

## **Novel Practices at SDMCET, Dharwad**

### **1. Learner Centric Teaching:**

**Objective of the Practice:** To adopt learner centric teaching to ensure effective learning by giving scope for the students to actively participate in teaching learning process.

**Rationale:** In this modern era of 21<sup>st</sup> century, the infusion of technology into teaching and learning has a remarkable influence on the instructional strategies of the educational institutions. The traditional teacher-centric method which has been going on for decades has now been modified and enhanced, owing to technology. In contrast to the traditional methods, the modern learning environments, students play an active role in their learning process and determine how to reach their desired learning outcomes on their own.

The contents taught in class room will help acquiring the knowledge and developing intellectual base. Learning the courses prescribed in the curricula will enable the students after their graduation to deal with real time / practical systems. Thus, the learning can made more effective by involving the learners in teaching learning process.

**Methodology:** The course teacher while teaching the course will give the students an activity, small project, conducting seminar exposing them to the state of the art practice, taking spontaneous quiz, carry out the validation through experimentation, giving open ended problems, case studies, model development, use of technological tools, with fairly reasonable introduction to the topics. The students are expected to carry out the activity by locating the necessary learning resources and collecting necessary information to validate the theoretical contents studied in class room. The whole class is divided into number of groups with maximum of 8-10 students per group and activity will be defined. The students are required to document the progress of the activity for final consolidation in to a report which will also serve as learning material for them at the time of examination to answer questions pertaining to the topics.

**Resources required:** Prototype modules, components, metering equipments, computers, power electronic devices, LCD, technological tools, etc.

#### **Outcome of the practice:**

\* The students engaged in the hard, messy work of learning will be able to answer the questions on the topics unambiguously.

\* Since the students have carried out the activity on their own, by choice they select the questions to answer confidently.

- \* The students present their activity before their classmates which in turn will be an educative program and also trigger some students to identify their field of interest thereby can select the major project to be done at higher semesters.
- \* It is observed that the students will be able to design the system on their own by developing having acquired explicit skills.
- \* It is observed that the students will be able to locate and use technological tools like open softwares available for simulation etc.
- \* It is observed that the students answer the questions pertaining to development of code more confidently in the examination.
- \* With little fine tuning they are able to take up the related assignments readily.
- \* The students become more responsible for their own learning.
- \* It will create interest in the students for lifelong learning.

## **2. Achiever Program:**

**Objective of the Practice:** To arrange for special coaching classes for slow learners/weak students to achieve set academic target and bring them in to the main stream thus, keeping their morale high.

**Rationale:** The learning capabilities of all the students will not be same. Some students are fast and some are slow in learning. The teaching to reach a class consisting of heterogeneous students is a real challenge for the teachers keeping the interest of the whole class intact. The students who are academically weak needs extra care which may not be possible in the regular classes. Hence, they require additional coaching to see that they continue to be in the main stream.

**Methodology:** The course teacher will identify such academically weak students by observing them during the regular classes or by looking at their performance in the first internal assessment test. A list of students with score less than 40 – 50% of marks (depending on the nature & criticality of the subjects) is prepared by the course teachers and will be notified to meet the respective course teacher for further guidance. The course teacher engages special classes for these students with more emphasis on clearing the concepts and also quoting the relevant practical examples. In the second internal assessment test, their performance is observed to further decide the rigor of the training to be given. Thus, the students are given finally to achieve the set academic targets.

**Resources required:** Class rooms, Laboratories, LCD, stationary for creating learning materials etc.

### **Outcome of the practice:**

- \* Enhanced performance of the students
- \* Creation of competitive zeal not to be identified for special coaching in subsequent semesters

- \* Qualifying for placements at par with other performing students
- \* Increased self confidence
- \* Privileged to be in the main stream, thus, keeping their morale high.

### **3. Mentorship Program:**

**Objective of the Practice:** To keep track of the progress of the students and provide necessary counseling if required.

**Rationale:** Students taking admission at SDMCET are from different streams, categories and background. The exposure of these students to the external world need not be same. But, when they are at SDMCET to pursue higher education, they are on a common platform. Hence, they require guidance and counseling at times by the faculty members to boost their morale. Mentorship program is devised to give them a feel of moral security to the students

**Methodology:** The Departments are required to prepare a list of mentor and mentees. Typically four students from each year of study (16 members involving junior and senior students) are attached to a faculty member who is going to be the mentor throughout their stay in the college. All the mentees will be supplied with a mentor record book which contains the full details of the students along with academic performance, attendance etc. The mentor will convene meeting of the mentees regularly (once in a month or need based) and discuss about their performance and problems if any. The mentor is sensitive and polite enough to counsel the students, thus increasing their morale. In the case of any serious issues, the same will be brought to the notice of the concerned competent authority for further course of action.

