

Title of the Practice:- Enrichment of Teaching & Learning Process (ETLP)

The Context that required the initiation of the practice:

In engineering, there are different types of students, some learn very fast and some learn slowly. Some students need only guidance and some need regular attention, guidance and mentoring. Each type of students has different learning attitudes and learning habits. In such a situation, it is crucial to understand them from different viewpoints and recognize their learning levels and plan accordingly to deliver learner centric teaching and learning.

Students face difficulties in learning and they go through mental stress and several identified and unidentified challenges. Enriching teaching and learning of students depend upon the two way interaction and hard work of student, parent and teacher. These three stakeholders' integrated effort gives the best learning outcomes. Parent teacher meeting and academic mentoring covers the distance among three stakeholders.

Curriculum design and development is a significant process of developing appropriate need-based inputs in consultation with the expert groups, based on the feedback from the stakeholders. Sharing experiences and observations of the stakeholders provides a wider prospect to plan, prepare and execute planning for better learning outcome. Feedbacks from stakeholders (Students, Faculty, Parents, Alumni and Employer) is extremely essential for understanding the curriculum delivery and its timely updating as per required for industry. Scanning of feedback from the stakeholder also provide an opportunity to realize our strength and weakness. This best practice helps to support & design, modify the curriculum as per feedback of stakeholders.

In order to enrich teaching and learning process, we have adopted an integrated approach of Student's mentoring, slow and advance learners, parent-teacher meet and stakeholder feedback.

Objectives of the Practice:

- Ensuring regularity and punctuality of students through counseling sessions
- To emphasize and motivate students for their overall development
- Focus and motivate students to achieve learning goals and thereby improve their academic performance.
- Monitoring and improving the quality of students' learning experiences through the timely collection, analysis and reporting of slow and advanced learners and interacting with different stakeholders concerning teaching, learning and assessment.
- Providing stakeholders with the opportunity to actively participate in the continual improvement of teaching and learning process.
- To promote student centric teaching-learning

The Practice:

Dr D Y Patil School of Engineering has a rigorous students mentoring system of mentormentees wherein a group of 20-25 mentees (students) are allotted to one mentor (faculty) which helps the mentees to interact with the mentor comfortably. Mentors and mentees meet according to a pre-arranged calendar, as well as per the need of the student or the moment. Mentees are always encouraged to initiate meetings with mentors. The mentor guides, encourages, and advices the mentees about their upcoming student life, student health, mental and emotional well-being and listen to their issues with patience and help them solve their concerns with appropriate resources, support and referral available. They are introduced to each other in the first few weeks of the new semester. In the next step, the learners are classified based on their learning levels.

It is always good to know the learners better in order to serve them better. Institute provides quality teaching-learning to students offering the learner centric teaching-learning which recognize that the learning interest and pace of every pupil is different. On the basis of students' preceding exam and current subject performance and basic knowledge, learning level of the learners can be classified in two groups – slow learners and advance learners for each subject. A standard procedure is followed and the data is analyzed and presented in tabular forms.

A number of activities are proposed for the self-motivation of both the learners. The slow learner is basically motivated for improvement in participative learning and activities so that they can become advanced learner. Overall, based on the assessment level, a faculty has to adopt teaching methodology in such a way that he/she may not lose the attention of the slow learner and turn-off the advanced learner.

The outcomes of the first two initiatives are presented and discussed with parents in the

parent-teacher meets. In the meet the parents are more curious to know about an overall personality of a student, his/her behavior, manner, habit, attitude, learning styles, confidence level in the class, self-esteem, self-awareness, decision making skill, interest in learning, special interest, hobbies, and classroom performance. Some of the issues, only mentor or only parent cannot solve but they can be solved in the meet interacting with each other together. Though student-teacher-parents interaction plays very important role in enhancing the teaching and learning process, stakeholder's feedback is equally important.

