

## Self-Appraisal among Engineering Undergraduates in Delivering Technical Oral Presentation in a Public University of Malaysia

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**Abstract:** *Alternative assessment has increasingly gained attention in L2 speaking. One of the research areas which have received much significant attention in the literature of EFL/ESL is the use of self-appraisal technique. The aim of the current study is to find the engineering undergraduates' conceptions about the use of self-appraisal on the technical oral presentation. For this purpose, 30 engineering ESL undergraduates were involved in this study from the Faculty of Civil Engineering & Earth Resources. They were then randomly chosen in order to delve into their perceptions pertaining to self-appraisal. A questionnaire was adapted from different studies. The results of the study showed that the questionnaire was reliable. The reliability coefficient of the conceptual study that was obtained indicated that the instrument was satisfactory and reliable for the study goals. Furthermore, the engineering undergraduates' perceptions pertaining to self-appraisal was positive. Based on the obtained results, it was concluded that using self-appraisal strategy among Malaysian engineering undergraduates could be helpful in overcoming some of their oral presentation hindrances when they are assigned to deliver their technical oral presentations. Hence, the findings of this study have clear implications for both students and teachers of ESL. Teachers and educators can employ the self-appraisal strategy as an autonomous learning opportunity to lower their anxiousness and polish oral presentation skills of the engineering undergraduates in academic and professional spheres.*

**Key Words:** *Self-appraisal, technical oral presentation, perceptions, engineering undergraduates.*

### Introduction

Oral communication has been explored in various disciplines such as in the engineering field. It requires a person to communicate technical ideas and different concepts to other people through formal and informal ways of oral communications. For instance, Kassim and Ali (2010) conducted their study on feedback gathered from the engineering industry in order to investigate the communicative skills at the workplace required by the industry. The findings revealed that special importance should be placed on oral communication rather than focusing only on written communication skills. Besides, fluency in the English language was viewed as an opportunity in the field of engineering to become a global engineer.

Gray (2010) investigated the importance of oral communication skills for students in New Zealand. It was viewed that oral communication competencies were needed by graduates of

accountancy upon entering the workplace. The findings of this study revealed that a majority of the accountancy professionals reported oral communication skills to be essential for a new graduate. However, the results paint a bleak picture of the level of oral communication skills among New Zealand's new graduates at tertiary accountancy programmes. In Gray's study (2010), it was reported that oral communication skills were not acquired by the respondents of this study as it was reported that the new graduates seldom have the required skills.

Marzuki, Ting, Jerome, Chuah and Misieng (2013) investigated a group of students' views of communication abilities and language proficiency. More specifically, the researchers wanted to identify whether the students conceptualization of the two constructs: language proficiency and communicative abilities are the same or otherwise. Their study also revealed that the students think that their communicative abilities and language proficiency affect their opportunities for employability in engineering aspects.

Subramanian and Harun's study (2013) identified the abilities of polytechnics students of marketing in using oral communication skills during their industrial training in Malaysia. The findings of this study reported that the managers realised that the trainees were in need of more practice in oral skills particularly when dealing with different customers. Furthermore, employers and trainees placed similar significance in terms of ranking the importance of oral communicative skills in English. Subramanian and Harun (2013) suggested that more trainings and rehearsals for improving oral skills need to be given to the trainees before they go out for their industrial training. Acquiring English oral communication skills and having good English proficiency need to be realised by the students. The researchers pointed out that oral communication skills are necessary for marketing students to perform well at their professional workplaces. Thus, institutions and universities should obtain regular input from the marketing field stakeholders in order to improve and evaluate their syllabuses as part of their efforts to enhance the students' oral communication skills including delivering technical oral presentations particularly at the workplace and fulfilling the stakeholders' needs.

### **Oral presentation skills**

A few studies investigated the students' delivery of oral presentations. For instance, the researchers pointed out that the verbal aspect of delivering oral presentations was the most challenging part of their oral presentations, especially, when they were assigned to deliver their technical oral presentations in the classroom. The findings pointed to the assumption that the engineering students were conscious about speech disfluencies such as silent pauses, filled, grammatical errors false starts and repetitions affect their technical oral presentations negatively. The researcher pointed out that efforts should be done so as to reduce the speech disfluencies. Thus, according to Kovač and Sirković (2012) the course of oral communication skills was

regarded by the majority of engineering students as a constructive course increasingly important in times of complex oral communication requirements.

