ANALYSING COMMUNICATION COMPETENCE IN ORAL PRESENTATIONS: ENGINEERING STUDENTS' EXPERIENCES

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ABSTRACT

With the rapid growth in science, technology, new organizations and management, industries critically need engineers who can communicate effectively with people from diverse backgrounds, to deal with multiple stakeholders, the government, private industries and the public at large. Studies have shown that although engineers may be technically sound, they are not effective communicators. This is particularly evident in the form of oral communication. Industries demand that graduating engineering students should be equipped with both technical and non-technical skills upon entering the job market as these skills are of vital importance in engineering workplaces. This constant emphasis on the need for good command of English in oral communication in graduating engineers has become a key concern in academia and the engineering profession. However, studies have shown that engineers and engineering students face communication problems, in particular, giving presentations at workplace, conferences, seminars, and in classrooms. Although there are abundant amount of various techniques, strategies, and skills in giving presentations provided in classroom teachings, articles, journals, literature, and on the Net; The question is why the communication problems particularly in giving presentations still linger. This paper describes the experience of Malaysian undergraduate engineers in giving presentation in the second language, English, during their 20-week internship program. It also describes understanding of the tasks assigned to them and presenting it to their supervisors. The combination of technical and non-technical knowledge is transferred and conveyed in a technical presentation. It is a representation of technical work-related matters, communication skills, students' experience, namely their awareness, readiness and interaction with the non-threatening audience in the actual workplace settings. The study employs an ethnographic approach in gathering data. Data were collected through observations, participation and interviews. The data suggest that although the students are technically sound, they need to fine-tune their communication skills especially in oral and presentation skills, as these two are the desirable skills in the construction of an engineer. This set of skills is constantly highlighted as one of the biggest factors in determining a graduate's success or failure.

INTRODUCTION

In a survey of employers, undergraduates, graduates and university administrators, graduates were said to be lacking in 'personal qualities and communication skills and are not able to market themselves' (Shuib, 2005, p.1). Malaysian employers have consistently identified and ranked communication skills as being of high importance in the list of competencies, which most, if not all, graduates lack (Singh, 2005). Their findings are aligned with empirical research by Mustapha (1999) on the perceptions of Malaysian employers regarding employability and workplace literacy. Mustapha found that employers were least satisfied with the graduates' communication skills. The findings of such studies were further supported by the former Malaysian Deputy Human Resources Minister, Datuk Abdul Rahman Bakar, who stated that most Malaysian graduates do not possess these vital skills needed in the workplace (Azizan, 2007). Those graduates surveyed cited a lack of job experience and poor command of English, with inadequate communication skills, as reasons for their unemployment (The Asian Pacific Post, 2005; Singh, 2005).

The poor command of English is believed to be the main cause of underemployment, as emphasized by Rafiah Salim, the former Vice-Chancellor of University Malaya (Phang, 2006). This is because English is given a prime emphasis by employers in recruiting future employees (Shuib, 2005). In addition, it was found that 56% of these employers refrained from hiring fresh graduates because of their lack of command of English, as reflected in a survey of 4,000 Malaysian human resource managers and directors (Tneh, 2008). Interestingly, whenever issues of communication and unemployment are raised, English is inextricably bound up with both.

Communication in the engineering profession

The engineering community is faced with a high demand in regards to graduates' competencies as highlighted by the President of the American Society for Engineering Education (ASEE):

> *...the industry is demanding that our graduates have better teamwork skills, communication abilities, and an understanding of the socio-economic context in which engineering is practiced (Smerdon, cited in Seat, Parsons & Poppen 1999, p. 1).*

This demand is closely aligned with industry which is in dire need for engineers to possess a diversity of skills and attributes, striking a balance of both technical and non-technical competencies. Globally, industry is shifting its focus to non-technical skills in the engineering profession aside from technical capability which still remains core (Nguyen 1998). Engineers are expected to communicate well with people from diverse backgrounds, to deal with multiple stakeholders, government, private organizations and the public. In order to accomplish these tasks, both engineers and engineering graduates need to be technically competent and acquire non-technical skills in pursuing their career as competent engineers because these skills are of growing importance in the engineering workplace (Bennett, 2002; Dukhan, 2005; Emanuel, 2005; Patil & Riemer, 2004).