The ultimate aim of stakeholder's feedback is to get useful insights for the purpose of improvement in all aspects of teaching, learning, assessment and capacity building. Institute obtains feedback in the structured formats from all the stakeholders. Considering online mode of Teaching-Learning the feedback is also taken in online mode through Google forms. It identifies the gap between the action plan prepared by the faculty members, delivery of curriculum and what is needed by the students. Inputs collected from all the stakeholders are analyzed and put forth in Board of Studies (BoS) for approval. After getting approval in BoS, the curriculum with the incorporation of recommended changes if any is sent to University Academic Council for their final endorsement.

The institute also takes students' feedback about teaching of faculties and the faculties with best performance are appreciated by management. This integrated approach, help the institute to enrich and improve the teaching – learning process.

Evidence / Impact of the practice:

- The mentoring system is implemented in each department successfully and significant improvement in the attendance and results have been observed.
- The slow and advanced learners' assessment has been implemented successfully in all the departments and significant numbers of slow learners are converted to advanced learner in each semester.
- In the parent-teacher meet, a number of issues were discussed with the parents in order to attain overall performance of the learners.
- The stakeholder's feedback is collected in a structured way as per the guidance of NAAC and communicated to the respective Board of Studies for the consideration. This feedback mechanism addresses the need of the curriculum revision /addition/deletion as per the need of industry.

Problems encountered and resources required / Obstacles faced and strategies adopted to overcome them:

• In the mentor-mentee system, some students feel uncomfortable in approaching

the mentors and some are shy and reluctant to seek help. In order to overcome this, we interact with their parents and try to understand the issues.

- In learning assessment, we identify only two levels of learners slow Vs. advanced learners, however there is third category at intermittent level. Second, the learners are identified subject wise and not at overall level. To overcome this we proposed the change in the next academic year.
- Most of the parents are not willing to join the meet due to their time availability. They are also more reluctant to share the issues of their wards.
- Our traditional practice of conducting such feedback is an offline mode.
 However, due to the pandemic, the institute conducted it through online/virtual mode.
 Due to this, comparatively less responses were received from the learners.
- Taking the stakeholder's feedback is one way process from the institute as the final decision is taken by the respective department' board of studies of the university after receiving the feedbacks from all the affiliated institutes.



Best Practice – 2

Title of the Practice: - Holistic Approach to Support Students (HASS)

The Context that required the initiation of the practice:

Dr D Y Patil School of Engineering conducts a good number of co-curricular and extra-

curricular activities for the students from diverse background for their holistic development. Majority of the students admit to the institute comes from the rural areas with low economic back ground. A few students are meritorious and having good life skill knowledge finds difficulty to pay the tuition fee of the course. Sometimes, it leads them to drop-out midway through the course. Some students are interested to pursue higher education but their familial and financial constraints also prevent them from pursuing it. Due to some other circumstances they also go through a lot of stress.

Stress according to the dictionary is a state of mental or emotional strain or tension resulting from adverse or demanding circumstances. In engineering education; students go through a number challenging circumstances related to family, friends, health, habit, education or financials etc. this leads to a enormous stress. In order to deal this in regular teaching-learning process, the creation of a suitable stress free learning environment is necessary and several times the students need personal counselling by professional counsellor. The stress level can be reduced, if the institute helps to develop some professional skills of their choices.

The students are quite busy in their regular academic study and they are less aware about the industry-specific hard and soft skills. Especially if the students are unsure about the career path they would like to pursue, it is important to develop skills that can transfer from one industry to another. The skills also allow them to explore their job options freely while still creating a strong resume. Even after completing the course, they are not well aware about the other carrier opportunities and avenues available outside. If they know, they are not competent enough due to lack of awareness and knowledge. While becoming a successful entrepreneur is natural for some, others require certain essential skills to start and lead a business to success. Along with professional skill development it is equally important to connect the students from a wide range of backgrounds with society to increase retention, engagement and social capital for them.

Social connect is important for mental and physical health and wellbeing as students with poor social connections are more prone and more sensitive to the effects of **social threat and bullying, depression and anxiety, substance abuse and health issues.** Hence, **i**nstitute has adopted a holistic approach to support students integrating facets related to financial supports, stress free learning, professional and entrepreneurship skill

development and social connect.

