

7.2 BEST PRACTICES

FIRST BEST PRACTICE

A. Career Guidance Training:

1. Title of the Practice

VVCE offers career guidance on all aspects of career planning, job opportunities and options of post-graduate studies for students to help them choose the right career path based on their interests and capabilities. The Institute works towards enhancing the individual and institutional culture to better turn out graduating students with appropriate attitude, capability and temperament to serve the needs of an ever-changing and dynamic needs of the community.

2. Objectives of the Practice

The practice of continuous and improved career guidance serves to achieve the following objectives,

1. To broadly explore various career options. The practice helps the students to think of various forms of careers that can be taken up by them after completing the graduation
2. To enable students to select appropriate higher education program after completing the undergraduate program
3. To identify and facilitate the students (with a desire to explore entrepreneurship) in making them aware of the necessary resources (Process, Technology and Enterprises) needed to explore entrepreneurship as a career path.
4. To impart oral and written communication skills and knowledge essential to successfully navigate the placement process.
5. To provide a platform for gaining knowledge on various aspects relating to civil services examinations along with Interaction with some already successful candidates.

3. The Context

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

The school students (Class XII) who are entering into engineering discipline, have different levels of school experiences. These range from Vernacular medium, urban and rural schools, central Schools, etc. This is in addition to the universal facet of varying Socio-Economic, Educational and Gender factors. Thus it is very challenging to develop a sense of levelling and level playing field to all students by the time they graduate.

Thus continuous career guidance and counselling would enhance the clarity in the minds of students to make well informed decisions about their career. The major challenges we faced and had to be addressed in designing and implementation are,

1. Career guidance activities had to be meticulously planned as a part of Academic calendar, which put additional pressure to reliably conform to Academic Calendar. This had to be successfully met.
2. Getting the students through In-house faculty members to emphasize the importance of attending the career guidance programs so that they are regular in attending placement training programs and career guidance sessions.
3. Getting the faculty members to be aware of multiple career options for Engineering in general and Branch specifics was also needed.
4. Continuous Alumni feedback and interactions were needed and was very much important in delivering the practical aspects of career planning including supplementary (formal/non formal) activities to bolster the formal curriculum.
5. Identifying appropriate resource persons for providing career counselling consumes much time and effort and had to be balanced with regular curriculum work. This sometimes projects as an intervention to formal courses.
6. The management members, head of the institution and heads of various branches also had to improve on their Perception and Awareness on increasing diversity, challenges and implications of this important career guidance activities. This also imposed extra resources (Financial, Infrastructure, Academic Space) to be provisioned

4. The Practice

Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced (in about 400 words)?

4.1 Practice

These goals are achieved through the following activities of Training and Placement Department. Some Supplementary and Complementary activities were also taken up by Engg. Departments.

1. Career Guidance training programs are conducted for students to help them explore various career options starting at 2nd Sem of the program.
2. Alumni (mostly from Industries) are regularly invited to address students and to guide them through the career options, provide industry insights and to impart knowledge on the current trends and latest technologies
3. Students are trained on communication skills, soft skills, personality development, aptitude skills and technical skills in order to make them confident to face the challenges of the future
4. Resource persons from premier Institutions, Research Center's and Industries are invited to deliver technical talks and to create awareness about the opportunities in various sectors
5. Students are encouraged to participate in technical contests, carry out project work, undergo internships and also organize various technical activities to enhance their knowledge through experience
6. Seminars highlighting the importance of higher education and Institution's & Universities of Higher Learning for admission are conducted.

7. Awareness program on civil service is conducted to encourage students to prepare for civil service exams and other national level exams.

With an objective to make every individual student of VVCE industry ready, following training programs are provided at various levels of their study.

1. Infosys Campus Connect Life Skills training program
2. Infosys Campus Connect program
3. Communication & Presentation Skills
4. Personality Development training program
5. Basic English Training program for Lateral Entry Engineering students
6. Soft Skills Training Program
7. Campus Alliance Program (Pre-Placement Training)
8. Numerous Technical activities (FDP, Workshops, etc for faculty and students) on specific skills, tools and technology supplementary to formal curriculum needed to enhance career prospects.

4.2 Uniqueness in the context of India higher Education.

The career guidance offered at VVCE not only includes regular placement training programs but also includes the following,

1. Life skills training program are conducted to bring a better personal understanding of one self, so that they are more successful and actively capable to participate in personal and professional life.
2. The recruiters provide necessary on campus training program. This in turn enhances the confidence to perform better, before they report to the job positions for which they are selected, in the pre-final year of study. This allows for higher retention in the companies they join.
3. Professional and English training programs are really helpful in placing the lateral entry students and many of whom are from Kannada medium of Instruction background. Though, they have skills and knowledge in their disciplines, they are not able to express themselves effectively at the time of recruitment by companies. Thus the basic English training programs are arranged at regular intervals for such students, to overcome this deficiency and enhance their confidence to communicate and interact in English language.
4. Career Guidance activities is not just a routine program but a highly focused activity. It has desirable feature of continuous improvement, based on regular feedback from the stake holders such as employers and alumni. The college management and administration has strong supported it at all times.
5. E-cell which has been constituted is very active in imparting entrepreneurial awareness, skills and knowledge.

5. Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.

1. The number of students attending the career guidance programs willingly have increased over the years.
2. The retention rate of graduates in their employed organizations is better than before.
3. Alumni feedback indicates that the students who have undergone life skills training programs are really helpful in balancing their work and life.
4. Star-up activities are initiated by incubation center where the students are facilitated in putting ideas into practice
5. The students have progressively gained confidence in managing the placement interviews better.
6. The success rate of students in getting placed (who opt for placements) have improved continuously and even good during downturn years.
7. A few of the students have become successful in selecting and getting through civil services examinations.
8. Some students have become successful entrepreneurs also.

6. Problems Encountered and Resources Required

Please identify the problems encountered and resources required to implement the practice (in about 150 words).

A lot of background work had to be done before, during and after organizing career guidance activities. These included identifying appropriate topics, Features or Skill needed to be imparted. This led to appropriate resource person to be identified to handle this, followed by Technical, Financial and Physical resources needed to conduct the activity. Qualitative assessment of Feedback from such activities had to be done to Scale up, Modify or even drop such activities in future.

This demanded Space and Time in various departments, additional Laboratory tools/ equipment's, dedicated additional time from faculty in related specialization, additional funds and logistics which was met by the college.

Developing industry linkage was essential for developing and delivering the training programs on a customized basis. The experts from the industry having a good network with other organizations was a critical factor in enhancing the placement opportunities for students. This has made a good beginning and can be seen in various start up's of VVCE incubation center.

7. Notes (Optional)

Please add any other information that may be relevant for adopting/ implementing the Best Practice in other institutions (in about 150 words).

The other activities which facilities the graduates to enhance the professional skills of students are listed below.

1. Continuous Assessment Meetings (CAM)
2. Transparency & Fairness
3. Departmental level IQAC
4. Industry Visit
5. Lecture Capture Solution
6. CRs Meeting
7. PSTM
8. Peer tutoring, Mentoring
9. Project competition & Exhibition
10. Effective Feedback mechanism
11. VVCE Scholarships, Research policy
12. Green and clean solar energy(170 kVA),usage of LED bulbs
13. Industry collaborations
14. Birthday celebrations of eminent personalities
15. Mock exams for challenging subjects (all branches & all semesters)

SECOND BEST PRACTICE

B. MANAGEMENT INFORMATION SYSTEM (MIS) ASSISTED CONTINUOUS ASSESSMENT MEETING (CAM) AND PARENT-STUDENTS-TEACHERS MEETING (PSTM)

1. Title of the Practice

VVCE has a practice of consistently monitoring the academic performance of the entire teaching-learning process from 360 degree perspective (faculty members, students and necessary resources) and make appropriate changes(to the degree permissible) to improve the same. The feedback on various academic processes/system/activities is collected from the students and the faculty members at regular intervals (Continuous Assessment Meeting). Further, Parents-Students-Teachers Meeting (PSTM) helps in getting feedback about the student's efforts in preparing for the courses and attitudes & perception outside the college which may inhibit effective learning. This information which is in most cases subjective is carefully addressed.

2. Objectives of the Practice

The practice of continuous assessment meeting serves to achieve the following objectives;

1. To identify the difficulties faced by the students with respect to teaching-learning process in any of the subjects/courses taught in a particular semester.

2. To discuss about the subjects/courses which require additional practical exposure apart from regular technical talks/workshops/industry visits and conferences.
3. To identify the need to conduct remedial classes/special classes for the slow-learners if any, and accordingly plan the schedule. Slow -learners refers to the students who need extra time & support to learn one or modules in the course(s).
4. To discuss the difficulties faced by the faculty members in designing and delivering the course content. Also to discuss the scope of improving the teaching methods based on the early feedback collected during the early part of the semester.
5. To suggest the faculty members suitable faculty development programs/seminars/workshops/conferences to update the various advancements in their subject of specialization. This in turn would help the faculty members to ensure effective design and delivery of the course/subject so that the confidence of the teacher is enhanced which in turn benefits the students.

3. The Context

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

The academic delivery is said to be effective only when the course content reaches the weakest learner among the students. On the other hand, the better motivated students who need additional learning experience apart from regular class room sessions, have to be provisioned. This is to be handled with supplementary activities such as paper presentation/prototyping/exhibition/technical quiz competitions. These two extreme categories of students need to be given additional attention in understanding their learning needs and strive to fulfill them to the best possible extent. This demands a “mature and learning centric” approach between teacher, students and the academic content. Here the biggest structural limitation is one of lack of academic autonomy. Thus the onus is on the institution to develop a very effective and gentle mechanism (innovative & subjective) to address this critical need. One such initiative undertaken by the institution (VVCE) is Continuous Assessment Meetings to identify the gaps in the teaching-learning process and develop remedial measures.

