Best Practices and Institutional Distinctiveness: AY 2020-21

Best Practice I

1. Title of the Practice: Imbibing professionalism in students through Industrial exposure

2. Objective of the Practice:

- To keep students abreast of changing technology
- To associate the students with industry culture, and gaps between curriculum & industrial needs.
- To enrich students with practical insights of developing industries
- To develop and improve business skills in communication, technology, quantitative reasoning, and teamwork.

Engineers can be surpassed if they don't keep in pace with the inconsistent trends and technologies. Metamorphosis from budding engineer to a career professional is possible only when we embed industrial exposure to their journey. Students can observe and learn as to how theoretical concepts are put to into action, thereby aiding their practical learning. Industrial exposure plays a crucial role in overall development of a student besides curriculum teaching and training.

3. The Context:

- i) Engineering and technology are two sides of a coin. Technology helps in making complex things easier hence everyone is in the race of upgrading technical skills. An individual is sustained in the global market only if he/she is unresistant to knowledge improvement and keeps oneself in pace with the fast-changing scenario.
- ii) Our Institute has a blend of students coming from various communities and classes (mostly middle class and below). Due to which the majority of students lack professionalism practiced in industry. University syllabi are devised to keep balance with latest technology and basic concepts of the subjects but by the time students graduate, the technology learnt in the curriculum is outdated. This motivates us to be associated with industry.
- iii) Students are unaware of various industrial sectors and roles. They are always in a dilemma to decide which role/sector will be the best according to their individual personality. This led to industrial exposure
- iv) The change of life stages from a student to a professional is not always very simple. Students face many challenges when they enter professional life. They must adjust themselves according to the professional environment by implementing their conceptual knowledge in the new world of work.

4. The Practice:

Institute provides a plenty of opportunities for corporate interactions such as:

- Guest lectures/ Talks Sessions /Seminars & workshops by industry experts
- Alumni share their technical experiences /Tech talks are arranged.
- Institute organizes industrial visits for the students.
- Summer Internship Programs are arranged for students.

Every year millions of engineers graduate from various engineering colleges throughout India, but employability is one of the biggest challenges. One of the primary reasons for this, is the lack of skill sets as per the need of industry; it may be due to the knowledge gap between industry and institutions. A student may have good technical knowledge but would lack in communication skills or teamwork culture or professional ethics. Hence more efforts are needed to enhance both technical and non-technical skill sets. Arranging for talk by industry experts and alumni was quite challenging. Amid pandemic talks and sessions were conducted on an online platform. Virtual industrial visits were conducted for students which helped them to understand the practicality of a theoretical concept. Today, educational institutes, students and business recruiters are aware of the importance of internship programs. Internship programs enable students to get training during their course programs and save companies' supervision and training costs by providing them trained employees. Motivating students to attend all online facilities related to industry exposure was also quite challenging. Institute inspires budding engineers to solve real time issues of industry. Students participate in competitions where the third party provides problem statements and they must analyze and dispense solutions. Smart India Hackathon, Hackathon, Solecthon and Ethan are some of the competitions that students participate in.

5. Evidence of Success:

The main evidence of our attainment in these efforts is the fact that we have been able to see a considerable number of placements as compared to the previous years. We have seen many cases of students who were weak in certain skills make significant improvements because of these inputs. Below chart shows the placement percentage ratio for the last five years. The chart depicts the gradual increase in offer letters received by the students though we had a lot of constraints or the process of online recruitment. All this is achieved because of efforts taken by colleges for developing the skills of students. Roughly 230 students are placed till date and still the process is going on.



Best Practice II

1. Title of the Practice: Soft skill enhancement

2. Objective of the Practice:

To develop various soft skills of students' to improve their overall development, this in the long run will support efforts for achieving the Outcome Based Education (OBE) objectives of knowledge, skill and attitude.

