

7.2 Best Practices

Describe at least two institutional best practices (Upload details of two best practices successfully implemented by the Institution as per NAAC format in your institution website, provide the link)

Best Practices No 1 Conduction of Faculty Development Programs (FDP) 1. Goal

The Institute organizes Faculty Development Programs for promoting quality in faculty members. FDPs are arranged and conducted with an aim to improvise personal, profession and holistic development of faculty.

2. Objectives of the Practice:

- To develop effective curriculum.
- To develop Teaching Learning Material.
- To develop digital content for ICT enabled learning.
- To enhance effectiveness in content designing and its delivery.
- To enhance instructional skills of the faculty.
- To update knowledge and inculcate professional ethics.
- To promote technical expertise.

3. The Context

The research shows that an inspiring and informed teacher is the most important factor influencing student achievement, so it is critical to pay close attention to how we train and support both new and experienced educators. Support for new teachers is often uneven and inadequate. Mentoring and coaching from veteran colleagues is important to the successful development of a new teacher. FDPs create opportunities for novice teachers to learn from best practices, analyze and reflect on

Their teaching. The context for undertaking this type of faculty development is our realization that observable teaching actions and skills are central to effective teaching, and fundamental to how teaching is perceived by students. These actions and skills have been identified by student feedback, a staple practice in our institution. Building on this information, we thought of enhancing the effectiveness of course delivery through workshops, seminars and common platform discussions and consultations that concentrate on particular teaching techniques and skills. We built the program on the assumption that once the novice instructors are aware of any discrepancies between their professed aims and their teaching practice, they would then take steps to minimize that discrepancy.

4. The Practice

Faculty Development program is conducted every year for all faculty or a selected number of faculty as per need. The sessions during FDP addressing various domains are conducted by in-house senior faculty and invited experts. The faculty members are grouped into their respective domains headed by a module coordinator who will be responsible to monitor and guide the proceedings. Recently in view of outcome based education stress is laid on formulation of topic learning outcomes, course outcomes, programme Specific outcome and its linkage with programme outcomes. Every faculty members also plan the sessions minute to minute so as to have uniformity across faculty members teaching the same subjects. Encouragement is given to faculty members to indentify real life problems and recent issues of national and international importance so that the students get benefit of connecting wherever is learnt in class to real life.

5. Evidence of Success

The success can be enumerated in two areas. The first is related to new faculty joining the institute without any teaching experience, this faculty receives in depth inputs as what is to be conducted during the class along with ready use digital material and valuable resource contributed by senior faculty members. To illustrate the benefit the new faculty members were good at developing digital content. A blend of the senior faculty with modern usage of the digital content created session material which is useful for the tech- savvy students of day. For the senior faculty member it was an experience of

learning, unlearning and re-learning considering the fast changes in the technical field. The students feedback have indicated marked improvement in faculty performance as the involvement of students is enhanced due to meticulous session plans prepared in FDP. The real life examples were also appreciated by students and there has been marked enthusiasm in participating various competitions that enhance learning like Go-Cart by mechanical engineering students, Smart-India Hackthon by computer and IT and electronic and Telecommunication students and many more.

6. Constraints and limitations:

As such there are no Constraints and limitations related to FDP.

Best Practices No 2 Effective teaching-learning process 1. Goals of the Practice

To develop, implement and maintain effective teaching-learning process.

2. Objectives of the Practice

The objectives/intended outcomes of this best practice are:

- To assist in curriculum planning
- To ensure effective delivery of contents across all the courses
- To improve student's learning experiences and outcomes
- To provide staff with information in regard to professional development needs

3. The Context

Quality teaching is defined in terms of effective pedagogical techniques to produce learning outcomes for students. It involves several dimensions, including the effective design of curriculum and course content, a variety of learning contexts (including guided independent study, project-based learning, collaborative learning, experimentation, etc.), soliciting and using feedback, and effective assessment of learning outcomes. Institutions need to ensure that the education they offer meets the expectations of students and the requirements of employers, both today and for the future. One of the most challenging paradoxes in the world of academics is the fact that while innovativeness in teaching is largely agreed upon as the most desired aspect of teaching, it is also equally a fact that innovativeness as a tangible teaching component cannot be defined or promoted. To meet the challenge of promoting innovativeness of teachers the best way was found to be insisting on documentation of individual teaching plans/lessons which in turn help to identify the most creative methodologies /approaches that can be shared with others who are not spontaneously creative. Under the system of standardized procedures the pedagogical tools adopted by most creative teachers get to be systematically documented and this can work as frame of reference for teachers who are not spontaneously creative. Senior faculty or sometimes even the youngest faculty coming from diverse backgrounds like industry etc., explore alternative pedagogies or adapt student support to varied student profiles and pedagogical competencies. Their alternative teaching methodologies can serve as training models to other teachers. The individual performance of each faculty member is a crucial factor in quality teaching. The unit plan designed by the faculty becomes the frame of reference to make the teacher accountable for the status of syllabus completion. In the context of teachers moving towards greener pastures / IT Sectors, the need for adopting standardized procedures was deeply felt as transition becomes smooth when there is a switch of teachers as the former teacher's records becomes a ready reference for the teachers. Through constant checks of teacher's documents which include their teaching plans, laboratory plans, academic records, course files, etc., the institution finds scope to identify areas of deficiencies and also take up appropriate FDP programs for the betterment of their professional effectiveness and also for the quality enhancement of the academic program.