Hadina Habil & Nur Afiqah Ab Rahman (2010) identified the issue of oral presentation skills from the view of engineering undergraduates in Malaysia. The researchers conducted their study using questionnaires and observation of 31 students from the Faculty of Human Resource Development and Faculty of Management. This study intended to examine to what extent the students of the study know and apply effective delivery skills in oral presentation and to investigate their appropriate use of oral presentation delivery skills in a tertiary context. The researchers found that 80% of the respondents were aware and conscious of the appropriate and inappropriate oral presentation skills. Yet, they did not know how to use the appropriate delivery skills effectively when they were assigned to deliver oral presentations. The researchers revealed that more than half of the respondents (63.34%) were rated as fair and poor in using effective delivery skills in oral presentations. They posited that the reason of the students' fair and poor delivery skills was the lack of training and most of the students delivered oral presentations only once in a month. In addition, they found that it was important to have oral presentation skills in the classroom. However, it was surprising to note that even though they had the awareness, they still did not know how to apply the skills during their oral presentations. That is to say, Hadina Habil & Nur Afiqah Ab Rahman's (2010) study posited that the reason of the students' poor delivery skills was the lack of practice in delivering technical oral presentations in the classroom.

The fact that engineering undergraduates at workplace frequently involve in oral presentations in Malaysia. It is high time for academicians in university and faculty to take correct measures to equip its engineering undergraduates with relevant presentation skills and competency to enhance student's quality and competitiveness in a global job market (Noor Raha Radzuan & Sarjit Kaur, 2011).

### **Self-appraisal**

Self-appraisal or self-assessment is a process by which students evaluate their own oral performances (Salehi & Daryabar, 2014; De Grez, Valcke & Roozen, 2012). Many researchers have always been encouraged to scrutinize whether students are eligible to make a significant contribution to their own assessments. Self-appraisal also termed self-assessment, self-rating or self-evaluation (Salehi & Daryabar, 2014) is frequently used to foster student-centered learning. Several studies have frequently concluded that self-appraisal is reliable. In this context, reliability means the consistency and steadiness of the scores produced by a measurement tool that can possibly be determined in various ways. According to Bachman and Palmer (1989), for instance, found that a multilingual group of students of English as a foreign language in the United States were capable to self-rate their oral communicative abilities. Additionally, another example of success with student self-assessment arises from Blanche (1990) who investigated

the ability of a number of students of French as a foreign language in the USA in order to estimate their own speaking performances. The researcher found that “the overall accuracy of the self-evaluations is impressive” (Blanche, 1990). A number of other educators and researchers found student self-assessment to be a successful method in assessment (Brantmeier, 2006; Little, 2005; Rivers, 2001) and revealed it to be a reliable method of improving students’ skills and abilities (Ekbatani, 2000).

The current study was aimed at answering the following question:

- 1- What are the engineering undergraduates’ perceptions about self-appraisal in delivering technical oral presentation?

### **Research Design**

To answer the research question, the study was conducted at Universiti Malaysia Pahang, Malaysia. The researchers employed quantitative method. Quantitative data was obtained through a set of questionnaire. The questionnaire was adapted from studies of Wen, Tsai and Chang (2006), Peng (2010) and Kovač and Sirkovic (2012). It has been used in a significantly large number of quantitative studies which focused on examining different affective components such as learning, motivation, and students’ eligibility influencing student assessment among students in ESL/ EFL contexts (Salehi & Daryabar, 2014; Salehi. & Sayyar, 2016). In collecting data, a five-point Likert scale was distributed to the participants to identify their perceptions towards self-appraisal in delivering technical oral presentation (TOP).

### **Participants**

The participants of the study were engineering undergraduates from the Faculty of Civil Engineering & Earth Resources, Universiti Malaysia Pahang (UMP). They were 4<sup>th</sup> year engineering undergraduates who are taking degrees in different programmes such as: Highway, Structure, Soil Engineering, and Environmental Engineering. These programmes are under the Faculty of Civil Engineering & Earth Resources. The researchers chose these participants because they were taking Undergraduates Research Project (URP) which required them to deliver technical oral presentation as one of the subject requirements. Also, there is another reason why the researchers chose engineering undergraduate students. It is known that Malaysia’s vision that is to become an entirely industrialized country by the year of 2020 (Hadina Habil & Nur Afiqah Ab Rahman, 2010). The key issues in achieving this vision are to emphasize industrial activities and the success of the economic and industrial activities rely on the field of engineering (Salbiah Seliman, 1996). Because of that, engineering undergraduates should realise that in their fields, they are required to carry out research in order to contribute to the sustainable development of Malaysia. Furthermore, the latter will need to attend, participate

in conferences and seminars. This is where the proper delivering oral presentation skills should be applied.

