## Steps before we impart Soft Skills

(Preparation for the Preparation of employability)

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Abstract—There has been a lot of research to find the need of Soft Skills for employability and also to find which soft skills are most desirable. It is a need of present era to have soft skills, to be employable for engineers. However, when we are in a hurry to train final year engineering students for soft skills, we need to first scrutinize what are their requirements and their aptitude to cope with the training being imparted. On one hand where we are providing best of the resources to enhance soft skills, on the other hand there is a major disconnect from the students' side. The results will be devastating, which, we will come to know at very advanced stage, where system is helpless. Hence while designing course for Soft Skills we need to give major consideration to andragogy, cooperative learning, specific most wanted soft skills and most of all students' take off level, as far as we are considering engineering students. In present paper failure of certain training methods and successful results post redesign will be discussed. Students are keen and willing, if we design course considering their needs and take off level, results are positive.

Keywords—andragogy, soft skills, employability, engineering students, foreign language, cooperative learning

## I. Introduction (Soft Skills and Need for its training evaluation)

Placement has become a major factor to evaluate success of engineering institutes. To increase the acceptability from industry; apart from technical knowledge, other parallel skills like various Softwares (being used at industry), Certifications and Soft Skills are taking place in the curriculum of most of the colleges. This is all to catalyse the employability of students. While imparting training on soft skills the major focus is mostly on verbal and written communication skills and the medium for these skills is expected to be English. While other soft skills like Team Work, Decision Making, Attitude, Group Dynamics etc. takes back seat over communication in English. However, forcing foreign language to start with a course may create revulsion among students and success of the course may jeopardize. There is a need for evaluation and design training course in soft skill to improve connection between objectives and outcomes, as the ultimate aim of training Soft Skills is an industry acceptable personality.

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#### II. Soft Skill Training (Part I) (A Failure Story)

90 Engineering Students (5 batches of strength 18 each) were considered for Soft Skills training. The objectives of the course (in order of priority) were to –

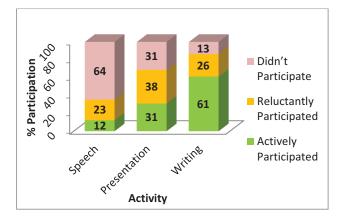
- Improve public speaking skills
- Enhance writing skills
- Improve presentation skills
- Inculcate Team Working
- Align Attitude towards skill enhancement

The focus of the course was mainly on verbal communication. Hence, important aspects required for public speaking, presentation skills and writing skills were informed to students through lectures and presentations and Students were tasked to give speeches(individual) and presentations (in groups of their choice) on selected topics. The results of participation are as shown in Table 1 and Chart 1.

**Table 1: Participation Matrix (Part I)** 

|              | Actively     | Reluctantly  | Didn't       |
|--------------|--------------|--------------|--------------|
|              | Participated | Participated | Participated |
| Speech       | 11           | 21           | 58           |
| Presentation | 28           | 34           | 28           |
| Writing      | 55           | 23           | 12           |

Chart 1: % Participation (Part I)



On assessment of the participated candidates, the results are as shown in Table 2.

The tasks, where students have to face the class, individual participation was least and the performance was also not up to the expectations. On the contrary, in activity like writing, the participation was comparatively good, though the results were, again, not up to the expectations. To address this behavior issue, both the authors referred certain papers on Andragogy, Cooperative Learning and Adult learning Techniques. The fundamental difference between the Child and Adult learners are as shown in Table 3.Adults learn best when there is respect, trust, comfort, association, and freedom to participate. The activities involved in the training must encourage participants to consider one another as resources[1]. To be effective in teaching adults, it's important to know your audience and have a general understanding of how adults learn. [2]