Challenging issues in designing and implementation of the practice

1. Initially it was found difficult to conduct Continuous Assessment Meeting as per the Calendar of Events (CoE) because of the time consumed for multiple events that are not included in the CoE. In addition, the department HOD has to chair many such meetings in a short span of time.
2. Initially considerable amount of time is demanded in analyzing the **Early feedback** report which is collected manually. It is difficult to conduct CAM without early feedback analysis report. This problem was rectified after implementation of Enterprise Resource Planning which facilitates online collection and analysis of feedback.

3. As is obvious and highly subjective, there is a “learning curve” at the beginning of every semester with the teaching-learning process. This induces a lead time of 2 to 3 weeks after which basic information about the course, teaching effectiveness and learnability from the students can be ascertained. This information provides the “seed” for the first CAM of every semester. The qualitative value of this information renders effectiveness of CAM. This calls for extreme frankness, introspection, positive critical observations to render effective responses. The real challenge is diversity & subjectivity of this information given the class composition & strength.
4. One other challenge is to get consistent & persistent participation & joint ownership of this CAM activity from parents. Motivation & appraisal for participation from parents has to be initiated at the time of admission & subsequent induction program. Effective & persistent communication gap had to be addressed and was done using a ERP named as “Conitneo” which sends SMS to the parents one week in advance followed by reminders.

4. The Practice

Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced (in about 400 words)?

4.1 Practice

The CAM practice consists of three main stages which are listed below,

1. Activities prior to Continuous Assessment Meeting
2. Activities during the Continuous Assessment Meeting
3. Activities subsequent to the Continuous Assessment Meeting

These activities are planned as a part of CoE. Two Continuous Assessment Meetings (one after 1st Internal Assessment and another after 2nd Internal Assessment) and two Students Performance Analysis (SPA earlier referred to as PSTM) is planned as a part of academic calendar (conducted after completion of Result Analysis of each IA tests)

Activities prior to Continuous Assessment Meeting

1. Early Feedback: The class feedback on various subjects/courses are collected after two weeks of the commencement of the every semester. The feedback is now collected online through ERP software. The feedback report is accessible to the faculty members through ERP login (only for the subjects they teach). The students' identity is masked and not accessible to the faculty members. This ensures exercise of higher degree of frankness by the students.

2. Mentoring/Counselling of students: All the students are made to undergo counselling by the faculty assigned for the purpose (among the ones teaching the subjects of that semester). Each faculty is assigned 10 to 15 students for the purpose of counselling. The students can freely discuss with his/her counsellors about the general academic constraints faced by them and also their personal problems that can possibly

divert their academic focus. Counseling particulars are recorded in ERP which is accessible to the respective faculty and the student. Each student should have completed at least one round of counselling session prior to CAM.

3. Internal Assessment Test: First Internal Assessment test is conducted prior to CAM.

Activities during the course of CAM

1. Selection of students for CAM: A sample of students are selected in such a way it comprises of all categories of students such as advanced learners, average learners & slow learners, based on academic performance. This group is shuffled every semester based on their academic performance.

2. Points to be discussed in the meeting: The students are given freedom to discuss about the academic constraints such as subjects, resources required to enhance their learning experience and other related academic issues. The faculty members also share their academic issues relating to teaching-learning process.

3. Minutes of Meeting (MoM): The minutes of meeting is recorded as and when CAM happens and the record of MoM is signed by all the members and maintained in each department. Also action taken related to the issues discussed in the previous meeting is reviewed in each subsequent meeting. This document is accessible to students also.

Activities subsequent to the completion of CAM

1. Evaluation of IA test: The Internal test papers are evaluated and uploaded in the ERP software. The attendance and IA marks can be accessed and viewed by the students through the individual login provided to them.

2. Communication of Academic performance to the parents: After ensuring all the data relating to academic performance (attendance and IA marks) are uploaded into the software, SMS will be sent to the parents. The date of parents meeting is also intimated through SMS to the parents.

3. Parents Meeting: (Students Performance Analysis – SPA): Principal, HODs of various departments, students and parents will have interaction meeting in the auditorium only for the first year students. From second year onwards this process is dealt separately at the departmental level. Overall result analysis, necessary support/feedback from the parents, any other improvements/issues relating to students' academic performance are discussed. The parents can also meet individual faculty members, HOD & Principal to discuss about their wards' academic progress.