### Data Analysis

Statistical Package for Social Science (SPSS 21Version) was employed in order to analyse the data of the questionnaire. Concerning the data analysis, Mean and Std. Deviation were used to identify the participants' perceptions about self-appraisal in technical oral presentation.

### Students' Questionnaire

Descriptive statistics, including means, and standard deviations, were employed to measure engineering undergraduates' perceptions about the self-appraisal in delivering technical oral presentations from 5 factors namely: A- Learning, B- Social Interaction, C- Students' Eligibility, D- Motivation and E-Speaking. For ease of statistical analysis, engineering undergraduates' perceptions were grouped under 3 main headings: low, medium, and high:

1.00 – V 2.33 = low mean value

2.34 – V 3.66 = medium mean value

3.67 – 5.00 = high mean value

The headings were adopted by Al-Nouh, Abdul-Kareem & Taqi (2015). They were used to identify the Kuwaiti students' perceptions in delivering English oral presentations.

### Result and Discussion

As a preliminary step to get the reliability coefficient of the current study, reliability of the score is assessed for the complete sample to identify the consistency of the items. The consistency reliability of the 18 items is calculated to be acceptable by Cronbach's alpha .806. Table 1 demonstrates the consistency reliability of the quantitative instrument.

Table1: The consistency reliability of the instrument.

Instrument	Alpha Coefficient
Questionnaire	.806

The findings of the study of engineering undergraduates' perceptions under 5 factors: (A- Learning, B- Social Interaction, C- Students' Eligibility, D- Motivation and E-Speaking.) using mean and Standard Deviation analyses are presented in Table1.

As indicated above, the research question of the current study aimed to investigate engineering ESL undergraduates' overall perceptions of the self-appraisal in technical oral presentation. Generally speaking, the results indicate a high level ( $M=3.95$ ) as shown in Table (2) below:

Table 2. General Means and Standard Deviations for Engineering Undergraduates' Perceptions about Self-Appraisal in Technical Oral Presentation.

Factors	N.	Mean	Std. Dev.	Std. Error	Range
Learning	30	4.01	1.01	.18	High
Social Interaction	30	3.99	2.11	.19	High
Students' Eligibility	30	3.80	.99	.17	High
Motivation	30	4.09	.82	.14	High
Speaking	30	3.90	.95	.16	
Total	30	3.95	1.17	.16	High

According to Table 2, the result demonstrates that the engineering undergraduates' perceptions are based on the 5 factors. It reveals high mean values with the factors. The highest factor is motivation with the high level ( $M=4.09$ ) followed by learning with the high range ( $M=4.01$ ). Also, the scores of the three factors namely social interaction, speaking and students' eligibility are presented ( $M=3.99$ ;  $M=3.90$ ;  $M=3.80$ ) respectively. Overall, the participants revealed positive perceptions pertaining to self-appraisal strategy in delivering technical oral presentation.

## Conclusion

Students' perceptions are among the effective factors which impeded students' oral presentation skill in different contexts especially in educational one. This study has examined the perceptions of engineering undergraduates towards self-appraisal in performing technical oral presentations in academic settings. The perception is related to the outcome of the students. The successful or unsuccessful achievement of a learner is entirely determined by the perception of the learners towards the objects or the contextual positions in which it is experienced by the learners (Benraghda, Ali & Radzuan, 2015). Self-appraisal is one of the attractive alternative assessment techniques which raises students' perceptions, awareness and encourages students to become autonomous learners. Teachers may also find it beneficial to adopt self-appraisal as an essential means for development of oral presentation skills such as: language skills and delivery skills. Furthermore, by use of self-appraisal strategy, students can figure out the specific areas in where they need assistance and support (Ariafar & Fatemipour, 2013), and then the latter can seek assistance from their lecturers.

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