice are -

- To carefully bring different category students (10<sup>th</sup> class science students with pass %, LEET, and JEE (Main) students) in the mainstream of technical education,
- Progress monitoring and overall development of students.
- Carefully Identify Fast and Slow Learners (**with a care not to display or notify publicly**)
- Uplift them to be competitive with their peers,
- To serve all the levels of students in holistic manner to their path of progress.

3. **The Context:**

Students, getting admission, from far off places after 10th class, are not grownup enough, to face the challenges in the field of technical education. They live in a residential campus far off from their homes and parents. Many of them are from rural areas, educationally and financially humble background.

During first year such students experience distress about being separated from family and community. Homesickness and feel-free is a normal part of student's development towards adulthood. Moreover, such students face lot of communication problems as they are not comfortable in understanding the concepts in English (medium of education). Their integration with LEET and JEE students pose further challenges.

Due to variety of such causes, some are not able to perform well. The issues related to different levels of learners is quite significant, whereas programs are running as line with

NEP-2020 for the last three decades. It is a challenging task to cater such a variety of learners.

#### 4. **The Practice:**

Identification of different levels of students is a challenging task, and publicly making such discrimination is fraught with dangers. The practice to identify different levels of students, **with a care not to notify publicly**. Extra attention is given on slow learners to get them at par with the rest of the students of the class.

The identification process for the different levels of learners is based upon –

1. Performance Monitoring through -
  - Class room performance monitoring by the Subject Teachers
  - Progress monitoring by Class Counsellors (assigned at the time of admission, till completion of course)
  - Interaction with Tutor Guardians (5<sup>th</sup> period is allocated in Time Table, every Wednesday for Tutor Guardian Scheme),
2. Assessment of **mid-term** and **end-term** exam results.
3. Assessment through General Proficiency.

#### **Steps to facilitate/ corrective measures:**

##### **Slow Learners**

- i. FOLLOW-UP of progress by faculty and counsel them to attend the classes regularly.
- ii. Conduct of REMEDIAL CLASSES by Subject Teachers and senior students (having good academic records) and inculcate theoretical concepts through model specimen.
- iii. Personal counselling by Tutors of Teacher Guardian Scheme.
- iv. Sharing of academic records with parent's time to time on need basis.
- v. To provide separate window for Repeat/ Retest Exams, to relieve them from over burden.
- vi. INDUSTRIAL VISITS to demonstrate the theoretical concepts.

##### **Fast learners**

- i. They are facilitated to take benefit of Minor Degree and Honors Degree.
- ii. SLIET Merit Scholarship (SMS) is awarded to Top 5% students based on their performance in an academic year.
- iii. Students are encouraged to take fields projects by funding from TEQIP and through Grant in Aid (GIA) by IIC.
- iv. Fast learners are offered to change their discipline at the end of first year based on their academic performance They are motivated for attending workshops, seminars and competitive exams. Moreover, coaching classes are arranged in the department for preparation of competitive exams.  
Duly approved policy exists in the institute to provide financial support for the same.

- v. They are encouraged to undergo industrial training during vacations apart from the mandatory requirements as per academic schedule.

#### **Awards for Quality Publications and Research (SQPA and SRPA)**

- vi. PG and Ph.D. scholars are encouraged to publish their work in quality journals and accordingly their contribution is recognized by offering SLIET Quality Publication Awards (SQPA) on public functions: Independence-day and Republic day. SQPA includes cash prize as well citation.
- vii. Institute also encourages the Research scholars as well as faculty to fetch the externally funded projects, and such awardees are recognized by conferring SLIET Research Project Award (SRPA) which includes cash incentive and citation.

#### **5. Evidence of Success-**

Institute is successfully mentoring the students specially from **RURAL and Financially humble background**. Many average students of SLIET, Longowal admitted after 10<sup>th</sup> Class, through lateral entry have excelled in different fields, became a good citizen and serving the nation. There are evidences, where an average student admitted after 10<sup>th</sup> class, passed with PhD degree from the institute with excellent academic record. A few success stories enlisted below speaks the same:

#### **Entrepreneurs-**

- i. **Paramdeep Singh Ghuman** ([https://in.linkedin.com/in/paramdeep-singh-ghuman-4b11321a?trk=public\\_profile\\_browsemap](https://in.linkedin.com/in/paramdeep-singh-ghuman-4b11321a?trk=public_profile_browsemap),
- ii. **Rohit Verma (FET)** <http://fet.sliet.ac.in/alumni-success-stories/>
- iii. **Sachin Korla**, a LEET student (passed in 2021), won DELL College of Year Award-2019 at National Level. Ashutosh Kumar bagged 5<sup>th</sup> position. <https://in.linkedin.com/in/sachinkorla>
- iv. **FET alumni, delivered lecture:** <http://fet.sliet.ac.in/alumni-lecture-series/>
- v. **Serving Corporate World**
- vi. **Vashist Bist** (<https://in.linkedin.com/in/vashistbist>)
- vii. **Satadru Mishra** (<https://sg.linkedin.com/in/satadru-mishra-763272219>)

#### **Serving as Faculty**

- viii. Students from very humble background Ms. Surekha Rani, **completed her certificate to Ph.D** from this institute and is serving as regular faculty in a university having university ranked at *29 among the top 200 universities* by NIRF 2022 rankings.
- ix. **Deepak Joshi** (<https://web.iitd.ac.in/~joshid/>)

- x. **Rajeev Ranjan** (<https://iitism.irins.org/profile/97648>) student from very humble background, completed her certificate to Graduation from this institute and is serving as regular faculty in a institute (IIT-ISM Dhanbad) ranked at *38 among the top 200 universities* by NIRF 2022 rankings.
- xi. **Pankaj Das**, admitted after 10<sup>th</sup> is serving as Assistant Professor (ECE) at SLIET and perusing his PhD from IIT Roorkee <http://ece.sliet.ac.in/people/pankaj/>

#### Selected for Higher Studies

- xii. **Dr. Anshul Varshney**, graduated from SLIET in ....., did his PhD from IIT Roorkee and currently serving CSIR-NPL.

