2015-16

Title of the Practice: The Annual Academic Retreat – IQAC Initiative

Goal:

An Annual conscious planned effort by the entire Faculty to develop AITS as a Centre

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Excellence

- To serve as an effective platform for the faculty members of the various disciplines to come together to gain and contribute towards institutional development.
- To identify further measures for Quality initiative, Quality sustenance and Quality enhancement.
- Familiarizing with the performances of other schools under the management
- Identify any additional resources required for the forthcoming year
- To raise the institutional capabilities to higher levels ensuring continuous quality improvement.

The Context:

Over the past two cycles of NAAC Accreditation, the institution is constantly and consciously working on the quality related parameters. Annamacharya institute of Technology and Sciences is proud of its Committed Management. All the faculty members are encouraged to be part of the process. The students are also involved in the bottom up Planning for setting goals for the year ahead.

The Practice:

The Annual Academic retreat is a unique practice adopted by the college for the past two decades as an occasion for the various schools to revise and finalize their planning strategies with regard to policies, activities and calendar for the new academic year.

Organized by: Internal Quality Assurance Cell

Period: May Duration: 3 Days. Participants: All the faculty members of the Departments Total Number: Between 160-180 faculty members Chaired by the College Principal Schedule:

Day 1(9.00 am-5.00 pm): AITS Campus

Director / Dean, Academics and Examinations Speech followed by sessions handled by Invited Experts

Day 2 (9.00 am-5.00 pm)

After an early breakfast, General guidelines for planning the Strategic Planning exercise for the year is given to the common forum followed by department wise discussions

Day 3 (9.00am-2.00pm)

Presentation by the departments Finalization of the Academic Calendar for the coming year Departure back to the campus

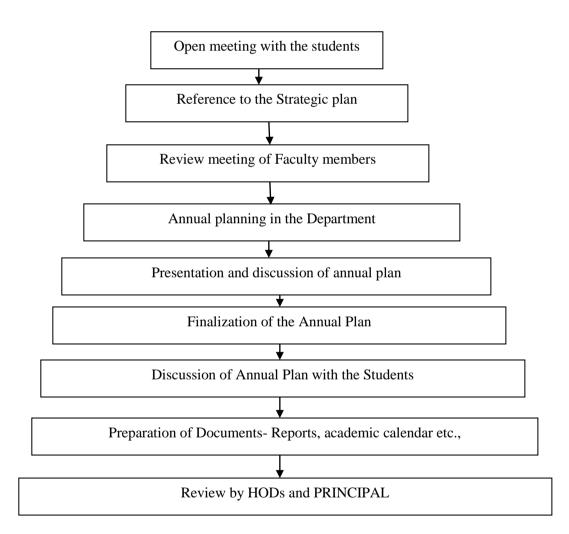
Evidence of Success

- All the faculty members have participate
- Departmental audit taken place.
- Common Institutional calendar is prepared for common events with the support of all the departments in one venue.
- Department wise Academic calendars are planned and implemented accordingly.
- Quality related bench marks are decided and agreed upon for implementation.
- More research and publication are the quality outputs.

The Annual Plan Document is referred by the different department during the weekly Departmental meetings and monthly General Staff meetings. The heads of the departments and the Principal reviews the annual plan during the department level and college meeting respectively.

Problems Encountered and Resources Required:

- No problems encountered.
- This requires advance and rigorous planning and the support of all the faculty members.
- This usually takes place during the month of May when the official vacation is announced.
- Financially it is burdensome for the college Management.



