DESIGNING EFFECTIVE ASSIGNMENTS TO ENHANCE LANGUAGE SKILLS OF ENGINEERING STUDENTS

Dr. GITASRI MUKHERJEE¹, Dr. NIRMALA RITA NAIR²

¹Assistant Professor, Department of English, Muffakham Jah College of Engineering and Technology, Hyderabad.
²Associate Professor and Head, Department of English, Muffakham Jah College of Engineering and Technology, Hyderabad

ABSTRACT

English language competency is an essential tool for engineering graduates. Effective English communication fortifies the abilities and creates a positive impression of an aspiring engineer. In the present scenario employers look for engineers who are equipped with not only technical knowledge but also sound command over the English language. Such engineers are considered assets in any organization. Hence it is important to lay the foundation for enhancing language skills and also developing human values and life skills. One way by which these goals can be achieved is by thoughtfully designing assignments which cater to strengthening all the four language skills as well as inculcating a taste for literature which will give them exposure to various cultures, styles of writing and felicity of expression. Indeed, as Eleanor Dougherty points out, “...a well-crafted assignment ensures that instruction will provide students with a goal and the power to get there, enabling them to engage in rigorous and interesting academic contexts as they acquire the content and skills necessary to participate in academic course work.” (p.9)

Different students have different tastes. Some Engineering students have a taste for English literature while others prefer to read, not Shakespeare, Wordsworth or Keats but rather, speeches and writings of eminent scientists and engineers. It is interesting to note that these works too often display richness of thought and expression and reflect not only their preoccupation with science but also their philosophies about life as evident in their speeches, for instance, APJ Abdul Kalam’s, “Vision of India 2020”, Steve Jobs’ “Stay Hungry, Stay Foolish” at Stanford University and...
Randy Pausch’s “Last Lecture” at Carnegie Mellon University, to name a few. It is in this context that the authors decided to design an assignment to cater to the needs of those engineering students who are keen to study a text that appeals to them. For, when interesting study materials form the basis of assignments then students not merely learn language skills but also enjoy the learning process. Thus the desired goals can be met by carefully choosing appropriate materials and utilizing them effectively.

Assignments are integral to the teaching and learning process and can be an effective tool for assessing students’ continuous progress. As Mukalel points out, “Taken genuinely on both the ends, teachers and students, the method of assignments is fundamentally very valuable...” (150). Other than term exams, class tests, and quizzes, assignments too offer insights into the students’ learning. Therefore, effective assignments should be planned and designed with much care and thoughtfulness. Assignments can be creatively designed in different ways. Some of the possible options include: Posters, Portfolios, Letters, Brochures (eg. travel brochures, college brochures), Instruction Manuals, Case studies, Debates, Dialogues, Videos, Collages, Plays, Power Point presentations etc. Teachers should elaborate on what is required, taking care to be clear and specific, since great responsibility lies on them to let the students understand the purpose and outcome of the particular assignment, since an assignment tailored appropriately to students’ interests and level, will challenge and motivate them.

This paper will discuss the importance of choosing a topic that will galvanize interest in students. To achieve this, a teacher may think of going beyond the boundaries of the prescribed text and pay particular attention to select a topic that pertains to the students’ area of interest with the view to enhancing the language skills. Students can meet the expectations once they have a clear idea about how to go about it. To make this task easier, teachers can layer the assignment with a clear rationale according to the requirement. For, while teachers know the importance and purpose of the assignment, the students cannot be expected to discern the same.

The teacher can break the assignment down in various segments so that students can follow it step by step without any ambiguity. Since “teaching through assignments has been widely accepted as a way of getting some substantial work done by students”.... (Mukalel 150), the following assignment was designed by the authors with three major segments as follows:

**Title of the Assignment: Great Engineers and their Contribution**

**Guidelines:**

- a. Read about an engineer of your choice, take notes and organize the information.
- b. Summarize the above information in your own words (word limit: 500).
- c. Prepare a PPT on the above information using appropriate visual aids and present it before the class.

The first two steps were accomplished by each student individually while the final step involved teams of four students each, with the purpose of encouraging team work and developing interpersonal skills.

This assignment required the students to first read about an engineer they admire. This provided the students with flexibility since they were given the freedom to choose an engineer from any country, century or from any branch of engineering. They were then required to note down relevant information and organize it meaningfully. In doing so, they would acquire the sub skills of skimming, scanning, comprehension and note taking. Students were encouraged to refer to both primary and secondary sources relevant to the chosen topic, thus also inculcating the habit of reading extensively.

