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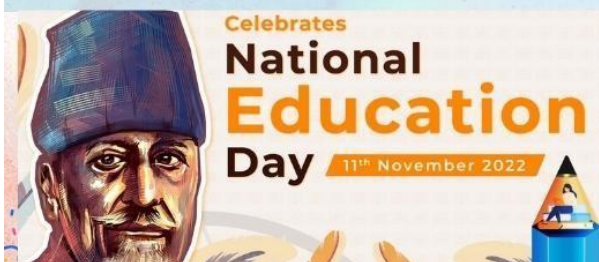
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Students Mentoring Strategies
Tex-Student Development and Brownie Points Report

Dr. Ramesh Babu V

Abstract :Despite the evolution of mentoring, the field has only just begun to evolve and provide a research base of "best practices" for program development. Mentoring programs are one strategy that professionals are using to interact with students more effectively, especially those who are at risk. Programs for mentoring are growing quickly, particularly in educational settings. This article outlines the conception and execution of an adult student mentoring programme, highlight certain important concerns, and offer detailed guidance for programme support.

Introduction

There is a special emphasis on **student Mentoring and development** to bring out the best in them. The 'focused initiation' gives the college graduates a decisive edge in job placements as they have already developed at the college the work ethics and professional outlook that the industry always seeks. Our **graduates are recognized in industry** as engineers and technologists capable of meeting industry requirements with regard to technical competence and good display of soft skills. The strategy discussed in this paper is credit point system (CPS) which will be the vital tools for students mentoring.

Credit Point System (CPS)

Generic Skills (or Soft Skills or Life Skills)

Generic Skills

Generic skills are popularly called "soft skills" and form a part of "life skills". **All personal skills that you would be required to possess at a workplace or elsewhere besides technical can be classified as soft skills.** Thus, soft skills would also include the usual 'personality development' skills!

Here is a typical list of soft skills that industry would like to see in their employees!

• Effective Communication and Presentation Skills	• Good Work Ethics	• Goal Setting
• Good Interpersonal Relations	• Teamwork	• Effective Time Management
• Commitment to Work	• Environment-friendly Behaviour	• Good Social Skills
• Problem Solving Skills	• Motivation	• Leadership



• Being Proactive	• Decision Making Skills	• High Emotional Quotient
• Managing Change	• Being Creative	• Professional Ethics
• Social Accountability	• Company Loyalty	• Civic Virtue

Practice Soft Skills to Earn a Great Reputation All Through Life!

To encourage all of you students to practice these skills and make them your personal habits i.e., make them a part of your everyday lives, a **Credit Point System (CPS)** is being introduced. It is a very simple system. It gives importance to those soft skills that industry always looks for in good employees. Here is how the CPS works...

1. Each of you will start with a bank account of 50 credit points at the beginning of each semester. You are expected to make a very sincere and conscious effort to preserve these credit points in your individual accounts till the end of the semester by practicing soft skills.
2. Any slip in your effort to develop these skills, especially goal setting, time management, commitment to work, interpersonal skills, enhancing emotional intelligence, work ethics, environmental awareness, etc. will be charged to your account and you will lose points as indicated in the Table 2.

Table 2 Slip -Up Credits

S. No	SLIP-UP <i>(To help you, the skills not used or practised well enough are given in brackets)</i> [AoL = 'Absence of or Low' display of the stated skill]	Credit points lost
1	Not successful in a Monday Test (AoL Goal Setting and Time Management)	3
2	Not successful in a Retest (AoL Commitment to Work)	4
3	Being absent for a test without permission/valid reason (AoL Goal Setting and Work Ethics)	4
4	Not submitting record books in time (AoL Work Ethics, Time Management and Commitment to work)	2
5	Being late for any class/lab (AoL Time Management)	1
6	Being outside class/lab or being absent without valid permission (AoL Work Ethics)	2
7	Poor performance at delivering a seminar (AoL Communication/Presentation Skills/Commitment)	1
8	Involved in a problem that displays lack of good conduct, character, or discipline on your part (AoL Work Ethics, Interpersonal Skills, Professional Ethics or Emotional Intelligence)	4
9	Keeping the classroom dirty and untidy (trash lying about, furniture disorderly, etc.) (AoL Basic Environmental Awareness) (2 credit points each will be deducted for all the students in the class.)	2
10	Arguing with or behaving without proper regard or respect for the faculty (AoL Work Ethics)	2