3. The Context:

The curriculum, teaching-learning process of our Institute as well as the co-curricular activities of our Institute improve the technical knowledge of our students. In today's world, simply being knowledgeable is not enough to achieve success. One has to be equally competent in other aspects such as personality, communication, interpersonal relation, leadership, teamwork, time management and other soft skills. The students admitted to our Institute are mostly from the rural and tribal area of Palghar district and we at Vidyavardhini consider it our responsibility to make sure that all our students stand on the same pedestal.

4. The Practice:

The Institute has various committees who organise seminars and competitions to develop soft skills of our students.

- We start from first year itself with the Induction program which covers sessions for physical fitness and universal human values.
- The Literati Club organises an elocution competition, Extempore, where students have to speak on a topic provided on the spot within a stipulated time.
- The NSS organises various webinars and quizzes to create awareness about COVID-19, organ donation, vigilance, road safety and many others.
- The Sports Committee promotes participation in individual as well as team sports like chess, table tennis, football, cricket, running. But due to the pandemic of COVID-19, virtual marathon and cyclothon were organised to keep up the sporting spirit of our students.
- The Students' Council take care of events from the cultural aspect. Again due to the pandemic of COVID-19, the events were held online and live streamed.
- The sensitization of gender equality is undertaken by the Women Empowerment Cell by organising webinar on Empowered women empower women.

All the above-mentioned events are focussing on development of one or more soft skills such as communication, teamwork, adaptability, problem-solving, creativity, work ethic, interpersonal skills, time management, responsibility, leadership, attitude, decision making, emotional intelligence, self-motivation and collaboration.

5. Evidence of Success:

Inspite of the pandemic situation we had good participation in most of the events.

Event	Student Participation	
Induction Program	400	
Literati Club	73	
NSS	50 to 100 students per event	
Sports Committee	32	

6. Problems Encountered:

The online mode fails to grab the attention of students for such non-credit activities as the students are majorly focusing on knowledge and not skills. The committees are taking all possible measures to ensure an increased participation hence forth. Another hindrance is the lack of resources for online mode from the students' end as most of them are from rural areas.

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Induction Program:

https://drive.google.com/file/d/1Wg14DhLpH9mQ2hFp6O0hBsR0b05uDeD0/view?usp=sharing

Literati Club:

Sports:

https://drive.google.com/drive/folders/18yVpdsFCx2Xnax7faJQu9DEOZJ3tf5DZ?usp=sharing

 $https://drive.google.com/drive/folders/1QW_ZZPA6eUFVp9b_U3TGdU8IQL2ENp7O?usp=sharing$

NSS:

https://docs.google.com/spreadsheets/d/1EQJcIoski0hHxA64cUo_3xRM8uUwGsPX/edit?usp=sharing&ouid=117923361549712447649

&rtpof=true&sd=true

Institutional Distinctiveness

Vidyavardhini's College of Engineering and Technology envisions to be a premier Institute of technical education always aiming and becoming a valuable resource for industry and society. Inline with its vision, priority and thrust, we at VCET believe in strengthening the pillars of the Institute i.e. students and faculty of the Institute. Numerous efforts have been taken in this direction to groom the overall personality of students and augment the technical skillsets of its faculty members.

Student centric activities:

- 1. Skill enhancement: Various seminars/ workshops are regularly arranged by various departments in pursuit of skill enhancements of students. Also, national level competitions like VCET National Level Project Competition (VNPS), VCET-Hackathon, Product show case are conducted every year to provide a platform to students to show case their technical abilities. The result of these efforts could be seen by the accolades won by the students at state and national level in various technical competitions.
- 2. Leadership qualities: Various student committees/bodies and also chapters exists at VCET which are a way of boosting the interpersonal skills of students. Most of these committees are student-driven, faculty guided committees wherein importance is given to overall development of students. The most appropriate way of achieving the right way of learning i.e. "learning by doing" is accomplished with existence of such student bodies. It not only helps in developing their technical skills but also enriches the interpersonal skills like self-confidence, communication, team work, leadership, accountability, negotiation skills, assertiveness, collaboration, etc. The various committees and student chapters at VCET are Student Council, Sports Committee, Literati Committee, NSS, Hackathon, IEEE, IETE, SAE, ISA, CSI, ISHRAE, VMEA.
- **3. Research & Industry readiness:** To make students industry-ready efforts are taken by the departments. During the final year, students are encouraged to take up either research-oriented projects and projects that would facilitate innovative solutions to some pressing problems. Students

