

**AN INVESTIGATION INTO FIRST YEAR ENGINEERING
STUDENTS' ORAL CLASSROOM PARTICIPATION.
A CASE STUDY**

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ABSTRACT

The case study was conducted in order to see how the use of English as the medium of instructions has affected the students' oral participation in Creativity and Innovation and also Effective Communication classes. The study was also conducted to find out the factors which influenced students' oral participation and the strategies used when participating. Using observation, interview, and survey, the data were collected from 146 first-year Engineering students. The study revealed that students who were good in the language tended to dominate the discussions compared to students who were less proficient. The findings of the study also suggested that more students used English in the Effective Communication classes compared to in the Creativity and Innovation classes. However, in Creativity and Innovation classes, the possibilities of students to initiate the discussions were higher. It was also found that the students asked more questions and were more willing to give comments and opinions compared to in Effective Communication classes. While responding to questions was not a problem, the study showed that in both classes, students did not like to ask questions during the lessons. The study also suggested that there was a tendency for students who liked to participate to sit at the front of the class and those who did not would sit at the back of the class. The study also revealed that factors which influenced students' classroom participation were interrelated. The identified 5 interrelated factors were linguistic, pedagogical, cognitive, affective, and socio-cultural. Apart from that, the study was also able to identify 7 strategies used by students when taking part in class discussions. The strategies were mentally practicing and rehearsing on what to say, writing down the ideas before reading it to the class, confirming on what to say with friends sitting next to them, focusing on the content rather than on the language, ensuring what they wanted to say was correct, preparing notes and questions before entering a class, and waiting for other students to participate first so that they could form their opinions or answers.

ABSTRAK

Kajian kes melibatkan 146 pelajar Tahun 1 jurusan kejuruteraan ini bertujuan melihat samada penyertaan pelajar di dalam perbincangan di dalam kelas UMC1022 Creativity and Innovation berbeza berbanding penyertaan mereka di dalam kelas UMB1052 Effective Communication. Kajian juga bertujuan mengetahui faktor mempengaruhi penglibatan pelajar di dalam perbincangan kelas serta strategi digunakan untuk melibatkan diri di dalam perbincangan kelas. Bagi mendapatkan data, 3 kaedah kajian digunakan; pemerhatian, temubual, dan kajiselidik. Kajian mendapati penglibatan pelajar di dalam kedua-dua kelas adalah tidak seimbang. Pelajar yang berkemahiran berbahasa Inggeris lebih mendominasi perbincangan yang melibatkan keseluruhan kelas. Di dapati juga pelajar perempuan lebih aktif berbanding pelajar lelaki. Kajian juga mendapati lebih ramai pelajar menggunakan Bahasa Inggeris di dalam kelas Effective Communication berbanding kelas Creativity and Innovation. Namun, kemungkinan pelajar memulakan perbincangan adalah lebih tinggi di dalam kelas Creativity and Innovation. Juga didapati lebih ramai pelajar bertanyakan soalan dan menyumbang buah fikiran berbanding di dalam kelas Effective Communication. Walaupun memberi respon kepada soalan tidak menjadi masalah, didapati bagi kedua-dua kelas, pelajar tidak gemar bertanya soalan ketika pengajaran berlangsung. Hasil kajian juga mendapati pelajar yang lebih aktif gemar duduk di bahagian hadapan kelas berbanding pelajar yang kurang aktif. Melalui kajian ini, 5 faktor yang berhubungkait mempengaruhi penglibatan pelajar di dalam perbincangan kelas telah dikenalpasti; kemahiran linguistik, kaedah pengajaran, kognitif, afektif dan sosio-budaya. Kajian juga mengenalpasti 7 strategi digunakan pelajar bagi mengambil bahagian di dalam perbincangan. Antaranya ialah berlatih apa yang ingin disampaikan secara senyap, menulis apa yang ingin disampaikan sebelum membacanya kepada kelas, berbincang dengan rakan yang duduk berhampiran tentang apa yang akan disampaikan, memberi penekanan kepada isi berbanding tatabahasa, memastikan ketepatan isi, menyediakan nota dan soalan sebelum kelas berlangsung, dan sebelum menyatakan pendapatnya, pelajar akan menunggu pelajar lain memberikan jawapan.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The main aim of learning a second language is to be able to use the language accurately, fluently and confidently whether in its spoken or written forms. That is also the main aim of many English for Second Language (ESL) learners in Malaysia. Although results from many major examinations such as Penilaian Menengah Rendah (PMR) and Sijil Pelajaran Malaysia (SPM) show that many students can get good grades for the English language papers, their performance in oral communication is questionable. Numerous complaints from employers, for example, indicate that many Malaysian ESL users are poor communicators. Lack of communication skills especially in the English language has been cited as one of the reasons why there are so many unemployed graduates (Sibat, 2005; Jacob, Huui, and Ing, 2006).