As industry is directly involved in shifting the paradigm of engineering education, the demand and expectations by industry should be taken seriously by education agencies (Patil & Riemer, 2004). Academics are urged to not only produce competent engineers with practical skills, 'but also with a range of transferable skills, including multilanguage proficiency' (Gilleard & Gilleard, 2000, p. 477). While technical skills are important, there is a burgeoning demand placed on communication skills, including mastering English language, as they are one of the biggest factors in determining a graduate's success or failure.

International and local engineering education board agencies— for example, the Institute of Electrical & Electronics Engineers (IEEE); the Accreditation Board for Engineering and Technology (ABET); the Institution of Engineers, Malaysia (IEM); Board of Engineers, Malaysia (BEM); higher learning institutions, and members of industry—have long recognized the importance of communication skills in graduating engineers, academics, professionals, and in career success (Aziz *et.al*. 2005; Jolly, Radcliffe & McLeod-Palma, 1999; Megat Johari *et.al.* 2002). Graduates are expected to be competent practitioners, equipped with both technical and non-technical skills to confront new changes in the competitive world. This expectation is explicitly stated in the generic/ professional attributes of a graduate in the Engineering Councils' policies of various countries such as Malaysia, the United Kingdom and Australia (Engineering Accreditation Council Malaysia 2005; Engineering Council UK 2005; The Institution of Engineers Australia, 2004).

The emphasis is that students should be able to communicate effectively, give clear oral instructions, and make effective oral and written presentations to technical and non-technical audiences. This statement

concurs with Levit and Howe (cited in Tenopir & King, 2004) who state that communication skills, which are equally vital to technical skills, are essential in the engineering profession. They claim that it is only if conclusions of analyses or potential solutions to problems are communicated effectively to decision makers or those who implement solutions that information becomes knowledge.

Oral Communication and Presentation Skills

As mentioned earlier, the importance of communication skills in graduating engineers is constantly being highlighted as the engineering graduates are expected to be able to communicate effectively, both verbally and in writing. In the engineering profession, effective oral skills and good writing skills are two critical elements for success. However, it is interesting to note that in the engineering culture, engineers 'should not communicate' (Leonardi, 2003, p. 36). There is a widely held belief in relation to communication that the less they communicate the better. Engineers often prefer to be communicating and be knowledgeable in terms of work-related tasks rather than in interacting with their colleagues.

In contrast, 'the ability to communicate effectively, both verbally and in writing, to peers, the employer, client and the community' are the desirable skills and attributes in the formation of an engineer (Nguyen, 1998, p. 73). Although these two main skills are equally highlighted, the focus of attention is on oral communication. Engineers, according to Tenopir and King (2004), spend more time communicating information output and ideas orally than in written forms. They are said to spend '690 hours per year in information output versus about 550 hours in information input' (p. 90). The information outputs take in many forms from consultation to giving presentations.

Presentations, in particular, take place either internally, externally, in small group settings or in formal settings. In small group settings, engineers are engaged in informal work-related discussions with colleagues, staff and seniors; whereas, in formal settings, they give presentations related to research, proposals, projects and other work in meetings, conferences, and seminars (Crosling & Ward, 1999; El-Raghy, 1999; Lee, F.T. 2003; Vest *et.al*. 1995). This transfer of information, or knowledge, and technical know-how must be presented with an excellent standard of oral communication skills (Riemer, 2002). Without clear communication, the ideas and goals will lead to unresolved issues and conflicts (Lee, F.T. 2003). Hence, in order to accomplish more, it is a practical necessity for engineers to be able to communicate effectively and make successful presentations (Seliman & Dubois, 2002).

Despite research showing that engineering students and practicing engineers are much involved in giving presentations, research has also identified that they face communication problems in giving presentations at the workplace, conferences, seminars, and in classrooms (Freeman, 2003; Kedrowicz, 2006; King, 2002; Lewkowicz & Cooley, 1998; Orr *et.al*. 2005; Polack-Wahl, 2000). Although there is an abundance of various techniques, strategies, and skills in giving presentations provided in classroom teachings, articles, journals, literature, and on the Internet, the question still remains as to why such communication problems, particularly in giving presentations, still linger. Thus, this paper focuses on providing a snapshot of engineering students' experiences in oral presentations and utilizes a selection of students only.

