BEST PRACTICES

2010-2011

Student friendly environment @ AITS

Best Practice I

Title: Training on Improvement of Communication Skills

Goal:

     1) To identify deficiencies and improving communication skills of student.

     2) To develop self - confidence in verbal communication.

Practice:

Students are identified and appropriate training strategies were adopted to improve the communication skills.

The Content that required initiation of the Practice:

Most of students are educated from government schools and are from rural background. The communication skills of such students are usually poor. Regarding the importance of communication skills our institution laid stress on communication skills enhancement.

Impact of the practice:

Student and teachers improved their communication skills remarkably.

Obstacles and Strategies adopted to overcome:

In the beginning of the training students did not shown keen interest to take practice of skills but later they actively participated in the training and enhanced their communication skills.

Best Practice II

Title: Remedial classes for the slow learners

Goal:

The aim of this practice followed by the institution is to bring improvement in the slow learners who need individual attention.

Context:

The challenging issue that have had been addressed in designing and implementing the practice of remedial classes is to reduce the number of students attending tuitions outside the college. When the students are not able to follow in the class these Remedial Classes will help then to learn and follow the subject. Some student's especially slow learners need additional and individual attention. These remedial classes have benefited them a lot.

The Practice:

The practice and implementation of the Remedial Classes is made effective from the beginning of each semester in all the streams. The list of slow learners is made from each class in each subject and two days in a week is assigned for each subject and students are supposed to attend these remedial classes. Separate attendance will be taken for each remedial class students are given exams after each chapter to know about their performance after attending remedial classes.

Evidence of Success:

The review results of Remedial Classes process that it has been very effective to the students. Most of the students attending remedial classes have cleared their pending subjects

2011-2012

Learning environment @ AITS

Best Practice I

Title: Analysis of Student Feedback

IQAC conducted a survey among students to evaluate the Institute, programmes of study and performance of teachers. Printed questionnaires were distributed to students and responses were collected.

The feedback form to evaluate the institute was designed to measure parameters such as academic atmosphere of the institute, infrastructure, library facilities and extra-curricular activities.

The programme evaluation process analysed the relevance, learning value, applicability, employability, syllabus etc. of the programmes offered.

The teacher evaluation process was intended to measure parameters such as planning, preparation and time management, good command on the subject, classroom management, and use of innovative teaching methods including technology tools, mentoring and guidance and laboratory interaction.

Four to six questions were included in the questionnaire for each parameter. The survey provided a grade scale (A-Excellent, B-Good, C-Satisfactory and D- Inadequate) with grade points A-5, B-4, C-2 and D-1. The responses collected from various departments were analysed by a team constituted by the IQAC. A report was prepared based on the findings of the analysis of the institute, programmes offered and the performance of teachers. The main findings of the feedback analysis are summarised below.

- Majority of the students are of the opinion that the academic atmosphere of the college is good, but the general infrastructure must be improved.
- Students are of the impression that the library and laboratory facilities of the institute must be improved.

Annamacharya Institute of Technology & Sciences (Autonomous)

- The programmes offered were rated as relevant and of high learning value and applicability.
- The curricula and syllabi were rated as very good.
- The subject knowledge, preparation for teaching and classroom management of teachers were found to be very good.
- The helping mentality of teachers and teacher student relationships were highly appreciated by the students.
- Students were of the opinion that classrooms must be modernised and innovative teaching methods should be introduced.

Best Practice II

Title: Value Education

Goal:

The objective of conducting value education classes once in a week is to impart values among the students along with their curriculum. With the regular subjects whom they study, they get an opportunity to learn about the values which a student has to inculcate in his life for the betterment of his own and the society as well.

The context:

This value education class is implemented from past one year. And every time different lecturers go to different classes. The challenging issues that had to be addressed was to make sure that the students were benefiting from the value education classes and they are taking these classes seriously along with their regular subjects.

The Practice:

The practice and implementation of value education classes were very effective. It is conducted on every Saturdays between 9:00 to 10:00 in the morning. Each lecturer is assigned a class where he or she will put an effort to bring the awareness and importance of values among the students. The staff will also conduct different activities with regard to this.

Evidence of success:

As far as evidence of success is concerned it is the positive verbal feedback from the students. It ensures that students are happy with the value education classes and students are finding their classes are beneficial.

Annamacharya Institute of Technology & Sciences (Autonomous)

2012-2013

Best Practice I

Title: Enhancement of Placements

Goal:

To help the students to realize their primary ambition of getting employed on graduation, efforts have to be intensified to arrange campus interviews and prepare our students for emerging successfully in them. Different strategies, ranging from curricular updating to training programmes for students have been organized. A realizable target of securing employment for a minimum of 35% of our graduates and Post-graduates has been set for the year 2012-13.