The researcher believes that learning institutions have the responsibility to guide and help the ESL learners to become effective speakers of the language. The first step should be to encourage the learners to use the language in the classroom. This means that learners should be given the opportunities to be involved in the classroom discussions. By engaging oneself into active participation, one will be able to improve his/her mastery of the language.

1.2 Background of the Study

Many steps have been taken or being taken to curb the deteriorating quality of English language among Malaysians. One of the steps taken is to use English in the teaching of Science and Mathematics subjects in school as well as tertiary levels. Beginning 2003, English became the medium of instructions for the Science and Mathematics subjects. In the first year of its implementation, English was confined to only primary year one, secondary form one, and lower six (Gill, 2004). By 2008, the language will be fully used in the teaching of science discipline subjects in schools as well as at the tertiary levels.

The change in policy does not only help the students to acquire and be proficient in the language, but the move is also aiming at preparing the students to compete at the international level where Science and Technology is now the driving force of the world's economy. Teaching the subjects in the science disciplines in English would expedite the acquisition of scientific knowledge and at the same time help the nation to develop a scientifically literate society by the year 2020 (Choong, 2004).

Choong (2004) also believes that the change in policy is basically an emergent response to current needs. As English is becoming an international language and the world's knowledge being written in English, Choong (2004) argues that it is much easier and faster to tap the knowledge by using the language rather than having translated it into Bahasa Melayu.

“It was also becoming increasingly challenging to translate the latest technological developments into Bahasa Malaysia. For example, in Chemistry, since the beginning of the 1990s, more than 1million articles have appeared in specialized journals every 2 years. In Biology, in 1977 scientists can determine 500 base sequence of the letters that codify the information in DNA but today, they can decipher the 3 billion bases of the human genome in a few years. In Mathematics: 100,000 new theorems are created per year.”

(Choong, 2004:2)

Apart from that, the use of English as the medium of instructions also helps to prepare students to have high levels of English-language proficiency that would help them compete in the global job market (Ashcraft, 2006). With the implementation of teaching of Science and Mathematics subjects in English, the Ministry of Education in Malaysia foresees that the students will have a better edge in the job markets, and be better prepared to meet the challenges of globalization (Shahrier, 2006).

The move by the Ministry of Education has also been embraced by the Malaysian higher learning institutions. In fact, the use of English as the medium of instructions at the tertiary levels is a common phenomenon around the world (Graddol, 1997). Because English is regarded as an international language, English as the medium of instructions has become a strategy to attract students from other countries to the university.

While the private institutions have been using English in almost all courses offered years ago, public universities are only starting to use the language in a few selected courses especially those taken by the first year students. For example, Universiti Kebangsaan Malaysia, a university which was set up to promote the role of Bahasa Melayu as an intellectual and educational language has drawn up plans in retraining the academic staff to use English in the teaching of Science and Technology courses (Gill, 2004).