4. The Practice

The procedures which constitute the implementation of the practice are as follows: The institution has a meticulously organized and clearly planned teaching, learning and evaluation schedule, well integrated into the total institutional scheme. Each faculty of the department has an individually drafted teaching and laboratory plan, which reflects how each unit and experiment is taught by indicating the time frame along with a mention of methodologies/ references used and modes of evaluation practiced. Self appraisals, submitted by the individual teachers gives a clear indication of the teachers' contributions in various categories - academic, administrative and extension activities. The Academic Monitoring Committee ensures the effectiveness of the process by fortnightly check of the attendance of students, academic records, Self appraisals and syllabus completion statements submitted by the faculty. The effectiveness is further ensured through cross verification by the Head of the institution. The teachinglearning process is continuously reviewed by the AMC and Principal by taking into account the feedback given by the students. Each department timely reports on the activities comprising academic activities, research and extension activities, innovations in teaching/learning, publications, staff and student achievements, extra and co- curricular activities to the Principal. To ensure quality sustenance and enhancement the college periodically conducts the performance audit of the departments which includes course review, Review of Teaching – learning methodologies, Result analysis, Research output,

Faculty Development Programs attended/conducted and Extension activities, Co-curricular and extracurricular activities conducted during the year. Departmental meetings are conducted once a month and whenever needed. The minutes are documented and signed by the HoD. Result analysis is submitted by the individual faculty. The result analysis of each department is submitted to the Principal after each semester. Monthly Syllabus coverage report is also periodically submitted by the individual teachers in order to ensure timely completion of the syllabus. Feedback is taken from the students twice in a semester for teacher evaluation. Thus the regulatory mechanism of timely checks on teacher quality has the double advantage of improving not only teacher but also student performances.

5. Evidence of Success

The evidence of success is also seen in achieving the targets/benchmarks/distinctions mentioned below:

- Availability of increased options with diversification of courses
- Industry relevant curriculum with thrust on employability skills.
- Better placement records.
- Word of mouth publicity through successful Alumni.
- Enhanced reputation among academicians networked through regular conduct of seminars/guest
- lectures.
- University ranks achievements are held by the students and High pass percentage least cases of
- dropouts.
- The College has emerged as a trusted name for discipline & value based /holistic education.
- Better performance in national level competitive exams like GATE.

6. Problems Encountered and Resources Required

University syllabus has limitations for catering to fast phase of technological developments. Although the institute tries to bridge the gap by conducting various add-on courses and guest lectures by experts from industry. The mind set of exam oriented learning of the students is a major issue and needs to be tackled by continuous counseling to students to switch from exam oriented learning mode to knowledge Oriented learning mode which will be useful for securing gainful employment or entrepreneurship for life time.

Best Practice No:3

Use of ICT for Online Teaching due to Pandemic Situation

- 1. Goal : To implement the curriculum on line using ICT facilities.
- 2. Objectives of the Practice :
 - To implement the course content.
 - Conduction of Pratical
 - CIE
 - Examination.

3. The context

All world is facing pandemic situation. To be out of this situation, we all are struggling. All fields are affected due to Covid 19. And also education field is affected. But ICT is very much helpful to teachers and students. Due to these tools teaching-learning process becomes easier. In education, ICT play vital roles in facilitating teaching and learning. They have transformed classroom communication methods and modified instruction strategies. Also, ICTs have made teaching and learning interactive and collaborative instead of the traditional teacher- talking and students listening approach. The development of ICT is seen as a better way of teaching and learning a certain language compared to the existing methods. In education, innovative learning, especially learning can be done by using the Internet to generate device-based learning ICT. In this digital era, ICT use in the classroom is important for giving students opportunities to learn and apply the required 21st century skills. In the digital world, where everything is under control of the Internet and brand new technological inventions, it is difficult to undermine their contribution to foreign language teaching. ICT appears as a 'bridge' to break the distance and 'survive' the learning. In case of distance, teachers can use ICT through video conference to enable them teach or monitor the students learning process.

4. The Practice

The pandemic situation and subsequent lockdowns have compelled to adopt new methods and techniques in teaching learning process. Therefore during the second half of academic year 2019-20 the institute adopted the online teaching. Different apps such as zoom, Google meet, Webex, Microsoft and many other ICT tools are being used by the teachers. And all efforts are being made to see that knowledge transfer is achieved effectively.

MOODLE platform is used to provide the students Digital Course notes, PPTs, Video Lectures and conduction of examinations. The online teaching helped the institute to keep the students enganged during this pandemic situation.

- 5. Evidence of Success
 - Effective implementation of syllabus/curriculum

- Successful Continuous Internal Evaluation
- Successful Conduction of in-semester examination
- Provision of learning material on MOODLE.
- Successful conduction of Pratical/Oral/Project examinations
- Good performance of students in online examination conducted by affiliating university.
- Enhancement of expertise faculty members in use of ICT facility.

6. Prblems Encountered and Resources Required

- Online learning may be a savior but it comes with its own problems :
- As this may lead addiction to children of overuse of electronic gadets and use of internet resources.
- From internet connection problems to assessment issues, there are many problems to solve yet. At some rural places there are always problems of having continuous bandwidth and data pack. And also some places facing the network issues.
- Ensuring online security for video classes and tackling boredom are also issues that need attention. In online education system, a teacher can't exactly understand the students gaining capacity and it is difficult to ensure understanding of teaching contents to students even after the successful delivery of sessions.

Lastly Chalk and board will never been replaced by anything.