

# **An Investigation Of Engineering Students' Oral Presentation Delivery Skills: A Case Study**

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**Abstract :** In delivering oral presentation, it is important for the presenters to make the audience listen to them. One way to attract the audience is through oral presentation delivery skills which include the use of voice, eye contact, gestures, body posture, body movement and facial expression. However, presenters often neglect delivery skills and focus more on the content. Thus, this study intends to investigate to what extent the engineering students know and apply the appropriate oral presentation delivery skills. The objectives of this study are to find out the engineering students' awareness of the appropriateness of oral presentation delivery skills and to investigate the use of appropriate oral presentation delivery skills. The findings of the research show that the students are aware of the appropriateness of oral presentation delivery skills. However, it is surprising to know that even though they have the awareness, they do not apply the skills in their oral presentation.

*Keywords :* Engineering Students', Oral Presentation Delivery Skills

## **Introduction**

English has become more important in Malaysia as the society has started realising the importance of the use of English in this information age. The ability to have a good command in English is vital for Malaysians to keep up with the vast and rapid change of the world. For that reason, it is crucial for Malaysians to get access to the first hand knowledge without waiting for the knowledge to be translated into their first language. After all, for Malaysians to be able to compete at the international stage, English language is the key to success.

To succeed in any field, the ability to convey or share that knowledge with other people is crucial. It was reported that it is vital for graduates to have soft skills like the ability to socialize, and express themselves to complement their technical skills. (New Straits Times, July 18, 2007). Even though the article emphasised on graduates, other people who want to stay longer in the competitive working industry need to learn and improve their soft skills as well.

In addition, other people also need to be realistic that being an expert in the content area is not necessarily sufficient as they need to attend meetings and meet other people as well. Salbiah Seliman (1996) said that professionals at leadership level or even at subordinates' level need to communicate with others. That is why the industry needs people with good communication skills (The Higher Education Minister, Datuk Mustapha Mohamed, New Straits Times, June 24, 2007).

## **Statement of Problem**

Students who study in Universiti Teknologi Malaysia (UTM) have to take English courses as university requirements. One of the requirements of the English course is that it is compulsory for students to do oral presentation as part of their coursework. This requirement should be a great help to students as it will give them exposure and practice on how to deliver message effectively. "However, many students find this situation stressful as some of them have not even had any chance to appear in front of an audience during their schooling years"(Shamril Wan, 2005:3).

UTM students who are pursuing engineering courses do not have one particular subject focusing on oral presentation in their curriculum. Even though they have English courses as one of the university requirement subjects, none of these courses teach oral presentation skills explicitly. Only one elective course which is UHB 3052 Effective Oral Communication Skills focuses on the teaching of oral presentation skills. However, this subject is an elective as not all students are required to register for this particular subject. Generally, other UHB courses introduce oral presentation as one of the component of the course or embedded in the course and usually, this component contributes only 10-15% from the overall mark.

From the explanation above, it can be said that UTM students, especially those who are in non-education field were not taught formally on the presentation skills. As stated in Salbiah Seliman and Dubois (2002: 37), "...an oral presentation must be heard...ones who do not have teaching experience, appear not to know that". Examples of students who do not have teaching experience are engineering students. Since engineering students do not have explicit teaching in oral presentation, it is unknown whether they know the appropriate delivery skills and whether they use the appropriate delivery skills in their presentation.

In this research, the researcher focuses on second year students from the Faculty of Geinformation Science and Engineering majoring in Property Management. The researcher was able to get the syllabus and course outline of the subjects the respondents were taking (Appendix E). Based on the syllabus, there is no single subject except UHB 2422 which include oral presentation as its coursework mark. Based on the course outline found, the researcher was interested to know their awareness and application of appropriate oral presentation delivery skills.

### **Research Objectives**

The objectives of the study are:

- (1) To find out the engineering students' awareness of the appropriateness of the oral presentation delivery skills.
- (2) To investigate the use of appropriate oral presentation delivery skills among engineering students in oral presentation.