Research Focus and Framework

The study evolved because the aforementioned research has shown that engineers and engineering students face communication problems in giving presentations at workplaces, conferences, seminars, and in classrooms. They are said to 'carry a stigma of being ineffective communicators...' (Reave, 2004, p. 57). This perception might due to two reasons: first, in the engineering culture 'regular and open communication among engineers does not occur' (Leonardi, 2003, p. 37); and second, the engineers are not particularly comfortable with some forms of communication such as oral presentations (Clayton, 1997). Similarly, in giving oral presentations, engineering students faced difficulty such as producing appropriate expressions, using inappropriate language conventions, and having problems in language errors during their Undergraduate Project Seminar presentations (Marzuki, 2003).

In this paper, engineering students' oral communication competencies are observed by utilizing the genre of Engineering Students' Oral Presentations (ESOPs) which consists of Introduction, Body/Content and Conclusion. However, this paper focuses only on the Body/Content section by observing the communication or clarification of ideas through a clear and well use of the language and the demonstration of general or specific purpose of the presentations. ESOPs unfold students' knowledge in delivering the technical/engineering concepts and ideas. In other words, students' communication competence are demonstrated through their ability to deliver a clear, convincing oral presentation to a specific audience, in this case their industry and faculty supervisors, in a way that elicits response, understanding, appreciation, assent, or critical inquiry.

ESOPs, therefore, in this particular study the ESOPs took the format of Introduction–Body–Conclusion–Termination.

The terms: moves and sub-moves, borrowed from Seliman (1996) are used in sequencing the order of communicative elements as they occurred in the ESOPs. These moves and sub-moves are further categorised into two styles: (a) relatively fixed order style, and (b) no-fixed order style (Seliman, 1996). In the first style, the occurrence of the communicative elements can be distinguished as they occurred frequently in a consistent manner; while in the second style the communicative elements were found to be inconsistent as there were no linear forms found in the presentations. However, this paper focuses only on the former style by giving examples of moves and sub-moves that appeared in the Body/Content section.

The relatively fixed order style

Most ESOPs adhered to the format Introduction–Body–Conclusion–Termination as illustrated in Table 1. Except for the sub-moves, the sequence of moves in the Introduction and Termination sections is mainly consistent. For instance, the common sub-move 'greeting the audience' in the Introduction occurred at the beginning of the presentations and sub-move 'thanking the audience' in the Termination were found fairly fixed. Within the Body/Content and Conclusion sections, the moves and sub-moves depends largely on the faculty's requirement (i.e. the allocation of marks in the assessment forms) and thus influenced the choice of information content and which moves or sub-moves to adopt.

This relatively fixed order style has a structure of:
  (a) an Introduction section with two moves:
        i. addressing the audience (Intro.1a, Intro.1b, and Intro.1c)
        ii. orientating the content (Intro.2a, Intro.2b, and Intro.2c)
  (b) a Body section with two moves
        i. presenting background information (Body.1a)
        ii. focusing on the content (Body.2a *, Body.2b, Body.2c, Body.2d *, Body.2e, Body.2f *, Body.2g *, and Body.2h **)
  (c) a Conclusion section with one move
        i. tying up (Concl.1a, Concl.1b, Concl.1c, and Concl.1d)
  (d) a Termination section with one move
        i. orientating the audience (Term.1a and Term. 1b).

Table 1. The structure of ESOP – relatively fixed order style

BODY	
1. Presenting background information	
Body.1a	Present company's background—history, logo, vision and mission, structure and organization chart, and products
2. Focusing the content	
Body.2a *	Present problem statement by relating it to the existing system in the company
Body.2b	Present assigned task(s) or project(s) by describing tasks specifications
Body.2c	State involvement of activities/process involved or state application of software/module/equipment where applicable
Body.2d *	Present assigned task(s)/project(s) by explaining the progress or stages of development using the software
Body.2e	State involvement of work-related activities during the internship
Body.2f *	Demonstrate developed system by explaining the use of softwares by presenting the interface design and how the system works
Body.2g *	Present process or procedures involved pertaining to the task or project
Body.2h *	Provide implementation and solutions

No star – all students; * FICT and FCSSE's students; ** FCSSE's students ; *** FICT and FEE's students

In organizing the content of the presentation, it appears that students were familiar with the formalized structure of an engineering oral presentation. The 'well-structured' presentation reflects what Spitzberg and Cupach (1984) describe as 'script knowledge' (p.126). Students' knowledge of what an oral presentation is was stored in memory, and this cognitive knowledge is then translated into how oral presentations should be performed. The actual performance may derive consciously and unconsciously through formal and informal learning or through involvement in numerous presentations in classroom settings before peer groups and academia, in one form or another.