The context:

Students, during the first three year of their graduation studies are not motivated in targeting their goals. Only during the last year/semester they give serious thought about their future and feel frustrated as they will realize that they have not taken advantage of the opportunities provided in the campus to acquire employable skills. Hence, it has become imperative to counsel and encourage them to set definite goals and work towards achieving them from day one of their tenure in the campus. They have to be given guidance in choosing the appropriate additional qualification like certification courses offered and improve their academic profile by presenting papers in seminars and attending workshops.

Better placement can be enhanced through the following efforts.

- Establish a placement cell with one staff from each department.

- To be noticed in a crowd of names and faces is to make your first impression unforgettable, and this first impression is in the form of a piece of paper which celebrates the history of your milestones and feats: **your resume**. Hence counselling be given for outgoing students on bio-data & job application and preparation of job prospects.

Annamacharya Institute of Technology & Sciences (Autonomous)

- Impressing on them the acquisition of relevant skills needed for specific jobs.
- Creating a career corner in the Library with posters for competitive examination, collection of current books for preparation of such examination.
- Display of details on jobs related to the field of study, on the notice board of departments.
- Offering general courses for communication skills, personality development and confidence building exercise.

The Practice:

Students with career ambition and the potential for employment will be indentified after the first semester. They will be motivated to improve their academic profile and join courses that will reinforce their employable skills. By the fourth year, the cumulative acquisition of these skills along with the confidence they had gained through mind set, will make these students winners & increase our percentage of placements.

Evidence of Success:

The enrolment for certification courses such as Sun Micro Java, DB2, RAD, MOS, MTA and spoken English. The present final year students are well prepared for the job selection. Last year graduates attended interviews for job selection in our campus as well as in other institutions. More than 25 % were offered placements. The success of the senior students has been a strong motivation for the present students to qualify themselves with employable skills.

Problems encountered and resources required:

Jobs available in our region are very few and they do not offer attractive incentives. From the past experience, the institution has learnt that targeting and grooming the students in the final year alone, do not raise potential to satisfy the employers expectations. Hence potential students have to be groomed from the first semester.

The management has to bear the expenditure involved in inviting several interested companies to the campus.

Best Practice II

Title: Computer Training programme for Non-Teaching Staff

Goal:

To upgrade office, library, academic and other crucial departments with latest technology to provide services more effectively and efficiently to staff and students.

The Context:

As a premier institute in higher education like AITS, it receives a large number of applications for education during every academic year. A good number of non-teaching staff are involved for sorting out the large numbers of forms, and finalization of merit lists including the allotment of subject combination, hostel allotment etc.

The Practice:

The library of the institute is with more than 50000 books. A good number of staff is engaged for library service. IQAC took the initiative to computerize the administration and library service.

The Computer and IT centre of the Institute has undertaken training of the non-teaching staff of the Institute and to see that the secretarial staff becomes computer literates.

The Institute office also chalked out the following programmes for the office staff:

1. Basic computer training.
2. Computer hardware/software training.

For the above, the Institute has the provision for financial grants from the miscellaneous fund. There is also provision for training in

Annamacharya Institute of Technology & Sciences (Autonomous)

shorthand and accountancy. Training also is being imparted for the operation of the Xerox machine and reprography.

The priority was given for computerization and networking of the following departments as these is located in the same campus.

- Pay roll
- Examination branch
- Institute admission branch
- Library
- Scholarship branch

The process involved in arranging computer infrastructure and offering proper training to non-teaching staff engaged in the respective branches.

The Institute authority with the assistance of a few sincere and dedicated faculty members took up a project for automation of the pay cell. A team of non-teaching staff at the computer centre is selected to offer computer training to the non-teaching staff for free of cost to make them skilled manpower.

The examination branch is now fully computerized and is run by the existing non-teaching staff effectively.

In the first phase of automation the library was imparted training for making them skilled manpower for quick library services and records maintenance. Presently the library is fully computerized.

Computer Hardware Training

The Institute has taken up all necessary measures to offer training for selected non-teaching staff on computer hardware and about latest emerging technologies as part of IQAC activities.

Evidence of Success:

The non-teaching staff of the Institute was highly motivated by the NAAC visit and working morale and motivation has considerably improved.

Annamacharya Institute of Technology & Sciences (Autonomous)

Problems encountered and resources required:

The challenges faced during the upgradation of the office are that the staff members were hesitated to undergo the training. A meeting was organized by the Principal and it has been decided by the IQAC to plan a programme for the supporting staff to have the training. A good speech by the principal as his commitment has motivated the staff to undergo training.