### **Significance of the Study**

This study intends to observe the appropriate delivery skills used by engineering students in their oral presentation and also to know whether they are aware of the appropriateness of OP delivery skills. Based on these two objectives, the findings will benefit two parties which are the students and the lecturers.

Findings from the studies done by Shamril Wan (2005), Abdul Halim (2002) and Salbiah Seliman (1996) show that delivery skills are important. Thus, with the findings of this study, the researcher hopes to make the students aware of what is expected in oral presentation and the appropriateness of delivery skills in oral presentation. If the students are already aware of the delivery skills, it is important for them to use the skills in their presentation. If they are not aware, they should be taught on how crucial getting the audience's attention is and in making the audience listens to the presentation.

Other than the students, this study will help the English lecturers in their teaching. If the result of the study shows that engineering students are not aware of the importance of delivery skills, the lecturers can spend more time in teaching oral presentation skills. If the students are already aware, the lecturers can use the time to polish the students' skills. In addition, subject

lecturers will also benefit from this study. Since they have more experience in the field, they can expose students to good and bad presentations and give suggestions to improve the students' presentation.

### **Research Design**

To answer the research questions, the researcher used both qualitative and quantitative methods. Qualitative methods used were observations and video taping. Meanwhile, quantitative data was obtained through questionnaire. In collecting data, observation was used to examine the use of oral presentation delivery skills which are voice, eye contact, facial expression, gestures, and body posture. The oral presentation was taped for reference. In addition, a set of questionnaire was distributed to the respondents to determine the respondents' awareness of the appropriateness of the oral presentation delivery skills.

### **Respondents**

The respondents of the study were students from the Faculty of Geoinformation Science and Engineering. They were second year students who were taking a degree in Property Management (2 SGP). The researcher chose these respondents because they were taking Advanced English for Academic Purposes (UHB 2422) which required them to deliver oral presentation as one of the subject requirements. In this faculty, there were seven sections of this subject with the total number of 231 students. This research is a case study which focuses on a small group of respondents. Thus, the researcher focused on one section only which was chosen randomly. The section chosen was Section 51 with the total number of 35 students.

There is also another reason why the researcher chose engineering students. It is known that Malaysia's vision is to become a fully industrialised country by the year 2020. The main issues in achieving the vision are to emphasise industrial activities and economic development and the success of the industrial and economic activities rely on the field of engineering (Zainal Abidin Sulong, 1993 cited in Salbiah Seliman, 1996). Thus, the significance of engineering field is especially felt in Malaysia including UTM (Salbiah Seliman, 1996). Because of that, engineering students should know that in their field, they are required to conduct and carry out research to contribute to the development of Malaysia. Besides, since doing research is complementary in their field, they will need to attend, organize or participate in seminars and conferences. This is where the appropriate oral presentation delivery skills should be applied.

### **Instruments**

Three instruments were used in this study to ensure a valid study and also to get a rich data. The instruments were questionnaire, observation and video taping. Data from each instrument was analysed to answer the research questions.

### **Questionnaire**

The main purpose of using questionnaire in this study was to answer the first research question which is to find out engineering students' awareness of the appropriateness of the oral presentation delivery skills. The questions were designed by the researcher based on the literature which focused on the dos and don'ts in oral presentation. Therefore, there is correct and incorrect answer for each question. The respondents' awareness was counted based on the percentage of the correct answer. For example, Q2: A presenter should use high and low tone of voice. The answer for this question is yes and only 84.6 percent of the respondents answered correctly. Therefore, only 84.6 percent of them were aware of the appropriate voice projection in

an oral presentation. In contrast, the other 15.4 percent of the respondents were considered as unaware of the appropriate tone of voice in OP.

