

ACY 2016-2017

Practice #1

Title of the Practice: Industry Institute Engagement

Objectives:

- To establish Industry-Institute Partnership /Interaction Cell
- To extend participation of experts from industry in curriculum development and revision
- To promote professional consultancy by the faculty to industries
- To undertake collaborative research programmes and field studies by faculty and industry experts
- To ensure students can take their theoretical and practical knowledge ahead to carve out a role for themselves in their chosen industry and society
- To adopt industry institute interaction as a tactile method of teaching for enabling students to build relationship with companies and practice networking with industry peers and experts

The Context:

Since ACY 2012 – 2013, the time of at which the autonomy was granted, the Institute is giving lot of importance to develop a holistic curriculum to the stakeholders with an objective of enhancing the students capability and raise their standards in par with other leading institutions. In this context, while realizing the vision of the Institute as well as preparing the graduates to meet the minimum requirements by the industries, the Institute has taken several measures by leveraging the potential of autonomy to tie-up with IT, ITES and Core industries. This realization and the context of building the relationship with industries enabled the institution to make an attempt to partner with industries to prepare the graduating engineering with 21st century skills.

The Practice:

Industry institute interaction is essential for ensuring that practice meets theory across all functional areas. It is highly essential in enhancing a student's interpersonal skills and making him/her industry-ready. Industrial visits, internships and practical mentoring have their own importance in building a career of a student, especially those pursuing a professional degree. Industry interaction with institute is regarded as the part of the curriculum as it gives students an insight into the regular, internal workings of a company. It is a known fact that just theoretical knowledge is not enough for making a professional career. Industry institute interactions go beyond academics and it provides excellent exposure for students to attain practical perspective of the world of work. Students get an opportunity to learn practically by applying their theoretical knowledge, through working methods, interactions and employment practices. It gives them the exposure to current working methods as opposed to just classroom theoretical knowledge. Furthermore, students are also able to learn about the work environment of companies and feel more confident when it is time for them to appear for campus interviews or otherwise. To realize this, the institute has the following practices in place

- Industry experts in various committees of the institute
- Summer internship for one month with credits
- One credit course designed and delivered by industry experts
- Full semester internship
- Organization of interaction sessions with industry experts for students and faculty twice a semester

- Organization of national level workshops with industry experts for academic community once an year
- Interaction programs by alumni of the institute working in industry for motivating young minds Regular industrial visits to students and faculty

Evidence of Success:

- Establishment of internship cell
- Grant received for research project from ISRO
- Positive Feedback from Internal and External Stakeholders
- Companies are volunteering to take interns with pre-placement offers
- Quantitative outcomes

| S. No. | Key Performance Indicator | 2016-17 |
|--------|------------------------------------|---------|
| 1 | Networking with companies | 43 |
| 2 | No. of interns | 285 |
| 3 | No. of interns with stipend (%) | 34 |
| 4 | No. of pre-placement offers (%) | 13 |
| 5 | Placements | 367 |
| 6 | No. of research grants by industry | 1 |

Problems Encountered and Resources Required:

- In initial stage, networking with companies posed serious challenges as the Institute is located in a very remote place from the city
- Initial travel was too hectic to establish the industry connect
- Paradigm change in the mind set of stakeholders posed serious challenges to adopt to this initiative at the very beginning
- Identifying the companies who are seriously looking for industry-academia engagement through various avenues had several challenges

Practice #2

Title of the Practice: Innovative Teaching Learning Pedagogy towards Student Centric Learning

Objectives:

- To slowly phase out teacher centric learning environment to student centric environment
- To develop an innovative teaching learning pedagogy promoting a vibrant classroom model and to break the monotonous way of lecturing
- To facilitate peer-to-peer learning strategy and to provide a platform to encourage critical thinking among the learners

The Context:

The Institution always believes in continuous improvement and embrace changes in adopting and deploying best practices in the academic eco-system. Realizing the limitations and scope for improvement with the conventional teaching – learning process that affects the preparedness of the students for 21st century skills, the institution has made an attempt to develop an innovative teaching learning practice with the use of appropriate ICT tools. And to change from complete teacher centric learning environment to student centric learning environment, Cohesive Teaching Learning Practice (CTLP) is developed after having several discussions with concerned stakeholders. This has been formulated to have the elements that were found to be minimal or missing in regular classroom environment. The attention level of learners are found to be decreasing for several reasons. Also, learners of nowadays show interest to digital platform. All these factors, led to formulate CTLP framework that addresses all these issues to the maximum extent.

The Practice:

In the context of outcome based education, an effort has been made to align the teaching-learning process in line with the philosophy of OBE by deploying “Cohesive Teaching Learning Practices (CTLP)” which includes the following class room delivery elements. These elements are focussed to accomplish focussed classroom delivery, effective assessment, creating interest among learners, articulation skills and finally, critical thinking skills.



Evidence of Success:

- a. Improvement in teaching – learning process and shift from teacher centric to learner centric environment is being observed in the classroom environment
- b. Improvement with regard to the preparedness of the course instructor for effective classroom delivery with a focused intended learning outcomes

- c. Availability of e-courseware in similar line with CTLP format
- d. Think-Pair-Share model of CTLP helped a lot for peer-to-peer learning
- e. All the deliverables are developed in CTLP format in LAN

Problems Encountered and Resources Required:

- a. Paradigm change in the mind-set of internal stakeholders posed serious challenges to adapt to this new teaching-learning pedagogy. As this was initiated by the members of IQAC, several programmes in this line was organized to train the members of faculty after necessary vetting of the proposed pedagogy by a team from IIT Mumbai and thus the challenge was slowly turned to a success story
- b. In the very beginning, there was a serous resistance from few members of faculty to prepare the lecture plan as per the format of CTLP as this takes much time in the first attempt. After having several training and sensitizing programmes, now all the courses are developed in the CTLP format