11	Found in possession of / using a cell phone anywhere in the college campus (AoL Work Ethics) (Anna University rule)	4/5
12	Not following the dress code of the college or not wearing the ID Card or both (AoL Work Ethics) (Bright dresses, short tops/kurtas, short-sleeved kurtas, T-shirts and jeans are not allowed.)	2 (4)
13	Talking to students of the opposite sex on a one-to-one basis that arouses suspicion. (AoL Work Ethics)	5
14	Damaging college property like building, equipment, furniture, etc. (AoL Social Awareness and Work Ethics)	5
15	Any other negative aspect of the conduct or behaviour of a student will be decided according to the case in question.	

The journey of 100 miles begins with a single step!

Brownie Points

BROWNIE POINTS are points that you can earn and add to your CP account! This can happen when you achieve something good and positive to earn the appreciation of the HoD or a faculty. You can earn one, two... or a maximum of ten brownie points depending upon your achievement or an event you are positively involved in. Of course, the acts of goodness would extend beyond the 15 items listed above and if they are related to the practice of soft skills and are brought to the notice of your CC or the HoD, you could end up with more points. Some examples of achievements and the brownie points you would be entitled to are listed below.

S. No	Achievement	Brownie Points
1	Getting the "Best NSS Volunteer" Award / "Best NCC Cadet" Award	5
2	Donating blood once/twice/thrice/four times/five times	1/2/3/4/5
3	Doing social service at a personal level (besides NSS)	5
4	Being an environmentally-friendly person at the personal level	5
5	Following traffic rules (licence/insurance/air-pollution check/helmet)	2/3/4/5
6	Scoring 100% in a Monday Test (MT) or Intensive Coaching Exam (ICE)	4/5
7	Getting the 1 st , 2 nd or 3 rd mark in class in an MT or an ICE	3/2/1
8	Having an updated personal diary/notebook with details of personal goal setting (SWOT data, mission statement, career/academic goals, a plan of action, etc.) with evidence of implementation	5/4/3/2/1
9	Having a TMP or an up-to-date booklet of "things-to-do" lists with evidence of implementation	5/4/3/2/1
10	Passing all the MTs/ICE/(MTs + ICE) for every subject in a semester	3/4/5
11	Scoring 75% and above in all the MTs/ICE/(MTs + ICE) in a semester	5/6/7

12	Getting the first/second/third prize in an intra-college competition (This will be considered only if Point No. 11 is fulfilled.)	3/2/1
13	Getting the first/second/third prize in an inter-college competition (This will be considered only if Point No. 10 is fulfilled.)	5/4/3
14	Getting First/Second/Third...Fifth Rank in Sona in semester-end AU exams	10/9/8/7/5
15	Publishing a paper in a International / Indian textile/apparel magazine	10/5
16	Any other special achievement not listed above but worthy of a claim	CCs to decide this!

Prizes for students with the greatest number of points

We are delighted to announce that students who have a large number of points in their respective CP accounts every month / semester will be given great prizes for their effort.

All students having 45 credit points and above in their account every semester will be given special prizes by the department.

We like to wish all of you the very best in your efforts to get the maximum number of points in your CP Accounts. And keep up the effort, all the time. You will never ever regret it.