The questionnaire designed was tested using peer review and pilot test. Based on the review, the researcher refined the questions by restructuring the questions and used easier words to make the questions understandable. However, after the researcher has done the pilot study, she changed the words once again. One possible reason for this might be the different level of English proficiency between the respondents for the peer review and the pilot study. In other words, the respondents for the pilot study might have difficulties in understanding words that were considered as easy by the respondents for the peer review.

Apart from the words changed, the pilot study led to an interesting finding which was body movement. Body movement was found to be a variable. This new variable was considered as an incidental finding. This is because, previously, the researcher considered body posture and body movement as one variable. Nonetheless, during the pilot study, when the researcher did the observation, she realised that body posture and body movement were two different variables. Thus, the researcher added body movement as a new variable in this study.

The questionnaire was divided into two sections. Section A was used to find out the demographic details of the respondents while Section B was designed to seek clarification whether the respondents are aware of the appropriateness of the oral presentations delivery skills.

In Section A, the respondents were asked about their demographic details such as gender, course and year of study, English result in Sijil Pelajaran Malaysia (SPM), Malaysian University English Test (MUET) result as well as their frequency in giving oral presentation. In Section B, the questions were designed based on the dos and the don'ts in oral presentation. The questions were categorized into six variables which were based on the oral presentation delivery skills. The table below summarises the distribution of the questions based on the demographic details of the respondents as well as the oral presentation delivery skills.

**Table 1:** Distribution of questions in the questionnaire

Variables	Item Number
<b>Section A – Respondents’ Background Information</b>	
Demographic Details	Q1-Q2
SPM English Result	Q3
MUET Result	Q4
Frequency of Giving OP	Q5
<b>Section B – The OP Delivery Skills</b>	
Voice (Variable 1)	Q1-Q3
Eye Contact (Variable 2)	Q4-Q6
Gestures (Variable 3)	Q7-Q16
Body Posture (Variable 4)	Q18, Q20-Q23, Q25
Body Movements (Variable 5)	Q17,Q19,Q24
Facial Expression (Variable 6)	Q26-Q29

The questionnaire was given to the respondents after they have delivered their oral presentation. The reason for this is the researcher did not want the respondents to know what she was looking for as the respondents might not act naturally during their OP. The questionnaire was given and collected on the same day.

### **Observation**

The researcher did a series of observation to observe the respondents' oral presentation. The main purpose of the observation was to answer RQ2 which is to see how the respondents use the appropriate oral presentation delivery skills in their presentation.

In the observation, the researcher used an observation sheet which was adapted from Hager & Scheiber (1997) (Appendix B and Appendix C). The original observation sheet contains three main sections which are the content of OP, the delivery and general evaluation of OP. However, since this study focuses on the oral presentation delivery skills, the delivery section was chosen and adapted. The elements of the delivery skills chosen for the observation were based on the favorable skills of oral presentations used in a study by Salbiah Seliman (2002) and Shamril Wan (2005).