**Resources required:** Class rooms to convene meetings, mentor record books, etc.

#### **Outcome of the practice:**

- \* Enhanced performance of the students
- \* Feel of Moral security and concern
- \* Increased self confidence
- \* Privileged to be in the main stream, thus, keeping their morale high.

### **4. Academic and Administrative Calendars:**

**Objective of the Practice:** To define/plan the various academic and administrative activities for the smooth & effective running.

**Rationale:** It is necessary for an academic institution to put in sequence various activities to be run as per the time schedule. Thus, an academic calendar indicating the various academic activities and an administrative calendar indicating the various administrative activities are framed and followed austerely for smooth running.

**Methodology:** The Academic calendar for both odd & even (main semesters) and supplementary semester is framed two months in advance and the approval for implementation of the same is

taken from Academic Council of the college. It is made known to the students by publishing on the college web site and also in the syllabus book besides displaying on the main and department notice boards. The academic calendar includes registration period, re registration period, commencement of teaching, internal assessment tests, parents meet, communication of attendance and performance to parents, display of IA marks, last working day, semester end examination, announcement of results, commencement of next semester etc. This alerts both the students and the college of the time bound activities to be completed. Further, the administrative calendar includes the appearance of various activities like admission process, accounts, statutory events, communications to various authorities within the college, to the management and other legal bodies and human resource related events etc. This will be guiding the concerned personnel to keep track of the work to be carried out within the mentioned time line.

**Resources required:** List of holidays issued by concerned authorities, regulations of the college, PC, etc.

**Outcome of the practice:**

- \* Well defined target dates
- \* Timely completion of the events/activities
- \* Increased discipline and confidence
- \* Smooth and effective governance
- \* Reference document that can be operated by anybody.

## **5. Transparency in evaluation system:**

**Objective of the Practice:** To bring in total transparency in evaluation of Semester End Examination.

**Rationale:** Autonomous institutions are free to design curriculum, teach and evaluate the students. The evaluation is consisting of two components viz Continuous Internal Evaluation (CIE) and Semester End Examination (SEE) with equal weightage. The CIE marks are shown to the students for clarification, if any. Similarly if SEE valued papers when shown to the students, they will come to know the fairness in evaluation and grading.

**Methodology:**

After completion of valuation work and before announcing the results, the SEE papers are shown to the students. The Controller of Examination will announce the schedule in consultation with HODs for showing the answer scripts to the students. The students will assemble at the venue on the date, time specified. The scheme and solution is made available in the venue. They can now get the paper and see the valuation and award of marks. They can seek clarification, if there are any doubts regarding the valuation and award of marks. The faculty will clarify their doubts. If the students are not satisfied or convinced with the clarification are permitted to appeal for revaluation through proper channel by submitting revaluation application along with the prescribed fees to COE before the last date. The faculty member is permitted to make correction

if there is counting mistake, answer not being valued. If faculty feel that the award of marks for a particular question is not properly awarded can change subjected to an upper limit of 10 marks only. Further, the faculty have to give the justification in the format for any such changes. If the change in the marks is more than 10, then such cases are to be placed before the principal for further guidance

**Resources required:**

Halls for showing the scripts, concerned faculty members, attenders to carry papers from COE office and back, stationary for documentation etc.

**Outcome of the practice:**

- \* The students will come to know that the valuation is fair.
- \* No ambiguity in the minds of the students about the valuation process.
- \* Students will come to know the pattern of expected answer for award of maximum marks.
- \* Reduced appeal for revaluation.

## **6. Augmenting well rounded personality development:**

**Objective of the practice:** To develop well rounded personality of the students so as to have edge over their competitors.

**Rationale:** Education is basically to bring about behavioral change. Acquiring knowledge by studying the contents mentioned in the curricula is not sufficient in this competent era. To meet the requirement of different stake holders, students need to be equipped with additional skills. Thus, it is a must to ensure that learning will happen both in cognitive and affective domain. Hence, through pre defined various activities an attempt is made to develop well rounded personality.

**Methodology:** Value addition programs covering domain specific and soft skill are regularly conducted by inviting experts from external agencies for a period ranging from one week to 2 weeks without affecting the regular academic activities. Motivational and aspiration building programs are also arranged. Trainings, hands on workshops, conference, symposiums are the routine activities organized to expose the students to latest developments. Industrial training, internships are encouraged to expose them to industrial environments besides calling industry/academia personnel for invited lectures. Apart from these regular aptitude test, industrial tours etc. are also organized. The platform is provided for students to exhibit their co curricular and extra curricular activities by organizing National level mega event called Insignia every year.

**Resources required:** Budget, human resources, infrastructure, etc.

**Outcome of the practice:**

- \* Value addition
- \* Increased knowledge and skill sets
- \* Increased Credibility
- \* Graduating engineers with all attributes as expected by the stakeholders
- \* Increased Image of the college and relevance to the society.