Objectives of the Practice:

- To support financially all the deserving students without any discrimination of caste, creed or gender.
- To inculcate work culture and dignity of labor and sense of responsibility amongst the students.
- To develop entrepreneurial skills and create a culture of entrepreneurship.
- To motivate students to take up self-employment or entrepreneurship as one of their career options.
- To inculcate the values of "generosity" and a "sense of social responsibility and connect" among the students.
- To identify and help students in order to pay attention to student's physical, personal, social, & emotional wellbeing as well as cognitive aspects of learning.

The Practice:

In order to support the needy students financially, institutes has taken a number of initiatives. Earn and learn scheme of the university is one of the initiatives where the students enrolled under this scheme earn by doing work as per the requirement for library, laboratory, sports facility, hostel and administrative office etc. Institute waivers of the tuition fees for a few meritorious students for the entire course duration and also offers fees concession for the UG completed students to take admission in the post graduate programs (ME Programs). Beside, institute takes discounted fees from the students for publishing the conference papers in the good journals.

Institute always focuses on creating a right stress free learning environment conducting a number of webinars, workshops and events. The full time personal counselor, Mr. Yuvraj Patil has taken several programs like "how to make the right habits for success" and "how to deal difficulties" in order to make the students stress free. Institute promotes the yoga activities on the campus though NSS with the help of professional trainers. A number of webinars are also arranged for the engagement of students towards knowing their own self in a deeper level and utilize their self-power towards gaining a better future from a career perspective. The psycho-neural counselling program was one of them conducted for students for career success. The overall purpose is to make the

learning environment stress free.

Institute conducts a number programs, webinars, workshops and events in order to inculcate soft and hard skills among the students. Some events address the challenges and future carrier opportunities in different subjects like Mechanical, Computer science and ENTC and in diverse fields like IoT, Data Science, AI, machine learning, Pathon etc. Different departments conduct several short and long term professional training and employability skill development programs. Institute always encourages the students to prepare themselves for the competitive examples like MPSC and GATE. Institute has a very active entrepreneurship development cell (EDC) to promote and conduct a number of entrepreneurship activities. The cell regularly invites successful entrepreneurs to encourage and motivate the students.

Institute successfully created a socially inclusive environment by actively connecting students to professional community. The activities under the social connects are tree plantation, plastic free campus etc. Institute desires to pay attention to student's physical, personal, social, emotional wellbeing as well as cognitive aspects of learning.

Evidence / Impact of the practice:

- During the year 2020-21, total 14 students are participated in the earn and learn scheme, belonging to different casts, creeds, religions.
- Mr. Pramod Maruti Jadhav has given fees concession for the entire course duration and Prajwal Sadashiv Patil has given 50% fees concession for AY 2020-21.
- In order the students to pursue higher education, the institute has reduced PG courses fees by 50% amount.
- Institute offered 40% discount in the publication fees to publish the conference paper in the International Journal of Scientific Research in Science and Technology (IJSRST).
- About 500+ students from departments of the institute attended the sessions of personal counsellor on stress relieving
- A number of students are trained in yoga by professional yoga trainer
- Several activities of professional and entrepreneurship skill development were conducted. Mr. Shidard Shinde and Mr. Sadik Khan are the role model for the institute as a budding entrepreneur.

• Institute conducted a two activities for social connect.

Problems Encountered and Resources Required / Obstacles faced and strategies adopted to overcome them:

- In the earn and learn scheme the institute came across problems like, scarcity of
 funds and constantly increasing number of students willing to join the scheme.
 Institute never took this scheme as a burden, but looks at it as a boon to
 inculcate our vision and mission very distinctively. The institute plans to offers
 some part time jobs to the needy students at campus.
- Many students are not approaching to avail fee concession schemes as it is linked to academic performance.
- Some of the students are shy and not ready to approach the counsellor when they are under stress.
- The pandemic situation has restricted to conduct the skill development, social connect and yoga activities offline.