**Table 2: Performance against Activity** 

|              | Parameters  | Excellent    | Very<br>Good | Good          | Average       | Below<br>Average |
|--------------|---|--------------|--------------|---------------|---------------|------------------|
|              | Stage<br>Daring   | 5<br>(15.6%) | 4<br>(12.5%) | 11<br>(34.4%) | 4<br>(12.5%)  | 8 (25%)          |
| Speech       | Content   | 0<br>(0%)    | 6<br>(18.8%) | 8 (25%)       | 5<br>(15.6%)  | 13<br>(40.6%)    |
|              | Connect<br>with<br>Audience                             | 0<br>(0%)    | 3<br>(9.4%)  | 5<br>(15.6%)  | 4<br>(12.5%)  | 20<br>(62.5%)    |
|              | Voice<br>Modulation                                     | 1<br>(3.1%)  | 3<br>(9.4%)  | 4<br>(12.5%)  | 9<br>(28.1%)  | 15<br>(46.9%)    |
| Presentation | Slide/ Chart<br>Preparation<br>Use of<br>White<br>Board | 3<br>(4.8%)  | 9<br>(14.5%) | 9<br>(14.5%)  | 12<br>(19.4%) | 29<br>(46.8%)    |
|              | Content   | 0 (0%)       | 9 (14.5%)    | 12<br>(19.4%) | 9 (14.5%)     | 32<br>(51.6%)    |
|              | Eye Contact   | 0 (0%)       | (3.2%)       | 15<br>(24.1%) | 15<br>(24.2%) | 30<br>(48.4%)    |
|              | Body<br>Language  | 0<br>(0%)    | 0 (0%)       | 4<br>(6.5%)   | 16<br>(25.8%) | 42<br>(67.7%)    |
| Writing      | Structure   | 0<br>(0%)    | 0 (0%)       | 8<br>(10.3%)  | 16<br>(20.5%) | 54<br>(69.2%)    |
|              | Content   | 0<br>(0%)    | 0 (0%)       | 22<br>(28.2%) | 26<br>(33.3%) | 30<br>(38.5%)    |
|              | Grammar   | 0 (0%)       | 4<br>(5.1%)  | 9<br>(11.5%)  | 22<br>(28.2%) | 43<br>(55%)      |

Table 3 [1]: Differences in Children and Adults

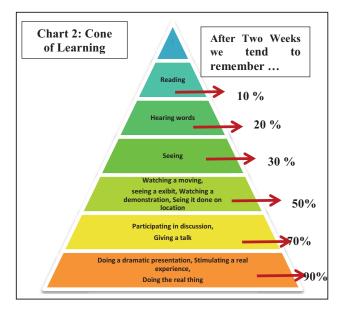
| CHILDREN                       | ADULTS                         |  |
|--------------------------------|--------------------------------|--|
| Depend on others to choose     | Decide for themselves what     |  |
| what is important to be        | is significant to be learned.  |  |
| learned.                       |                                |  |
| Accept the information being   | Essential to validate the      |  |
| offered as it is.              | information based on their     |  |
|                                | views and knowledge.           |  |
| Think what they are learning   | Think what they are learning   |  |
| to be useful in future.        | to be directly useful.         |  |
| Are relatively "clean slates." | May have fixed viewpoints.     |  |
| Little ability to serve as a   | Major capability to serve as a |  |
| conversant resource to         | well-informed resource to      |  |
| associated colleagues.         | colleagues.                    |  |

#### III Adult Learning [2]

To connect with adults for fulfillment of training cause, following key factors should be focused on, in the development of training program:

- 1. The training surroundings should be welcoming to make participants feel safe.
- 2. The training should be where learners have an opportunity to share their experiences.
- 3. The material presented should be useful to the learners.
- 4. The training presentation should be engaging.
- 5. The material presented should be relevant.

People often remember more when they practice or use their learning compared to when they just read or hear information. The amount of information we remember is indirect proportion to the amount of involvement we had in the learning. The Cone of Learning is as given below in Chart 2:-



#### IV. Knowing Audience (The students)

To know the audience [2]following demographic study was conducted –

- a) Nature of the residing area
- b) Language of Education (Primary and Secondary)

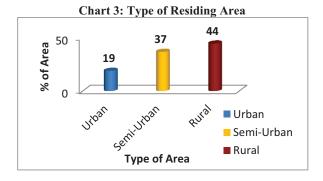
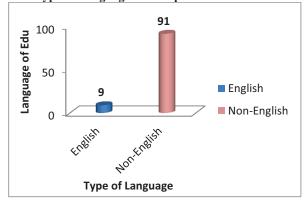


Chart 4: Type of Language used in prior education



To learn, adults require a comfortable atmosphere, respect and relevant context. In earlier course students had disconnect because of the following highly probable reasons:-

- (a) Language of communication expected was English which they were not comfortable
- (b) They were given information in Lecture form and were tasked with activities where their Selfrespect was being challenged due to poor English
- (c) Content in the tasks was largely vague and was not having direct impact on their life
- (d) Group dynamics were at very nascent stage
- (e) No feeling of achievement by cooperative learning

# V. Soft Skill Training (Part II) (A moderately success Story)

The course, of the Soft Skill training programme designed earlier, was changed and instead of focusing on the English Speaking, English spoken presentations and individual writing, new course objectives were set (in order of priority) and the objectives were to:-

• Improve group interaction

- Create comfortable and friendly environmental within the class
- Connect individual work, with group work
- Improve writing skills as a group activity

The aspects of new designed course were:-

- Activity based exercises, where no one was required to face the mob alone.
- Freedom to select language of communication
- Individual tasks leading to completion of Group Tasks
- Compulsory feedback and peer evaluation

Before starting the exercise students were made to interact with each other and then introduce one of their peers to the class while sitting in a group. This activity made everybody comfortable and students enjoyed interviewing and introducing their peers.