2016-17

Title of the Practice: Promotion of Research

Objectives of the Practice

- 1. To keep pace with the relentless wheel of change and update the intellectual calibre of the faculty
- 2. To encourage the faculty to pursue Ph.D.
- 3. To acquire guide ship to produce more research scholars
- 4. To motivate the faculty to apply for the major and minor research projects by providing guidelines and details of funding agencies
- 5. To fulfill the requirements to promote the research departments into research centre's
- 6. To collaborate with other institutions and universities in and abroad □ To arrange for interface among the institutions, industries and the public to take up research projects relevant for the present day
- 7. To encourage the faculty and the students to organize and present research papers in the national / international seminars/ conferences / workshops
- 8. To publish quality research articles in reputed journals, edit study materials for the prescribed syllabus and author books of high originality.
- 9. To provide seed money for research activities
- 10. To take steps for publishing a Research Journal

The Context

Since constant updating of the subject is very essential to try the untrodden paths, the teaching staffs of the college is highly conscious of quality enhancement and quality sustenance on par with the progress of technology in keeping with other autonomous institutions. The College generates knowledge for dissemination and so its main focus is on quality research. It has created a research ambience through strengthening infrastructure facilities, motivating staff members and guiding them to acquire grants from the funding agencies to launch on research undertakings - pursuing Ph.D., taking up

minor or major research projects, guiding research scholars and publishing research papers and books. Challenging issues to be addressed while designing and implementing the practice:

- The great demand of the rural based students for the attention of the staff to cope with their studies.
- Requiring sound knowledge of technology development
- Creation of awareness on the need for research to update the knowledge of the students and the staff at international/national standards
- Creating an interest in research in students through individual or group research projects as part of their syllabus
- Forming linkage with the industries and research centers and collaborating with them for the research projects of staff and students.

The Practice

The institution provides opportunities to the faculty to do Ph. D. under Part Time research privately. The College also motivates for doing major and minor projects through UGC and other funding agencies. A Research Committee under the Chairmanship of the Principal actively involves in promoting research culture among the staff and students in the campus. It sets the target for achievement in the action plan presented and submitted in the Planning and Evaluation Committee meeting every year. The attainment of the target is reviewed at the end of the academic year. Support facilities for research:

- Special consideration in the form of leave is given to the staffs that are on the verge of completing their research work.
- The visits to various Universities/websites and libraries for data collection have enriched their research.
- The management extends co-operation to the staff to go abroad for paper presentation and send proposals to UGC to avail travel grant.
- The management has decided to give financial assistance to the self-finance faculty who make research publications in the journals with high impact factor.
- Rewards of teachers are based on their achievements in research. Constraints faced in the pursuit of research

- Owing to time constraint and interface, the gap between academia and industries is not adequately bridged to fulfil the needs of industries.
- The students can be further motivated to explore new areas of research and procure funds from various funding agencies.
- Students can be provided hands-on activity based research in the industries to address challenges faced in the job market.
- Extension Programme can focus on neighbourhood oriented research to solve real life problems. Interdisciplinary and socio-economic developmental research can be encouraged among the students and the teachers.
- Ph.D. holders can be motivated to publicize their research in the form of books.

Evidence of Success

The achievements in the field of research are the main indicators of excellence in research practiced at the college.

- Recently five to six staff members have successfully defended their doctoral degrees in different Universities. A good number of staff have availed the opportunities for presenting papers and publishing articles and books. 5 Minor and 2 Major Research Projects are undertaken during the assessment period. 5 staff members are University approved supervisors for guiding Ph.D. scholars. Final year UG and PG students undertake mandatory and funded, individual and group projects.
- One of Research Department has been elevated into Research Centre.
- E-journals, INFLIBNET and Internet laboratory are added in the library.
- Additional Internet laboratory has been established for the hostel students.
- Publication of research papers in reputed journals with high impact factor evinces the keen interest of the faculty in research.

Problems Encountered and Resources Required

- More incentives can be given to the teachers by the institute for research activities- publications of books and papers in reputed journals.
- Refresher courses can groom teachers to take up research projects.
- Conferences and seminars can be organized for the teachers and the students to create awareness of the requirements for research-preparation of proposals, various funding agencies etc.