The next step involved summarizing and writing the above information in their own words. This entailed using crisp and concise language i.e., avoiding verbosity, redundancy and using appropriate vocabulary items such as one word substitutes, synonyms, antonyms, collocations, etc. Students were required to prepare several drafts before giving it a final shape, to make them realize that the first draft is not usually the last draft.
However, the students had to pay attention to the required style of writing, length, format, and documentation before making the draft final. This process provided an opportunity to the student to assess his/her writing and benefit from the feedback and suggestions of the teacher, which had to be incorporated for final approval. The students were asked to complete the task in a stipulated time which helped them to improve their work efficiency under pressure. This process aimed at improving or even excelling in the art of writing while underlining the importance of making the students’ writing original and free from plagiarism. The final step involved preparation of a PowerPoint Presentation (PPT) by each team, which was presented to their peers.

This exercise helped them to enhance their presentation skills, cope with stage fright and develop soft skills which would prepare them to confidently face challenges in their academic and professional career. The peer group here played a very important role as they were not a passive audience but had to listen carefully to the presenter and assess their friend’s performance, i.e. in this process they listened to, learnt from and assessed the presentation. As pointed by Mukherjee and Nair (2013), “peer assessment … can provide immediate feedback in the classroom and might be helpful for students who have a tendency to respond positively to a peer than to a teacher…. Peer assessment keeps students alert, since it involves building a positive image by making an endeavour to ensure that the fellow students appreciate their efforts. It also benefits those students who are assigned to assess their peers, since it makes them more responsible and active listeners.”

As Gardner (2005) points out, “The most effective and challenging assignments focus on questions that lead students to thinking and explaining, rather than simple yes or no answers, whether explicitly part of the assignment description or in the brainstorming heuristics.” Once the students were enlightened by the substantial information which they had gathered about the renowned engineers of their choice, they felt confident when making their PowerPoint Presentation and answering questions that followed.

The primary rationale for designing the above mentioned assignment was to reinforce language skills to lay a strong foundation for the future of the aspiring engineers. However, at every juncture, the assignment had the additional benefit of imparting human values which are behaviors and principles that guide one in doing what is right and acceptable in society. In accomplishing the task, the students also learnt certain life skills that facilitate a better quality of life and help in accomplishing ambitions and living to one’s full potential.

The entire assignment provided not just subject knowledge but also an opportunity to imbibe values of those great personalities as they read about them, their achievements and contributions. The eminent engineers served as role models of inspiration since they were visionaries, innovative, creative, risk takers who dared to think differently. They were also courageous, humble, hard working, optimistic, full of hope, focused, altruistic, and epitomes of integrity, simple living and high thinking; they lived disciplined lives of dedication and determination, as they worked for the nation and humanity.

In the process of carrying out the task they also acquired various skills. For example, in the first step while reading they learnt to make the right choices when it came to selecting what they wished to include from the large amount of information they had gathered. In the next step which involved writing, they realized that they would need to make multiple drafts, which required them to persevere, be patient and not get discouraged or give up. Rather they wrote and rewrote in pursuit of perfection. The third phase i.e. preparation of the PPT, involved team work which meant listening to and working with others in harmony, being an effective team and thus preparing themselves for personal and professional challenges in the days ahead.

Besides taking pride in and enjoying a sense of ownership of their work, the students were motivated with the knowledge that their endeavors would serve as models for their fellow students. Thus their sense of making a contribution was satisfying and fulfilling in itself.
Designing meaningful and effective assignments takes thoughtfulness and skill and requires the inclusion of certain important elements. For instance, the need for the teacher to be aware of the objectives to be met, keeping in mind that the goal of the assignment should reflect the outcomes of the course. The teachers should encourage students to strive for quality since “...if assignments are not of high quality and are not relevant to the curriculum, then learning will also be of low quality and loosely connected to the curricula, if at all. Teaching and learning constitute a reciprocal process. Ineffective instruction is often distinguished by a loosely regulated plan, and students spend classroom time going through the motions of learning but not producing solid evidence of that learning (Dougherty 9).

It is important to note that the teacher has to keep in mind not only the interests but also the level of the students, since an assignment which is very tough may discourage students while an assignment which offers no challenge at all would not have served the purpose.

Thus the teacher plays a crucial role in finding new, innovative ways to plan and design assignments to reach students and assist them in exploring their own potential. Hence a well-conceptualized assignment will meet the primary objective of imparting language skills and also serve the purpose of broadening their vision, inspire and motivate them to aspire to be great engineers themselves one day.

REFERENCES:

Online Resource