### **6. Problems Encountered and Resources Required**

Being situated in remote/rural area of Punjab, and most of the students admitted in this temple of learning are from very humble background, a few problems are encountered -

- It is a challenging task to channelize the energy of students studying at different levels, from different backgrounds.
- Issues related with equivalency for competitive exams and government jobs/PSUs
- Active collaboration with industries and potential employer in the region (due to remote location).
- Availability/Development of educational opportunities in cities and urban areas

### **Resources Required/Action taken**

- Apart from normal working hours the faculty and staff devote their maximum time with students and especially with the ICD students.
- Institute is spending generously to create the recreational facility.
- To deal with the situation, requirement is to maintain a healthy student Teacher Ratio of 1:20. However, due to litigation/roaster related issues institute face problems to recruit faculty.
- Re-structuring of its academic programs to remove the discrepancies in terms of number of years and theory-practical ratio.
- Institute need to provide accommodation to its 100% students.
- Grant of an Institute of National importance (INI)/multi-disciplinary University status.
- More emphasis on Extra Curricular Activities to gainfully engage the students. Institute is trying its best to create a Multi-Level Indoor Sports Complex and development of open-air theatre.

### **7. Notes**

To successfully achieve and implement its Best Practice, following initiatives are taken by the institute:

**a. Support for All the students -**

- i. Provision of in 3<sup>rd</sup> Minor with provision to consider best two.
- ii. Provision of Buffer days to complete their attendance assignment requirements.
- iii. Introduction of Extra Academic Activities (EAA) to compulsorily participate in three activities: Sports, Cultural/Literary and Social (<http://fet.sliet.ac.in/files/2021/08/03-BE-Food-Technology-Scheme-and-Syllabus-July-2021-After-BOS.pdf> ).
- iv. Presence of active Communication Skill and Personality Development Cell (CSPDC) to improve their communication skills and personality. (<http://sliet.ac.in/communication-and-personality-development-cell/>, <http://sliet.ac.in/modules-for-icd-ug-students/>).
- v. Training to appear for placement interviews and inculcate the professional ethics.
- vi. Counselling and Soft Skills Club (CSSC) facilitates the students to enhance their soft skills (<http://sliet.ac.in/counselling-and-soft-skills-club/>).
- vii. Presence of various Technical Clubs with financial support, to provide opportunity to uplift their technical domain knowledge.
- viii. Multi-layer Counselling System i.e. Class Counsellors, Tutor Guardian Scheme (TGS) , Students Mentor Scheme (SMS) <http://sliet.ac.in/tutor-guardian-and-student-mentor-scheme/> and Psychological Counselling (<http://hc.sliet.ac.in/counselling/>)

**b. Strategic Planning for Academic Progress**

Institute set short term and long-term goals to meet its vision and mission through. The same is executed through Strategic Planning by WAR ROOM, **Vision Plan SLIET 2030** and **NEP-2020** Cell. <http://administration.sliet.ac.in/vision-plan-sliet-2030/>

**War Room:**

In order to keep pace with growing challenges, a WAR ROOM concept is introduced in the institute since May 2019, to set the targets and planning to achieve them, in line with increase the productivity and accountability. Under this umbrella Eight (08) pillars were identified with 5 to 8 members in each pillars.

A centralized meeting space was created, where project teams and stakeholders come together, visually communicate and do brainstorming on various targeted activities under the guidance of an **Industrial Coach** .

(Weblink: <http://sliet.ac.in/war-room/>)

**Vision Plan SLIET 2030:** Institute has defined its vision plan till 2030 and is continuously working for it in accordance with NEP-2020.

(Weblink: <http://administration.sliet.ac.in/vision-plan-sliet-2030/>)

**NEP-2020 Cell:**

NEP Cell is also created in the institute as per UGC guidelines, which is active for implementation of same.

<http://administration.sliet.ac.in/files/2022/12/Annexure-2.pdf>

**c. Innovative Practices**

**SLIET innovation Centre** was established on 21<sup>st</sup> November 2018 to create an ecosystem of Innovation and Incubation. This cell encourages, stimulates, and nurtures the ideas of young minds that have a great potential to convert their ideas into prototype /product or services. The Innovation Cell includes faculty, staff members, students, alumni, and experts from the industry that can motivate and translate technological innovations to the societal development of our country.

The cell has a separate infrastructure and is assessable to students with all the necessary resources. The institute reserves a separate fund to support students to build product and service.

The main objective of the cell is to promote project-based learning and helping selected ideas to lead towards Startup and entrepreneurship.

Active students from various clubs are encouraged to participate in different innovation related activities like participation in Hackathon, awarding projects from institute side and providing space and facilities to complete their innovative ideas.

(Weblink: <http://iic.sliet.ac.in/>)