The first task given was to prepare "An Information Brochure' for the students who will be taking admissions next year. This information brochure's objectives were to provide first-hand information, which was not available with the students and they faced certain problems during their initial days. The task was group competitive task. Batch was divided into two groups (each group with 9 candidates).

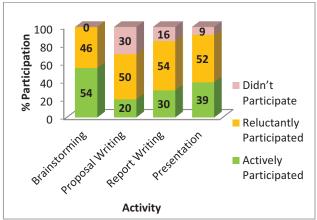
The activity was divided into four stages *viz*(a) Brainstorming (b) Proposal Writing (c) Report preparation and (d) Presentation. In each activity individual was given some time to work individually and then was allowed to interact with group to build the work further as final group work. The results of participation are as shown in Table 4 and Chart 5.

The results as far as participation was concerned were seen to be positive as compared to that in earlier task during Part I exercise.

Table 4: Participation Matrix (Part II)

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|--|--------------|--------------|--------------|--|--|--|
|  | Actively     | Reluctantly  | Didn't       |  |  |  |
|  | Participated | Participated | Participated |  |  |  |
| Brainstorming  | 49           | 41           | 0            |  |  |  |
| Proposal   |              |              |              |  |  |  |
| Writing  | 18           | 45           | 27           |  |  |  |
| Report Writing   | 27           | 49           | 14           |  |  |  |
| Presentation   | 35           | 47           | 8            |  |  |  |

Chart 5: % Participation (Part II)



Students were given freedom to attempt the individual exercise to their capacity and exercise was not made compulsory, however, the participation in group was made mandatory. During the initial task of brainstorming groups started interacting. Further, before proposal writing certain English Grammar exercises (interesting and objective type) were distributed to students. Grammar exercises were not part of evaluation and were given as individual assignments. These exercises helped students for writing their Proposals w.r.t. correct grammar. Thus quality of English started improving and same was continued till the end of the exercise. Students were allowed to write exercises in their capacity. On finishing individual exercise students have to share their work and build the groups exercise in totality.

In this process each individual took pride to contribute towards Group work and got inputs from peers' on weak areas through interactions. In the process of Cooperative learning weak areas got inputs and same were refined in group discussions.

**Outcomes** - In the total process, skills like Active listening, Group discussions, public speaking, leadership etc. were used by students unknowingly.

On completion of Group task each group was given a chance to discuss their work with the other group and the other group was given a chance to criticize the work. Before starting this exercise importance of peer evaluation and true feedback was discussed through various real life stories. **Outcomes** –In this process students felt the authority to correct and hence skills like Paraphrasing, Active listening, and Public speaking etc. were used by students unknowingly.

For the last exercise of Presentations, students were asked to prepare their script for entire presentation and a Peer review was done for each exercise. This task was again a competitive group task. To add surprise and fun factor and to ensure 100% participation following technique was used:-

Students were asked to prepare vanity cards and cards were drawn, to select three candidates from each group in sequence. Selected candidates were to present group working the same sequence. This method was explained to all well before time so that each individual and group gets time for preparation.

**Outcomes** – Due to uncertainty each individual prepared oneself for final delivery. Due to competitive activity each group helped every individual thus skills like team work, integrity, loyalty etc. were used by participants.

At the end of competitive group work, both groups were merged.

Based on the feedbacks, best part (agreed by entire class) from the work of each group was chosen to make final Proposal, Report and Presentation of ,the class'. The final presentation was given to various forums by different group of students. Each time vanity cards of participated candidates were removed to ensure each one gets a chance to perform.

VI. Success Factors— On comparison of the tasks, the approach and objectives, it can be seen that success of the Soft Skills training program has high probability, if we design the course considering Andragogy, Cooperative Learning and Demographic details of participants. Aligning the course objectives towards team related soft skills initially, will automatically drive participants to accept need for individual related soft skills and will align his efforts towards them. Cooperative learning also helps to a greater extent to improve individual skills and this supports the above statement to start with group skills initially.

## VII. Concluding Remarks -

Objective of any training course is always to maximize knowledge or skills take away, by learners. However for adult learners to attain the above objective, in Soft Skills development, principles of Andragogy and Cooperative learning helps a lot to connect learners with the course.

Instead of turning the learners away, by focusing on their language (English speaking) skills, if we indulge them in group activities and create interest in learning other Soft Skills (which are equally important), in due course we can align learners objectives with that of Soft Skills Training Course, through group activities and Peer interactions.

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