- International collaboration and co-operation can be sought to make research more qualitative.
- Academic audit formulates quality parameters to ascertain the quality of research of the staff and the students in each department.
- The institution is run separate laboratory along with internet in free-of-cost.
- Holistic development for all the students and faculties

2017-18

Title of the Practice: Student Design Model Contest

1. Objectives of the Practice

The main aim of this practice is to encourage the students in a direction, in which they can improve their creative skills and innovative skills and also exhibit their knowledge in the form of either a working model or study model or in the form of a chart representation of their idea about a model.

2. The Context

The students are good with their theoretical Knowledge. But it has come to the notice of faculty that they are lagging in practical implementation of designs other than the circuits they practice only the laboratory experiments. In this connection, to encourage the students to design their own creations, this student design model contest practice has been organized. They have been supported frequently by professional bodies in the institute. Also through this practice students can compete with in the present, fast growing and changing technological era, having introduced with new technologies in emerging fields or subjects. It is very much useful to the fast learning students and also it helps the students who need orientation to develop new technology and to learn evaluation process of new technology.

3. The Practice

It has been started in the year 2015 on a lower level and has been continued every year by leading to enthusiasm in the students. In the beginning the students had many apprehensions regarding the success of this practice. But through the frequent motivation by the faculty and lab technicians, those apprehensions have been overcome by the students. The Professional bodies in the institute have played a vital role in organizing this practice. They gave various volunteer teams to conduct these events. Further, the students were encouraged with appreciation certificates and also with appropriate prizes. Later, for betterment in the conduction process of these events a dedicated team of faculty has been appointed in the department. They are taking care of enlisting the interested students, selection of better among enrolled, implementation process, design and development phase and monitoring process. This Practice also leads to self-learning of students through which their confidence levels have been improved.

4. Evidence of Success

This practice, which was tested in year 2015 with a small group of individuals, has grown to 20 batches with minimum of 3 students per batch in the year 2016. The results of this practice have shown a tremendous rise in the year 2017 leading to creation of 33 models. The top 5 models among 33 were selected to compete in the district level model exhibition. After receiving positive feedback, they were selected for university level competitions. In the year 2018 this practice has led to design and develop 53 models and exhibited in the institute level competitions. Further, this practice created zeal among group of students which made their model selected for a competition titled "*Smart India Hackthon-2018*". This particular model impressed the organizers and jury members of the above said competition leading to file a patent.

5. Problems Encountered and Resources Required

Although, the practice leads to a grand success, the students found difficulty to find time to carry out this type of activities due to their academic assignments. In the beginning it was very difficult to provide them laboratory slots and equipment's. Later it has been overcome by providing flexibility for the interested students and the supervising faculty in the academic activities. The main resources require to implement the practice were the consumables and the equipment. This requirement has been provided continuously by establishing the project lab where the students and their corresponding mentors can meet and discuss about the implementation of models.

Title: Outcome Based Education (OBE)

Objectives of the Practice

• To assess students learning and effectiveness of all educational and operational activities

Context

In the OBE model, outcome assessment plan is prepared and informed to all stakeholders. It has defined standards of Performance and academic expectations from students in the form of learning outcomes at course level and Programme level.

The Practice

A set of graduate attributes are defined and aligned at all levels. The statements of learning outcomes are articulated from the graduate attributes. The learning outcomes are defined for all Programmes and courses using measurable action verbs (blooms' taxonomy) to assess students' learning at the end of the Programme and course respectively.

These outcomes are assessed by using at least one direct and one indirect assessment tool. Attainment of outcome indicates that the corresponding PEO is achieved. As these objectives flow from University level to domain, institution and Programme level, and achievement of PEO indicates the corresponding objective at all levels is met. Some of the assessment tools are developed online and the results are reported in the standardized format domain-wise. Based on the results of implementation of outcome assessment, gaps are identified. The whole process is taken care by the outcome assessment committees constituted at the department and institutional level for the purpose.

Evidence of Success

- It helped in identifying the areas of improvement
- Institutions had proposed action plan in their implementation report for improvements in teaching pedagogy, infrastructure, learning resources, facilities and support system etc., which also served as an input during the Programme review and strategic planning of the university.