Conclusion

Two stages can be used to describe the process of creating a high-quality mentoring programme: programme development and programme implementation. A programme strategy that encourages the development of a trusting connection between mentees and mentors, demonstrated by their desire to spend time together and share private information, is of particular value in this step. The key to a successful programme is the subsequent resiliency (the mentee succeeding despite being at risk). The elements of best practise, such as the enrollment of mentees and mentors, mentor training, matching criteria, regular mentoring sessions, year-end activities, and programme evaluation, must be present during the second stage, programme implementation. Making sure mentor-mentee connections are long enough—at least six months—is important in this second stage. Risky students require important grownups in their life who they do not regard as abandoning them once more. Overall, a mentorship programme for adults and students that is based on current best practises can significantly increase the likelihood that students will succeed in school and beyond.

Method to Assess the Course Outcomes and Program Outcomes of Textile Engineering Program-Tex-Attainments

Dr.V. Ramesh Babu

Abstract

The key aspect of the success of the education system is an assessment of course and program outcomes. Course Outcomes (COs) play an important role in Outcome-Based Education (OBE). The attainment of Program Outcomes (POs) depends on the attainment of Course Outcomes (COs). In this paper, the CO attainment for Textile Printing and Finishing Technology on the basis of various tools such as direct and indirect methods in which students internal and external assessment marks and assignments have been considered as input data. The attempt is made here to find out accurate attainment of COs by considering all the students including non-achievers who also contributing to CO attainment. Further, the PO/PSO attainment is computed by simple methods based on Direct CO attainment measurement and as well as indirect measurement. **Introduction**

“Outcome-Based Education” (OBE) model is being adopted at a fast pace at Engineering colleges in India at the moment. It is considered as a giant leap forward to improve technical education in India and help Indian Engineers compete with their global counterparts. The OBE model measures the progress of the graduate in two parameters, which Program Outcomes (PO), Programme Specific Outcomes(PSO) and Course Outcomes (CO).

Program outcomes are narrower statements that describe what students are expected to know and be able to do by the time of graduation. They must reflect the 12 Graduate attributes as described by Washington Accord for under graduate engineering programs. Two or Three Programme Specific Outcomes (PSO) framed by the department to be expected the students should able to know at the end of the program. Course outcomes are the measurable parameters which evaluates each student’s performance for each course that the student undertakes in every semester. Previous work has been carried out on assessment of outcomes which has its own gaps and complications. Izham Zainal Abidin et.al discussed the three to four steps calculation methods for direct measurement of CO attainment with excel sheets.¹ Sushama Kolhe et.al derived the CO attainments by both direct and indirect measurements.² Bhimasen Soragaon et.al elaborated the methods for attainments by considering only the percentage of students who achieves set target.³

Dr.Rita Jain et.al also described the methods for attainments of COs by not taking into the account of students who not achieves the set target.⁴ These above methods little bit complicate and the proposed method assess the COs by considering all the student’s because non-achievers too contributing for CO attainment. This paper describes the simple and less complicated few steps process to compute the attainments of CO’s and PO/PSO’s.

Method for CO’s Assessment

The curriculum structure of the Bachelor Degree Program is designed based on the Program Outcomes and Program Specific Outcomes. The curriculum structure includes different courses under the categories Basic Science, Engineering Sciences, Humanities and Social Sciences, Program Core, Program Electives and Employability Enhancement Courses. All courses under the Program shall have their own course outcomes (COs). These COs are produced based on the

requirement of the Program Outcomes (PO). Each CO will be mapped to PO (the CO-PO matrix) as shown in Table.1.

Table.1 CO-PO Articulation Matrix

CO's	PO1	PO2	PO3	PO1 4	PO5	PO6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2	PSO1	PSO2
Discuss the style and	3		2			1							3	
Explain the working	3												3	
Contrast the mechanism of				2										
Explain the mechanism of		3		3	1									
Summarize the pollution control measures in	3		1		2	2							3	
Summarize the energy	2	2											2	
U15TXT503 Textile Printing	3	3	2	3	2	2							3	

Once the outcomes for a course are decided, the assessment methods are designed to assess the attainment of the stated outcomes (Figure 1.1).

