

Title of the Practice: Teaching and Learning Process

Objectives of the Practice:

SRK Institute of Technology desires to impart appropriate knowledge, skill and training to enable the students become qualitative practitioners of their profession. Teaching and learning process is the focal point in the whole of educational activity. Changing face of education and rapid advancement of technology on one hand and changing perceptions among the millennial students as well as induction of new generation of teachers on the other hand challenge the whole gamut of teaching learning process. The crux of this practice is to train the facilitators in better teaching learning processes for enhanced deliverance of learning.

The Context:

In the past few decades, there has been a paradigm shift in teaching methodologies. It has moved from teacher centric approach where the learner is a passive participant to student centric approach where a teacher is just a facilitator to student's learning. In addition, the massive advancement of science and technology coupled with the expectation from native millennial student generation, has impacted and shaken the concept of teaching. Often, those joining the teaching community recently are also of millennial generation. In this context, it is imperative that the teachers are trained appropriately to carry forward the teaching learning process in an effective and smooth way. The shift in generational outlook, that is, the young tech savvy brigade joining the ranks of teaching and older generation teachers who need to become more versed with technology, can be achieved only through timely and interventional training.

The Practice:

Since its inception, SRK Institute of Technology has taken measures to ensure that teachers are adequately trained in the teaching methodologies. In this regard, faculty development programmes for teacher training are continuously conducted; the resource persons for these programmes may be from national teacher training organisations or the senior faculty members within the campus. Sometimes, teachers are given an opportunity to attend such programmes outside the campus.

At SRKIT, newly recruited faculty members having less than two years teaching experience are given orientation by the senior professors. During the orientation programme, the participants are given an opportunity to have practice teaching sessions along with teaching methodologies. All new members are encouraged to observe and be a part of classroom proceedings of senior faculty classes.

In 2016, the institute has organised a teacher training programme along with the National Institute of Technical Teachers Training and Research (NITTTR) Chennai. Thirty four

faculty members, especially newly recruited, attended the programme. The feedback on the programme suggests that the training session was productive in terms of supporting teachers understanding their perceptions of class room teaching, methods of assessment and evaluation.

The institute became a consortium member of IUCEE (Indo Universal Collaboration for Engineering Education) in 2018. We became the members of IUCEE TLC Cluster Team. Inspired by IUCEE Leadership Summit held at Goa in 2019, a Teaching Learning Centre was established in 2019 for the purpose of giving inputs to teachers regarding teaching learning process. As a consortium member, the faculty got a chance to attend a series of webinars for self awareness and up gradation in all disciplines.

A week long faculty development programme was conducted as a part of Teaching Learning centre initiative with IUCEE collaboration. Dr. Claire F. Komives, Professor of Chemical Engineering, San Jose University was the resource person for the FDP on “Effective Teaching Learning” held from 14th Oct to 18th Oct2019. In this FDP, the faculty were introduced to many concepts of teaching like team teaching, flipped class room, blended classroom, designing tasks, reflective practice, collaborative learning, assessment methods using Bloom’s Taxonomy.

Similarly, many faculty members were encouraged to do AICTE-NITT Module 5 ‘Technology enabled learning and lifelong self learning’ during COVID break in March-April 2020. This course was pretty useful for both inexperienced and experienced faculty as the module focussed on the teaching methods using available technical resources.

Evidences of Success:

The faculty with less than two years become more confident in handling the classes. The perspective shift from a student to a faculty is visible as most often, the newly joined faculty are also millennial. They are tech savvy but their outlook towards teaching is not a very informed one.

The lockdown during pandemic was a game changer. The above initiatives helped the faculty to adapt online teaching in no time during the pandemic. The faculty became versatile in implementing active teaching learning methodologies using the technology. The awareness ignited the adaptability and explorative nature of the faculty that was evident in the successful implementation of online teaching learning.

The reluctance to use technology or collaborative teaching methods among the seniors has slowly given way to a more positive acceptance. They are implementing quiz, peer teaching, group or team learning and flipped classroom methods. Blended classroom has been a boon in the post COVID situation. Classes were conducted in both online and off line format.

Problems encountered:

Many problems are encountered while implementing teaching learning development activities.

1. In flipped class room, students may not be game to advance preparation of the topic. They may skip the pre task assigned by the faculty thereby attending the class with zero prior knowledge that leads ineffectual learning.
2. Prior preparation by the students may create or promote unhealthy digital divide among the students.
3. Use of technology in blended learning can cause cognitive overload on the learners.
4. Also, IT literacy among the faculty is one of major disadvantages in adapting new technology in learning.
5. The faculty may not be able to keep pace with the student's learning who has advance knowledge of the topics.
6. All students may not have suitable access to technology or internet bandwidth.

Despite adapting latest methods in teaching learning, we cannot ignore the fundamental chalk and talk method. SRKIT tries to maintain a fine balance between the old and new versions of teaching learning.