BODY

First move–Presenting background information

The analysis of communicative elements in the Body section was the most difficult in determining the cut-off points due to the considerable variation of the content which was presented in a non-linear form. The source of these variants could emanate from the marks allocated in the assessment forms and requirements of the respective faculties.

Body.1a–present company's background

In all twenty-two presentations, the students provided the company's background either in general or detail information. However, none of the faculty supervisors interviewed, except for one, mentioned the specific requirements on how detailed the information should

be. According to most of them, it does not matter as long as there is 'sufficient' related information. According to one faculty supervisor, 'In the Industrial Training presentation, they need to have the Introduction; they need to talk a bit about the company…' (Pr. Hazim). 'A bit' here is assumed as some basic information on the company's background, its products, organization chart, and departments. One example of a brief and detailed description of the companies is shown below:

> *Let's proceed to some introduction of my company, ok. The name of (company) company known as (name) has started their business in Malaysia in 1973 in (name of a building and street). They changed to (a location) for their operation starting in 1974. Then in 1999, the name (company) changed officially to (name) and in 2004, a new department is set after and then named as (name of the department). So in 2005, the company and (another company) start off. (Chen)*

In the second excerpt, the student went on reading the companies' chronology events and its major alliances worldwide which took nearly four minutes. In this case, the additional information was not considered 'a bit' anymore. What really matters according to Pr. Hazim was:

> *When they put a slide for example the organisation of the company, I would ask whether they really understand reading the materials with regard to the company. For example, whose the share holders, whose the owner in terms of understanding the business in that particular company. They can only understand that if they dig up the materials. (Pr. Hazim)*

In other words, students need not go into great depth in providing the company's background. They only need to have a general knowledge of the company's business, and they also need to understand the significance of the information they disseminated.

Second move–Focusing the content

The second move, *Focusing the content* is the vital component or crux of the ESOPs with varying degrees of content consisting eight *sub-moves*. Due to its variation, the description of its content in the *sub-moves* is based on the faculty with and without an indication of stars. No star means that all students presented similar content in its respective *moves* and *sub-moves*. One star (*) refers to students of FICT and FCSSE, two stars (**) refers to students of FCSSE and three stars (***) refers to students of FICT and FEE.

Body.2a*–present problem statement

Students of the information technology program presented problem statements pertaining to the existing systems in their respective companies. In stating the problem statement, they needed to identify whether the system needed to be upgraded, revised or whether they had to develop a new system or otherwise learn how to maintain the system. Of the fifteen computer-related presentations, only nine fulfilled what was meant by the problem statement, which was to state the problem of the existing system. In the following example, the student identified the problem and stated that there was a need to develop a system:

> *There is no systematic system or program for PE staff use to keep track all the lot requests and the (inaudible) analysis results. So, in AFL database we will develop to overcome the problem. A log-in form will be needed …*
> *(Teng)*

While in another presentation, Syafiqah suggested that the current system need to be upgraded. She explained, '*Current system for the … (er) … is a just manually process … (er) … include all ... include the paper method la, so we have to … (er)… develop one project … (er) … to make it … (er) web-based system*' *(Syafiqah)*. Later in their presentations, both Teng and Syafiqah demonstrated the new developed or upgraded system in their presentations, as well as other ten students in the Body.f * *submove*. However, Syafiqah also talked about her difficulties in learning the system:

> *Quite difficult to make a summary report is because (er) from the report that has been done from the tender document, it's difficult to make a summary. Difficult to understand the process documentation needs. I have to (er) I have to learn (er) to understand what … they ... they need. So (er) and fields … IT fields and engineering fields is different … is difference fields, so (er) the communication is not … not going well.*

Another student, Sabrina seemed to be confused in understanding what was meant as problem statement. Like Syafiqah, she also talked about her problems in developing the system:

> *This is the problem statement before develop the system. I have problem, take time to find the … software micro (inaudible) MX7 because it's not open source and surf Internet how to install the software. In myself, don't have the programming language knowledge for micro (inaudible) MX7 because at campus never learned to the software. (Sabrina)*

Body.2b–present assigned task(s) or project(s)

Chandran, for example, had divided the tasks assigned to him into two parts: the main task and sub-tasks, '*This is the main task and really a toughest part of my … during my training here. I was assigned to develop a system called ACMFMP using C Sharp programming language*' and he continued explaining the sub-task, '*I just developed a system under (second supervisor's name) based on what he said and I used a notepad as a creator … these are the sub-tasks actually to develop the system*' (*Chandran*).