The CO attainment is evaluated by formal assessment using existing data from students' marks from the internal test, Semester End Examination, assignments, innovative practices and lab practices.

1. For the theory courses, continuous assessment test marks, Semester End Examination, Assignments and Innovative Practices are considered. The course coordinator needs to map questions to specific COs in the Assessment-CO matrix.
2. Each of these assessment categories contributes a certain portion of the marks into relevant COs.
3. Assessment of CO matrix is produced for each individual course based on the assessment categories.
4. The average marks obtained in assessments against items for each CO will indicate the CO attainment in terms of actual percentage of the course. The average uses every value in the assessment tool.
5. The target is stated in terms of percentage of students getting more than class average marks for each CO is fixed by the Course Coordinator.
6. Attainment gaps can therefore be identified.
7. This direct measurement method provides a way to analyze the attainment outcomes for each course. From this result, the attainment of each CO for the course can be further reviewed and analyzed. If the targets are achieved then, it is inferred that the entire COs are attained for that year.
8. Course Coordinator sets higher targets (or retains that) for the following years as part of continuous improvement. Action plan to improve any weakness can be identified and implemented in the following semester.

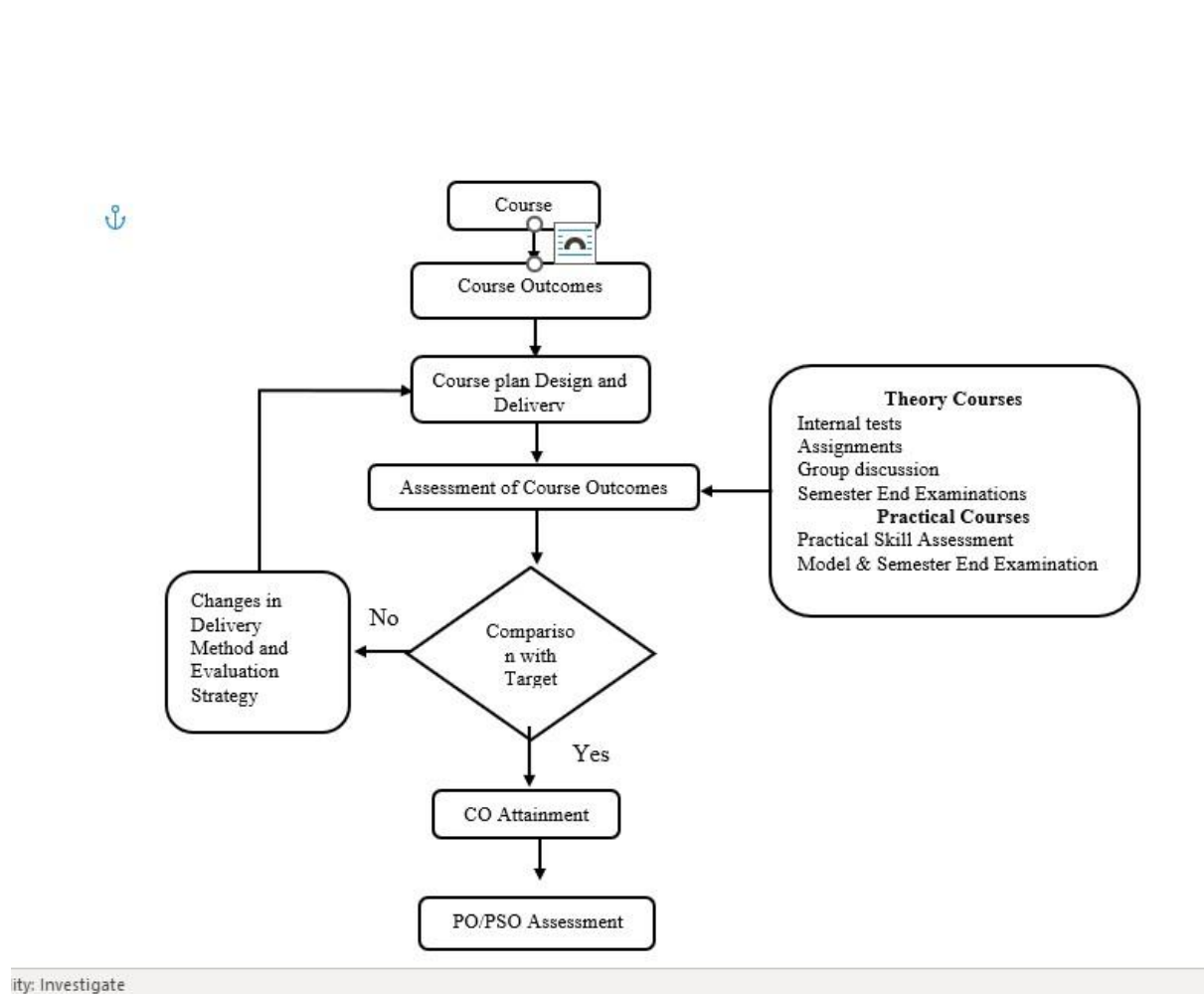


Figure 1.1 Assessment of CO Attainment

Assessment tools for CO are computed at the end of every semester. The assessment tools are:

- Continuous Internal Evaluations (CIE)
- Semester End Examination (SEE)

Course level assessment is carried out through internal tests, Assignments, Innovative Practices, Practical Examinations and Viva voce. Each course has clearly defined objectives, a set of measurable outcomes and contributes to one or more of the program outcomes. The Faculty Member teaching the course is responsible for reporting any major issues that are observed during outcome's assessment and initiating appropriate changes to ensure that the course outcomes are met with requirements. Table 1.1 and 1.2 show the assessment processes for Theory course.