are encouraged to participate in various project show cases and demonstrate their ideas. Industry Institute interaction is fostered through various events and activities like Product showcase, seminars/talks/ workshops by industry experts, activities conducted by the Industry-Institute Interaction Cell. To provide an insight regarding internal working of companies and augment theoretical knowledge with practical perspective, industrial visits are organized by the departments. These visits help the students to identify their prospective area of work and select relevant organizations for their internships, projects etc.

- **4. Employability:** The Institute has a Placement and Training Cell with an efficient team of faculty, including a full-time placement officer to facilitate career guidance, training and placements to students and support the functioning of the cell. The cell offers guidance and support on all aspects of career planning such as aptitude training, technical training, placement opportunities and even higher studies, through structured training and placement activities. Career counselling is provided at granular level such that every student is benefitted from it. In line with its objective of aiding in placing students in competitively good companies, appropriate initiatives are taken to counsel the students with respect to career guidance and higher education. Some of them are:
 - Seminars on higher/foreign studies.
 - Talks on career guidance
 - Talks on motivational lectures by alumni, entrepreneurs, industry guests and faculty.
 - Provision of books, magazines, periodicals on Competitive/Civil service/GATE/GRE/TOEFL etc. exams in the library.
 - Subscription of newspapers related to career opportunities such as Rojgar Samachar.
- **5. Social/Moral and Ethical values:** The National Service Scheme (NSS) Government of India, Ministry of Youth Affairs & Sports provides an opportunity to the student youth of INDIA to take part in various government led community service activities & programs. The sole aim of the NSS is to provide hands-on experience to young students in delivering community service. VCET has its own team of NSS. UDAAN was founded in the academic year 2014-2015 at VCET. UDAAN is now part of the NSS committee of VCET. The inception of UDAAN is a result of the responsibility of our institution and students towards the social scenario of the society. Some of the activities are blood donation camp,
- **6. Entrepreneurship:** The entrepreneurship cell of the Institute 'E-Cell' is formed with an objective of fostering entrepreneurship skills amongst the students. It is a student-driven and faculty-guided cell striving for channelizing the competencies of the budding engineers. It is a platform where students can exemplify their innovations, creativity, zeal, passion & entrepreneurship skills and cherish their dreams. Myriad of activities like seminars, talks & prototype building of the ideas are conducted for the students.

Faculty centric activities:

- 1. Enhanced Teaching Learning: The traditional black board learning is the heart of teaching-learning process. However, with the advancement in the technology it cannot be the only means in teaching-learning process. Use of modern tools and methodologies is a must to improve the transfer of knowledge from faculty to students. The internet has exposed the students to huge repository of the knowledge. Therefore, students need to be advised to use it effectively. Every classroom is equipped with LCD projectors and internet facility to demonstrate online literature. Apart from that, faculty members have explored different ICT tools some of which are listed below:
 - NPTEL Videos
 - Youtube Channel/Youtube Videos
 - Course web pages
 - Google Forms
 - E-books
 - Digital library
 - Google classroom
 - Flipped Classroom
- **2. Research and consultancy:** Faculty members are motivated to carry out research activities, funds are provided to attend STTPs, conferences and workshops on specialized topics of interest. Faculty members are also encouraged to carry out consultancy work. To facilitate increased industry interaction, MOUs are signed with industries.
- **3. Professional development:** Numerous professional development schemes such as

research promotion scheme, IPR support, reimbursement of conference fee, support for higher education, support for faculty training. The is also one of the remote centers for IIT Bombay through which faculty can attend certification courses.