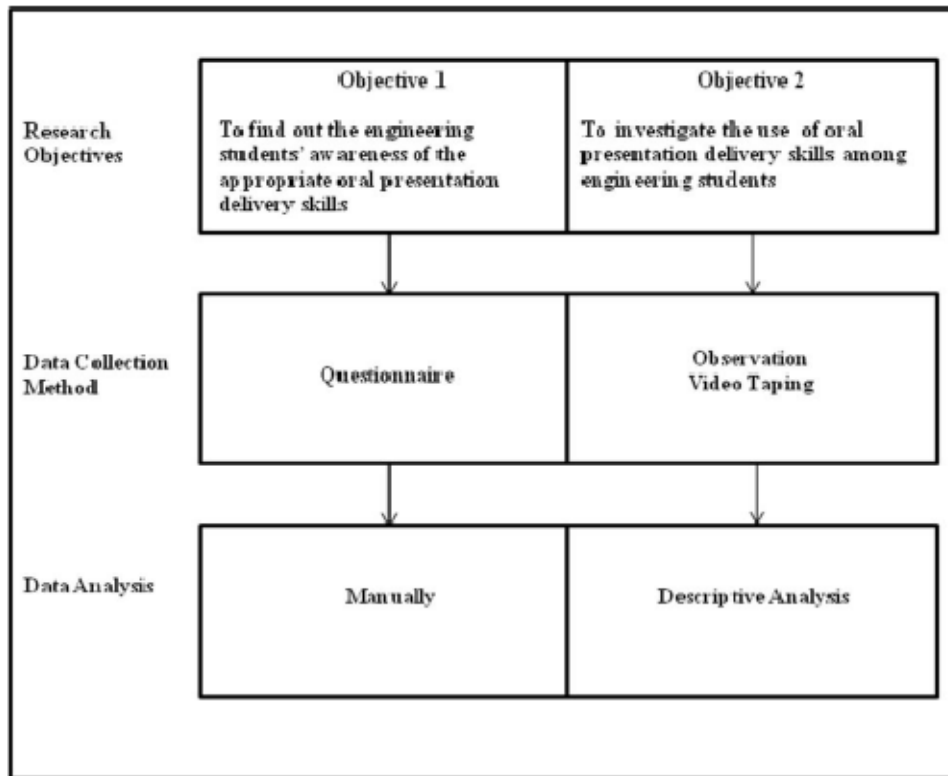
Due to the limited literature and rating scale for delivery skills alone, the researcher designed her own oral presentation rating scale. This rating scale for delivery skills was created after the pilot study. The researcher faced difficulties in using the observation sheet as it did not have any guideline or description for the scale used. Not only that, the researcher wanted to reduce biasness and increase the reliability of the observation. The rating scale was based on the scale of the observation sheet and also based on other available rubrics for oral presentation. The rating scale was shown to an applied linguist practitioner who is specialized in language testing. Thereby, the researcher will assess the OP using this new rating scale.

During the observation, the researcher played a passive role without participating in any activity and sat at the back of the classroom. The observation was done twice to make sure that the researcher did not leave anything out and graded the oral presentation fairly. The first observation was done during video taping while the second observation was done by viewing the video recording.

### **Video Taping**

Video taping was done to help the researcher when observing the respondents' OP. During the video taping, the researcher placed the video camera at the back of the classroom. Since the voice of the presenter was included in the study, the researcher put the camera at the same level where the audiences at the back seated. This was to ensure that the camera recorded the voice at approximately the same level as what the audiences heard.

In brief, the instruments used in this study were to help the researcher in finding answers to the two research questions stated in Chapter 1. The research framework in Figure 1 helps to understand what instruments were used in the study and how the instruments were analysed.



**Figure 1** Research Framework

### **Pilot Study**

The instruments used in this study were designed and adapted by the researcher based on various sources. Therefore, a pilot study was done to test the instruments. The study was conducted at Digital Lab B, located the Faculty of Management and Human Resource Development. The respondents for this study were second year students from the Faculty of Electrical Engineering. These students were chosen to be the respondents for the pilot study as they were from an engineering faculty which is the focus of the study. Not only that, they were taking the same subject as the respondents for the actual study which was Advanced English for Academic Purposes (UHB 2422). Besides, they were in their second year of study which is assumed to possess approximately the same experience and knowledge as the respondents in the actual study. There were 31 respondents and the researcher managed to observe and video tape ten presentations.

During the pilot study, the observation was done without any rating scale and the researcher relied on the observation sheet alone. That was when she realised that she could not rate the OP using the observation sheet. Even though there were scales in the observation sheet, there was no guideline on what should be considered as good, fair or poor delivery skills. Since this may lead to inaccuracies in rating, the researcher decided to design her own oral presentation rating scale based on the observation sheet and other available rating scales for OP.