Table 1.1 Direct Assessment for Theory Course

Sl.No.	Assessment Method	Frequency of Assessment
1.	Semester End Examination	Once in a semester
2.	Internal test 1	Once in a semester
3.	Internal test 2	Once in a semester
4.	Assignments	Continuous
5.	Group presentation	Continuous

Table 1.2 Course Outcomes (Cos) Assessment weightage for CIE

COs	Knowledge level	Internal Test		Assessment Tools	
		1	2	End Semester Exam	Assignment/Group Presentation
CO1	K3	50%	-	20%	-
CO2	K3	50%	-	20%	-
CO3	K3		50%	20%	-
CO4	K3	-	50%	20%	-
CO5	K3	-	-	20%	50%
CO6	K4	-	-	-	50%
Total		100%	100%	100%	100%

At Course Level:

- Fix the target levels for attainment of course outcomes delivered
- Actual attainment of COs is calculated
- The loop is closed either by increasing the target level for the next offering of the course or by planning suitable improvements in the teaching / learning process to increase the actual attainment so as to reach the target.

CO Attainment

A method to calculate CO attainment is developed and implemented.

- The marks of the students from the assessments such as Semester End Examination and Continuous Internal Evaluation are taken into account to calculate the CO-mark of that particular course.
- It is a direct measurement method that provides a way to analyze the attainment of each course.
- The Course coordinator needs to map questions to specific COs in the Assessment-CO matrix. The students' marks are entered in. Once the marks are entered in, the system (excel sheet) will automatically calculate the CO attainment.
- From this result, the attainment of each course outcome for the course is to be further reviewed and analyzed.
- Action plan to improve any weakness are identified and implemented.

Tex Project Industry Mentorship

Focus

- Industry based projects
- Problem solving
- Project Based Learning
- Publications
- Patents
- Joint Research collaborations
- Students Placements and Internships

Quartet

- Faculty Mentors
- Industry Mentors
- Interdisciplinary Mentors
- Students



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