Another student, Adiba, described her job, 'My job description will usually evaluate CRT and LCD but I'm in charge fully in CRTV function and renovation' and also stated her responsibility:

> *… so, I need to evaluate and to ensure that the software is ready to use and one of my job descriptions that very important also is to verify problems which from previous and current models. We need to compare the problems to make sure it won't happen again. (Adiba)*

Another student, Safiyyah gave an account of her involvement with a team of experts in upgrading the system. She stated:

> *My industrial training activities consisted performing tasks related to the upgrade of the MS … and then created Maintenance Release Statement (MRS). Next, I also … Next, I assisted in the system upgrade. The system upgrade … I also conducted testing… I reviewed and made several changes … I attended several training processes to …*

Body.2c–state involvement of activities/process involved

Students of the information technology program described the tasks specifications and stated the activities involved or the use of software/module/equipment where applicable. They stated the progress or stages based on months or steps pertaining to the project or task undertaken. In the following example, Hanis explained the technical concepts and procedures involved in developing the systems:

> *First month in (the company), I understanding about the company business and old version of CMIS program. Second month, I…I make interface design and data insertion and third month, implementation which is code process and fourth … (er) CMIS documentation and last month, maintain and control system. (Hanis)*

In this sample, Hanis informed her supervisors what she did in building the system and/or explained the developed system by going through features such as the interface designed, types of software used

and how the system worked. However, as mentioned earlier, there was no clear-cut point as to which section the students should place these explanations and how they explained it. A few students presented it after they stated their assigned task(s) or project(s); a few others presented it in the system demonstration in the Body.2f * *submove* or in the Body.2h * *submove*—Implementation and solutions.

Body.2d–present assigned task(s)/project(s) by explaining the progress or stages of development

This particular sub-move is sometimes interchangeable with Body.2h* sub-move depending on the students' understanding. Sabrina presented the progress or stages of the system development in a monthly basis form:

> *One month … first month, December–understanding database and coding MySQL, research and understand the coding macro (inaudible) …*
>
> *Two month develop interface using the macro Dreamweaver and then copy the … the coding macro Dreamweaver paste in homesite file, ok. Add the coding, …*
>
> *Third month–understanding the research, how to create the message error. After that, add coding for update, delete and change the table in database. Add the table, …*
>
> *Fourth month–March. Make the flow … work flow to know how to … how the data insert and remade tables. Coding, select to (er)… add the coding select to relate (er) … let's … like table (inaudible) and table record application. … to add the coding for button SAFE, EDIT, UPDATE and DELETE.*
>
> *Four month (er) I have a problems … so method, create a new database. (er) before that, in database have six table, so (er) I create new database.*
>
> *April - edit the coding to be systematic and create coding that using the check board/chat box. Ok. This one using the … This one use the coding option value, ok.*
> *(Sabrina)*

Body.2e–state involvement of work-related activities

Some students who were either assigned a group task or had a number of tasks assigned to them or were not assigned a particular task during the internship period did not present any specific task, instead they chose to present an overview of their involvement in the work-related activities during their internship. For example, Aiman, reported,'*This is somes of my job here in the electrical. Some of the dates … the job I've been*

… I've been done here. For example, motor servicing. So, we are to make a service about … for the motors we have to repair it and so on …' Aiman gave an account of his activities and involvement in the given tasks of the respective departments where he was attached. He claimed that due to his vigorous involvement in many activities in different departments, it had given him the first hands-on experience and exposure to a real life of being an engineer.

Body.2f *–demonstrate developed system

Ten out of fifteen students of the information technology program demonstrated the systems they developed or upgraded. In a quartet presentation, Jaclyn presented the kiosk system that her group had developed:

> *So, this is the menu. The menu … we … (err) (the sentence hangs). … then this is my task to create the menu. All the designs … used Adobe photoshop (inaudible).*
>
> *For the main menu, we have the five buttons (names of the buttons) and also…After all the design have complete, we have to combine it using Flash to add some (inaudible) and create more animation. So, we go to one of the main menu, we go to 'History'. This is 'History' main page and this is … this interface are created by group member (name). So, I would like to invite she to explain about the task.*
> *(Jaclyn)*

Two other students said that they did not develop or design any new system as their assigned tasks only required them to maintain the existing system in the companies or assisting the team members with the on-going project:

> *During the Industrial Training, I should maintain the HRMS system. I should maintain this system to make sure the system can well function. Another task is uninstall and troubleshoot the HRMS if something problem. (Asyikin)*
>
> *I have to help them make a system for inventory in their (inaudible) spare part room. (Syakirin)*

Overall, the fundamental understanding and assumption was that when the students presented their progress status or development stages of their projects or tasks, the supervisors wanted to see whether the technical concepts or knowledge taught at the university were transferred and applied in managing the assigned task(s) or project(s). Hafizza, in her presentation, stated that one of the objectives of *InTra*

is to enhance students' knowledge and skills, which Ming understood as, '… *whatever you learn in the university then you can apply with the practical*', evidence of their capabilities in learning and acquiring new things beyond the classroom context and it concurs with the concept of putting 'theory into practice' (Sirat & Nordin, 2006).

Body.2g–present process or procedures

As for a few of the final year students, they were already absorbed as a permanent staff in the company and were given the responsibility to handle several projects, for instance, the student, Mustaqim. He informed me of some of his responsibilities, for example, '*My job is make deals with vendors in purchasing equipment, maintenance tools, spare part, repair critical breakdown and service*'. He also discussed the projects and an incoming project that he needed to handle simultaneously. He explained the process or procedures involved as in the Body.2f * sub-move. He said:

> *This is the project that I handled during my practical session. (Inaudible) handing good. Number two, we renovate and install new partition. As you can see here, (inaudible) their length is only (inaudible), but after renovation, we extend the length of the (inaudible) to become like this. So, this project (er) is finish and close, so now the production workers using this equipment. (Mustaqim)*

He further explained:

> *My project is to supply, deliver and install ducting line. So, this the ducting line, up to the roof, till up to the roof, so we … I handle it with the vendor. So now I'm waiting for the EOE from the vendor approval, still not reviewing the … the drawing. This one (refer to the slide) is work-in-progress site. If you … it is still under construction. Ok. (Mustaqim)*

Referring to his future project, Mustaqim said 'This is the incoming project, upgrade and existing with (sentence hangs) … Ok, I still waiting their turn follow the production schedule.'

Body.2h *–provide implementation and solutions

Hanis presented what she did for the implementation and solution method followed by a report on the development progress within the 5-month internship program.

> *For implementation and solution method. For development method, I first, I study the existing system. Second training and book reference. Third design work floor … work flow and form. Then creating view and navigator, folding,*

testing and observation. (er) for me here, I have a 5-month and I divide into (er) 5-month category. First month, in (the company). I understanding about company business and old version CMIS pro, ok. A second month, I … I make interface design and data insertion and third month, implementation which is code process (er) (er) fourth (er) CMIS documentation and last month, maintain and control system. (Hanis)

In conclusion, in the ESOPs which adhered to the relatively fixed order style, the communicative elements found in the moves and sub-moves are predictable as they followed a linear path from Introduction to Termination in a consistent manner. These predictable moves enabled both faculty and industrial supervisors to keep track with the presentations according to the format in the assessment forms.

Conclusion and Implications

This study provides a snapshot of engineering students' experiences in giving oral presentations in their InTra programme. It demonstrates some of the elements in communication competencies using excerpts from transcribed videotaped presentations and recorded interviews. The transcriptions act as a means to provide further insights by identifying students' difficulties and experiences pertaining to oral communication. The important findings generated from this study need to be understood within the study's particular context and situation. Although the findings may not be generalized to other forms of study pertaining to oral presentation in other academic settings, they provide a pattern of students' communication competencies that can be related to syllabus design, implementation, teaching and learning aspects and monitoring students' development.

What emerges has set a priority to:
- give further emphasis on the related skills involved in giving presentations, specifically oral communication and presentation skills
- stress the practice of presentations by incorporating it into engineering subjects
- encourage students to speak in English in their everyday life
- focus on conveying messages, thus indirectly applies the use of proper grammar and sentence structures
- remind students that constant practice makes perfect and thus enhances their speaking skills
- teach them how to apply the knowledge into tasks/projects
- expose them to different types of presentations

Reflecting on these priorities, oral communication competency is relevant in the engineering curriculum and that engineering students should have well developed their communications skills in order to deliver effective presentations to both technical and non-technical audiences. Their performances in giving ESOPs have attested to their inability to express their ideas and thoughts fluently. The goal is not to interfere with the technical knowledge aspects, but to polish the students' communication skills which are demanded and critically needed not only by the industry but in all situations and contexts.

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