Besides having difficulties in rating the OP, the researcher also found another delivery skill which was not included in the studies done by Salbiah Seliman (1996) and Shamril Wan (2002). The delivery skill was body movement. In most of the rubrics available for OP, body movement and body posture are considered and rated as one variable. On the other hand, the researcher realised that these two variables should be separated and counted as two.

There are problems if these two variables are considered as one. For example, let us say, in an OP, a presenter stood straight without bending at all but he did not move and stayed behind table all the time. If body movement and body posture are considered as one, how should we rate his OP? We cannot rate him as good because he did not move at all. Likewise, we cannot rate him as poor too because his posture was good. In contrast, if there are two different variables, we can easily rate his body posture as good and his body movement as poor. Therefore, the researcher included body movement as one of the elements of delivery skills used in this study.

### Data Analysis

From all the analyses of the items in the questionnaire, the researcher will make a conclusion based on the average percentage of respondents with the correct answer.

**Table 2:** The Average Percentage for All Variables

Variables	Percentage of respondents with correct answers
Voice	92.31%
Eye Contact	96.15%
Gesture	80.38%
Body Posture	69.23%
Body Movement	68.61%
Facial Expression	65.38%
<b>Average</b>	<b>78.68%</b>

Table 2 indicates the average percentage of the respondents who answered the items in the questionnaire. From the data presented, it is assumed that 78.68 percent of the respondents knew what appropriate and inappropriate OP delivery skills are. Therefore, it is also believed that a large number of them knew what they can and cannot do when giving OP. The findings of the questionnaire answer RQ2 where majority of the respondents were aware of the appropriateness of the OP delivery skills.

Table 3 summarises the average performance of the presenters during the observation.

**Table 3 :** The Average Performance of the Presenters

Description Skills	Percentage (%)		
	Good	Fair	Poor
Voice projection	20	40	40
Eye Contact	10	60	30
Gestures	10	50	40
Body Posture	20	60	20
Body Movement	0	10	90
Facial expression	40	30	30
<b>Total</b>	<b>100</b>	<b>250</b>	<b>250</b>
<b>Average</b>	<b>16.67</b>	<b>41.67</b>	<b>41.67</b>

From the analysis of the observation, it can be concluded that majority of the presenters (41.67 percent respectively) were at poor and fair level in delivering oral presentation. This is an unexpected finding as findings from the questionnaire show that the respondents were aware of the appropriateness of the oral presentation delivery skills. From table 3 above, it can be assumed that the respondents did not apply the skills that they knew. There is also possibility where the respondents did not get enough practice and exposure on OP. This could be related to their syllabus where only UHB 2422 course required them to deliver OP.

### **Overview of the Study**

This study aims to find out the engineering students' awareness of the appropriateness of the oral presentation delivery skills and to investigate the delivery skills used by the students in their oral presentation. To gather the necessary data for this study, the researcher used three different instruments which are questionnaire, observation and video taping. Questionnaire was used to check the respondents' awareness of the inappropriate and appropriate oral presentation delivery skills. Meanwhile, the researcher did a series of observation to investigate the use of OP delivery skills among the respondents. Besides, video taping was used so that the researcher can refer to the taped presentation for rating and evaluation.

### **Review of the Findings**

The findings will be reviewed based on the objectives of the study. For the first objective, almost 80 percent of the engineering students were aware of the appropriate and inappropriate delivery skills in oral presentation. These findings were based on the respondents' correct answer in the questionnaire. Even though the engineering students were aware of the OP delivery skills, they did not use appropriate delivery skills when giving OP. This can be seen as for the second objective, the researcher found that 63.34 percent of the presenters were rated as fair and poor in using appropriate delivery skills. This might be because they lack of practice and most of them gave oral presentation once in a month only.

The study has led to an incidental finding which was body movement. This variable was then added to the questionnaire as well as the observation sheet. Due to the difficulties in finding the most suitable rating scale for delivery, the researcher designed her own rating scale based on the literature and the adapted observation sheet.

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