4.2 Uniqueness in the context of India higher Education.

1. One of the biggest challenges in HEI in India is the issue of learning outcomes and positive learning experience amidst extreme diversity of Equity, Opportunity, Accessibility & Quality. One qualitative measure is the effort put by institution to bridge all these gaps to the extent possible to ensure better, improved, qualitative & equitable learning experience. It is important to ensure increased level playing field and positive outcomes for all students.
2. The institute meticulously conducts CAM every semester. The feedback is seriously considered for further improvements at all levels. This helps in building **academic rapport** (between the faculty members and students) that lasts even after the students complete the course.
3. **ERP (enterprise resource planning database):** suitable ERP software is implemented for maintaining and sharing the students' database such as attendance and internal assessment marks. The faculty members are trained and monitored on effective usage of ERP software.
4. **Anytime, Anywhere accessibility of ERP by students:** The ERP software has a cloud access meaning that it can be accessed through internet anywhere and anytime by the student and faculty members. There is a separate team both at department level and college level to assist and support in dealing with ERP. The team also ensures that the attendance and marks data is shared at regular intervals with the students and parents via SMS. This in turn would bring academic discipline/seriousness among the students and allows for early & midcourse correction if needed.

5. Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.

1. Majority of the students have become serious in learning the fundamentals in various subjects. This in turn has helped to manage placement activities.
2. Parents also support in bringing academic seriousness in the minds of students as they are also concerned about the importance of improved academic performance of the students.
3. Number of faculty members attending faculty development programs/workshops/seminars have increased, so as to update the subject

knowledge and hence strive to bring confident & joyful learning environment into the class rooms.

4. Attendance of the students have improved continuously because of the monitoring of attendance on a daily basis (for every sessions) and monthly update of this data to the students and their parents.
5. Some of the alumni have given positive feedback about the initiatives the college has taken to provide additional & supplementary academic activities initiated after feedback in CAM. This has greatly helped in shaping the students careers.
6. Remedial classes are conducted for subjects which are challenging and for regular subjects which involves slow learners.
7. Gaps in curriculum is also fulfilled as suggestion form students for certain activities beyond syllabus which they provide after interacting with their peer group. These suggestions have implemented after discussion with the respective HOD and Faculty members.

6. Problems Encountered and Resources Required

Please identify the problems encountered and resources required to implement the practice (in about 150 words).

1. Significant attitudinal shift required across the stakeholders to continuously make use of such provisions in CAM for the all-round good of all.
2. Given the immense potential for a feature like CAM, the institution as such has been using this a little beyond functional level. There is significant head room available which is not being used (lack of academic autonomy)
3. Maintaining students' database and retrieving them was difficult before implementation of ERP. It took lot of time to cull out the consolidated academic performance when only physical records were maintained.
4. Initially it took lot of time to upload basic profile of students into ERP software as it required time to acquaint with.
5. Initially faculty members required lot of training to learn how to use ERP software. Later continuous interaction with and training by the ERP service provider helped overcome the problem.
6. In the starting stage, only a few parents turned up for parent-teachers meeting because the communication letters reach late to the parents who are from faraway places. Now the ERP helps in ensuring timely communication to the parents through SMS.
7. The major resources required to implement the practice includes well – established/developed ERP system to maintain and share the information on a timely basis. Other infrastructural requirements include auditorium for interaction with parents, Board room for conducting CAM.

7. Notes (Optional)

Please add any other information that may be relevant for adopting/ implementing the Best Practice in other institutions (in about 150 words).

The ERP software in the market is basically introduced with standardized features. The ERP named "TCS-ion" was implemented in the institution in the year 2013. This software contained the features of maintaining students database in the form of attendance, students profile, academic calendar and time table. The features of the software is that it has modules for Human Resource Management, Attendance, Stock Register and so on. The challenges faced during implementation includes uploading the students' profile and teachers' profile consumed much time before starting to use & staff members needed hands-on training to use the software. Technical issues such as complexities in terms of more steps to complete a backend process in a module had to be overcome.

To overcome the difficulties faced with the above software, another ERP software called "Pupilpod" was implemented in the year 2015. This software enabled to overcome the problems faced with the previous software. Later in end of year 2016, various departments of the institution underwent NBA accreditation. NBA required each program, to submit program outcome (PO) and course outcome (CO) attainment calculation for various courses in each program. Pupilpod did not have NBA module.

To overcome the above difficulty, a new ERP called as Contineo was implemented. The Contineo software has a different variety of modules such as attendance, counselling, NBA, students comprehensive profile. Faculty using ERP packages takes considerable time to get acquainted with various modules. The institution had continuous interaction with ERP service provider to understand and implement the system successfully. After implementation, the software is effectively used by all the departments. Implementation of ERP system for educational institutions is influenced by the factors such as readiness of faculty members to use it, time and length of backend process, coverage of different modules, and usage of the database by the students to monitor his/her own academic and non-academic performance.