The Computer Centre has undertaken this activity. Available financial and infrastructural resources of the Institute utilized.

IT and physical facilities @ AITS

Best Practice I

Title: Student Mentoring/Counselling System

Objectives of the practice:

The mentoring system assigns a faculty member to every student; the faculty member is called the mentor for the student. The mentor plays the role of a personal mentor for the student in all matters. For the institute, the mentor is the first point of reference for all matters concerning any specific student. The mentor guides the student at every step of their stay at the institute to be successful at whatever the student takes up. The mentor personally ensures that the student is aware of all the resources available to the student during their course of study at the institute. The mentor is available to counsel the student in any matter of concern apart from the curriculum also.

The context:

The student mentoring system is relatively new in general to a student entering the institute. The students do take some time to familiarize and feel more comfortable with their mentors and most importantly develop confidence in them. The students meet their mentors to consult them regarding the courses to take and to guide them through the registration process. The students then meet their mentors before every internal assessment to update them on their progress in every course; the students also see their mentor after the internal assessments to discuss their performance and the scope for improvement next time and the steps to be taken to achieve on the same. The students might also choose to meet their mentor more regularly for to get advice regarding matters which may be extra- or co-curricular or otherwise. In addition, the mentor might also choose to see any student with more regularity when their academic performance concerns the mentor.

The practice:

A mentor is a personal mentor and counsellor for a student during the duration of stay at the institute. A mentor represents a parent away from home for a student, and is the first point of reference for the activities of a student during the complete course of study at the institute. As soon as a student enters into the institute, a faculty member is assigned to take over the role of a mentor for the student. The mentor not only guides the student in academic matters but also in any matter of concern for the student. The student seeks the advice of the mentor at every step of their course of study beginning from the registration for courses at the start of every semester. The students meet their mentors regularly.

However, depending on the need the mentor conducts more meetings with the concerned students and their parents. The mentor educates the student about the various course requirements, such as the mandated minimum and maximum course load every semester, and how to choose electives. The mentor helps the student channel their interests and energies effectively during the complete course of study at the institute. The students meet their mentor for various reasons; some students would like extra help with the material in a course and are hesitated to approach to a new instructor assigned to the course; a few might be facing problems adjusting to the new environment may be in the hostel or at other places around the institute; some others would like to know about their options of availing various resources at the institute and participating in various extra-curricular activities like joining a debate club at the institute; group students would like to know about their options for going through internships during the break or even the benefits of the same; a few may want to do some minor project work or participate in various competitions in addition to their courses; some others might want to know their options after graduation and how to figure out where they would fit in better. At times the students might just need someone who can give them

Annamacharya Institute of Technology & Sciences (Autonomous)

personal time and attention by listening to their struggles while transitioning from high school to a higher education environment and finally in becoming a constructive member of society.

Evidence of success:

The most important evidence of success for the mentoring system is from the testimonials of the end-users. The students and their parents have been very happy with the mentoring system. Generally, for the complete duration of the course of study of a student any one faculty member has been effective in assuming the role of a mentor. The behaviour of the students in the campus in general has witnessed a tremendous improvement and the students are much happier and contended with their course of study at the institute after the implementation of the mentoring system. The pass percentage and the average academic performance of the students have also achieved greater heights with the mentoring system. Some students have presented themselves as quite a challenge for their mentors, but they figure out their priorities and start performing better after counselling sessions with their mentors. The students have been at most risk during their initial stages in the course of study. The transition from a high school environment to a higher education set-up proves to be too sudden for some students. The mentoring system has addressed the needs of the students and effectively nurtured many students during the duration of its implementation.

Problems encountered and resources required:

Despite our best efforts in the effective implementation of the mentoring system, there are still a small percentage of students who discontinue their course of study at the institute. The percentage of drop-outs did reduce greatly after implementing the system, but still present. Some students have required a great deal of time and effort from their mentors but shined after words. However, the depression that a small percentage of students went through was too critical for us to handle. We are planning to establish a centre with professional counsellors.

Annamacharya Institute of Technology & Sciences (Autonomous)

2014-2015

Students @ chemistry Lab

Laboratory Culture @ AITS

Best Practice I

Title: Creation and Uses of Digital Library Facilities for Student Learning Processes

Goal or Objective of the Practice:

The practice of offering most courses and programs through Digital Library e-learning was initiated during 2012-13. The goal of this practice is to maximize the number of students to make use of Research Journals in new technology, attending webinars, participating in e-debates as part of student learning process. Eventually Institute may thus shift towards open community based student-learning processes.