Problems encountered and resources required

Annamacharya Institute of Technology & Sciences (Autonomous), Rajampet

- Training of faculty
- To develop framework for alignment of PEOs with university objective and mission

Title: Social commitment becomes an attitude, a challenge and a way of life, an essential constituent in Vision and Mission of Annamacharya Institute of Technology and Sciences, Rajampet.

2. Objectives of the Practice

The objectives of this initiative are:

- To generate among the faculty and students a deeply ingrained urge to be informed about and to be involved in community issues and causes.
- To promote among faculty and students a spirit of solidarity with those in need and the under-privileged.
- To foster among faculty and students spontaneous and joyous response to volunteering and social action.
- To enable them to understand and appreciate the role of social involvement as an essential ingredient of personal growth and maturity.

3. The Context

- The life and struggles of the villagers around the campus presented challenges and opportunities to create among faculty and students of the college with an empathy with these communities:
- Generally low standard of teaching in the local high schools
- The low rate of adult literacy
- Lack of guidance and counseling for the youth of the villages career guidance as well as personal counseling

4. The Practice

Different departments and other centres on the campus came up with the following interventions:

Tutorial Classes are made a part of the regular timetable for all the students. Motivational classes are conducted for I B. Tech students. Expert talks are arranged frequently. Short-term skill development programmes for the unemployed youth of the villages to enable them to be employed or to set up small service centres of their own are held through AP Skill Development Centre. Through SIEMENs Technical Skill Development Centre, the faculty train educated unemployed youth in technical job-oriented skills for employment

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opportunities in Electronics & Information Technology Hardware, installation and maintenance of power backup systems and computer application training.

NSS Cell conducts awareness programmes to tackle multiple issues related to health, hygiene and education in some of the selected villages. NSS Programmes enompass a range of collaborative and participatory community development and social outreach activities through community interaction, mobilization and awareness on various issues such as health, hygiene, education, child labour, alcoholism, substance abuse, domestic violence, sustainable agriculture, science & development, career and livelihoods. The multicultural exchange of ideas on community development has facilitated generation of various approaches in addressing issues impacting community development.

Faculty and students have over the years organised several relief programmes in which they have proactively provided and distributed essentials to those affected by the havoc wreaked by HudHud cyclone including contributing to the Chief Minister's fund for flood relief. The faculty and students have also responded generously to meet unforeseen expenditures of faculty and students related to accidents, operations, hospitalizations etc.

5. Evidence of Success

NSS Activities has brought about determination among the community members to take initiatives for their own development.

Till date, AP Skill Development Centre, SIEMENs Technical Development Centre have trained rural, unemployed youth in fabricating inverters, house wiring, personal computer maintenance and fabrication of solar powered LED lamps. The trainees have been sufficiently skilled and motivated to set up their own small businesses in these fields.

The participation of faculty and students in social responsible initiatives enabled the serious students to feel and empathize with suffering people, a desire to walk along with such persons, and finding inner healing for themselves in the process.

The donations submitted to CM relief fund have been repeatedly acknowledged with lot of appreciation from government.

6. Problems Encountered and Resources Required

There are often limitations faced in generating the required resources to operate the various outreach programmes. However, a participative culture of voluntary service in the college enables undertaking of various initiatives to ensure that we fulfil our commitment to our social service programmes.

The NSS community work involving fieldwork in the adjoining rural areas of the campus often raises health concerns. Though there is a medical service on the campus staffed by qualified personnel, there is the requirement of a mobile dispensary which will have the ability to penetrate in to the rural areas and enhance accessibility of health care to the people. The mobile dispensary would also be critical in communicating to the people awareness of preventive measures in cases such as malaria and communicable diseases.

7. Other information relevant for adopting/ implementing the Best Practice

Finding resources is always a constraint. However, the sense of purpose and pride that the students and faculty of the college have imbibed has led them to look at creative ways of conducting such programmes for the benefit of the society.