

## **INSTITUTIONAL BEST PRACTICES**

### **1. TITLE OF THE PRACTICE**

#### **AUGMENTATION OF STUDENT LEARNING CAPACITY**

### **2. OBJECTIVES OF THE PRACTICE**

Modern Teaching Learning Process emphasizes on student-learning rather than faculty-teaching. The learning skill of students is desired to be developed to such a level that they are subsequently able to easily develop Life-long learning skill, which is an important aspect of Programme Outcomes (POs) of a modern Graduate Programme in technology. Thus, the first step towards life-long learning is development of learning capacity and the second step is development of Self learning capacity. The objective is to build up student learning capacity step by step so that s/he acquires skill for Life-long learning at the time of graduation.

### **3. THE CONTEXT**

Success of an Outcome based Education (OBE) or more precisely Learning Outcome (LO) based education by and large depends on learning capacity of the learners. To help the students to develop learning skill, faculty / instructor has to design the courses and instructions in such a way that students can learn them almost by themselves with or without the help of the teachers. The challenging issues lie in the fact that designing such systems requires innovative thinking and dedication. Added to this is generation of motivation of the students towards development of self learning capacity. Interestingly assessment of development of learning / self learning capacity is difficult as it is associated with other factors like assimilation of domain knowledge or communication skill (oral / writing). Hence designing a suitable assessment system for this skill is also a tricky one.

### **4. THE PRACTICE**

This practice is to be followed by all faculty for their students. It has four components:

1. Initiation stage(motivation): generation of motivation amongst the learners about the course. It is a usual practice in any academic programme.
2. Planning stage (drafting the Specific Instructional Objectives (SIO)): breaking up the syllabus of the course in modular and unitary forms, writing the related instructions using Bloom's taxonomy is an essential component of this practice. This is normally followed by faculty in an OBE system. SIO is displayed and made available to students. Through this they understand the level of learning or understanding they are required to master a specific topic. It helps them in self learning of the topic, in case a class room instruction is missed.
3. Practice stage (to acquire the skill under supervision): this is an innovative part of the scheme. Termed as "Learn while teaching" is an innovative method of instructional delivery adopted in our institute. The course instructor encourages his students to volunteer to deliver a topic/sub topic (preferably new but related to the course). At the end of the delivery of the topic in the class room by the student, the instructor along

with the peers of the speakers discuss the essential points, if any, the speaker has missed. This technique motivates students to self-learning.

Seminars are conventional means for development of self-learning skill. However, it is different from above in the sense that normally seminar topics are related to completely new areas (like new technology).

Home assignments or Term papers are the easier and effective techniques to develop self-learning capacity in students.

4. Assessment stage (evaluation of acquisition of self-learning skill): apart from the assessment during practice stage, other technique of evaluation is adoption of “Open Book Examination” system. The method is not new but adopted only in some autonomous institutions. Under normal circumstances our affiliated nature of the institute does not permit its adoption. However, in internal assessment scheme it can be easily accommodated. Design and Planning courses are Open Book Examination compatible. The optional Unit Test i.e. the third one is scheduled to have open book examination for those willing.

### Limitations / Constraints

Time management in practising “Learn while teaching” is to be kept in mind.

Organization of Open Book examinations requires proper thinking by the faculty and briefing of the students.

## **5. EVIDENCE OF SUCCESS**

The success is evident from appreciation of the practice by a section of the students, mostly the brighter ones. Quite a few had been observed to become academically confident and independent.

The practice has also been appreciated by National Board of accreditation (NBA).

An interesting case study can be cited here to substantiate the evidence of success of this best practice. A group of senior students affiliated to PHOENIX, our student technical and cultural body organizes annually MOCK TEST for their peers, mostly from junior classes. The questions are compiled by them and desirous students are motivated to write these tests to increase their employability (professional ability as well as to face professional interviews). The scripts are evaluated by the students and answers discussed with the candidates post evaluation.

PHOENIX also organizes seminars on specific topics with joint participation of experts and our students.

## **6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED**

Two constraints faced were (a) time management for “learn while teaching”, and (b) organization of open book examination. Open Book examination is normally not a popular one for both the examiner and the examinee. To the former setting the question paper and to

the latter writing the test seems to be much tougher compared to conventional ones. The student community, not so receptive at the beginning, has been persuaded and the practice has now an increased acceptability.

The teachers have been advised to allocate 5 to 10% of the class room teaching time for practice of the technique and/or utilize tutorial time partially. The practice does not require any additional resource for its execution except arrangement of training for faculty on pedagogy. Emeritus Forum has played a constructive role in this matter.

## **7. NOTES (OPTIONAL)**

In autonomous institutions the practice can be made a mandatory part of the teaching learning process. In non autonomous institutes the practice has to be followed in the way as done in our institute described above. Dedicated faculty is needed to inculcate this practice effectively.