The Context:

There is a fast changing technological scene. New technologies are emerging at a rapid pace; the non-availability of faculty in relevant emerging subject/field in right time gives a big loss to the fast learning students. Higher education students need orientation towards to development of new technology and to learn evaluation process of new technology which is published in high reputed journals, presented through webinars and e-classes. The institute encourages and introduces creative learning environment continuously through expertise and high capacity infrastructure; giving thrust on holistic development of learners, so as to fulfil the standards of excellence in higher education.

The Practice:

Willing to learn and dedication of student community has undertaken the challenge to make use of digital library facilities for downloading latest research articles to learn and presentation by students in seminars.

Annamacharya Institute of Technology & Sciences (Autonomous)

Wi-Fi facilities are offered in the hostels and campus gives mobility to students for downloading required research journal papers while on move. Now the virtual class rooms are being installed and the virtual laboratories are being used. The practice of "Creation and uses of Digital Library Facilities in student Learning Processes" is unique in the institute being on such a big scale.

Constraints are as follows: (1) confidence on self learning (2) limitation of student fees fulfilling the needs to run the huge resources required to continue the practice.

Evidence of Success:

1. Digital Library facilities deploying on over hundreds of desktops with Internet facilities have made IT enabled class rooms which are now 24x7 learning places for digging e-content on any topic. The visiting student ratio to digital library has eventually increased recently which proves how students are motivated and habituated towards e-learning. Enabling campus with Wi-Fi facility has extended the scope of e-learning from fixed structured network to wireless network. This has a very positive impact on student learning processes in the Institutes. It enabled organization of the Seminars and training programs.

2. With fibre optical cables in existence in the institute since 2005, bandwidth has been boosted significantly. Hostels have been provided with Wi-Fi connectivity. Now Campus is also Wi-Fi enabled since 2011. Any time any where Internet facility enables student to do advanced learning and also finish their projects on time. It gives excellent communication medium between faculty and students. The student has a full access to huge learning resources of internationally top-class Universities and Research bodies. Faculty and students have access to webinars announce by International experts.

Annamacharya Institute of Technology & Sciences (Autonomous)

3. Virtual Class room has been set to attend to lectures, webinars and practice exercises. Now the virtual class rooms are being installed in several Institutes offered by IIT Bombay under ekalavya scheme. It has and will have positive effect on learning the subjects/recent developments in research and technology. Virtual Laboratories are increasingly used for learning new trends in various fields of Engineering.

Problems Encountered and Resources Required

Institute has provided limited grants per year plan for the renewal of journal subscriptions. Problems thus encountered are "User fees kept high. Rs. 500 per student per Semester". Other problem is lack of appreciation, rewards and incentives for the self efforts of student members who undertake the challenging tasks of reading, applying, developing and creating of new applications and enabling use of Digital Library in student learning process.

Best Practice II

Title: To enhance research potential of faculty members.
Goal:

The aim of this particular practice is to provide necessary infrastructure, human resources and motivation to nurture the research competencies among the faculty members.

The Context:

The institute offers 6 UG and 11 PG degree programme in various engineering departments. It is the responsibility of faculty members to inculcate effective learning methodology in their students to understand various engineering concepts. To accomplish this, they need to be creative and innovative in their approach to teaching / learning activities and should possess holistic idea about the subjects what they teach, which requires some level of research competencies in the teaching faculty members.

The Practice:

The Institution–Industry interaction cell has been established. The institution encourages the faculty members to publish the research papers, attending national/ International conferences and to carry out consultancy work. The faculty members are encouraged by providing the cash incentive to those who publish research articles in national/international journals. They were sponsored to attend the national/international conferences in India/Abroad.

The cash incentives are provided to those faculty members who are doing the consultancy work based on the amount and nature of work. As many as 4~5 MoUs have been signed between the institution and various industries to carry out the research and consultancy activities.

Evidence of Success:

The number of Ph.D., degree holder in the institution has been increased considerably. The results of above said practice increases the number of papers published by the faculty members. A lot of research projects have been sanctioned to our institution for doing the research by the faculty members.

Annamacharya Institute of Technology & Sciences (Autonomous)

Problem Encountered and Resources required:

The staff members are finding it difficult to find the time to carry out this type of activities due to their academic commitment. Faculty residential quarters are in proposal, to encourage the staff members to stay in the campus to carry out the research activities. Laboratories, e-learning facility and computer aided packages are required for which contribution from the Management and money collected from sponsoring institution have been used.

Annamacharya Institute of Technology & Sciences (Autonomous)