Universiti Tun Hussein Onn Malaysia (formerly known as Kolej Universiti Teknologi Tun Hussein Onn), an engineering-based public university, has also started to offer some courses that use English as the medium of instructions. While options are given for the other Engineering subjects whether to use Bahasa Melayu or English, Creativity and Innovation, a compulsory university paper initially offered in 2003, is fully taught in English. Lectures, tutorials as well as assessments are all done in English.

Being one of the staff involves in the teaching of Creativity and Innovation as well as the English papers, the researcher is interested in finding out whether the students' use of English, particularly in their oral participation in the Creativity and Innovation classes differs from one of the English papers offered by the university, Effective Communication. It is important, therefore, to discuss albeit briefly the background of the two papers.

1.2.1 UMC1022 Creativity and Innovation

Creativity and Innovation is a compulsory subject offered to all students at the university. This two-credit-subject is fully taught in English and requires the students to attend classes for a total of three hours per week. Besides exposing students to the various creative thinking techniques, this subject aims at helping the students to acquire the English language (KUiTTHO, 2003).

In this subject, students' participation is graded and for that a total of five marks are allocated. Thus, students are expected to take part in class activities in which they will be given tasks or problems to solve. Usually, to maximize the classroom participation, students are divided into smaller groups where they will be given the opportunities to share their ideas or practice the problem-solving skills. Most of the time, a lesson will end with group presentation (UMC1022 Course Outline, 2005).

1.2.2 UMB1052 Effective Communication

The students are also required to take and pass two English subjects; UMB1042 Technical Writing and UMB1052 Effective Communication as part of their academic requirements. While Technical Writing is offered during the first semester of the academic session, Effective Communication paper is offered in the second semester.

The Effective Communication paper which aims at developing students' delivery of speech in oral interactions and presentations, has three major components; (1) public speaking, (2) taking part in meetings and discussions, and (3) interviews (UMB1052 Course Outline, 2005). Like Creativity and Innovation, Effective Communication is also a compulsory two-credit subject.

1.3 Statement of Problem

Studies by Sibat (2005) and Jacob, Huui and Ing (2006) indicate that the ability to use English is regarded as one of the most important criteria that employers look for when hiring the graduates. The researcher strongly believes that the graduates' failure to communicate effectively in English language during job interviews and in workplace is the result of, among other things, their failure to grab the opportunities to practice and use the language when they were in the university. In other words, unwillingness to participate in class discussions has caused them to waste the golden opportunities to improve and master their English communication skills.

In this aspect, the researcher believes that there is a need for language teachers to find out what actually happened during the teaching and learning process. By looking at two different situations in which the language is used, taught and learnt, (English as a mean of communication in teaching and learning activities, and, English as a subject), perhaps this study will be able to shed some lights on the issue of students' participation. It is hoped that from the findings of this study, we will be able to come up with useful working plans and strategies so as to ensure the teaching and learning process would be more successful.

1.4 Purpose of the Study

The main purpose of this study was to find out whether the students' participation in Creativity and Innovation paper differs to in Effective Communication paper. To achieve the main purpose of this study, there were some questions that need to be addressed. Do the students participate differently in the two papers they enroll in? In which class do they participate more? Do they ask questions? How do they respond to the lecturer's questions? Will they voluntarily give comments and opinions during class discussions?

1.5 Objectives of the Study

The objectives of the study are as follows:

- 1.5.1 To find out whether the students' oral participation in Creativity and Innovation class differs to in Effective Communication class.
- 1.5.2 To find out the factors that influenced the students' oral participation in the classroom.
- 1.5.3 To find out the strategies used by students when participating in classroom discussions.

1.6 Research Questions

Based on the objectives, thus, three research questions were formulated. The research questions are as follows:

- 1.6.1 Does the students' oral participation in Creativity & Innovation class differ from Effective Communication class?
 - a. In which class do they participate more?
 - b. Do they ask questions?
 - c. How do they respond to the lecturer's questions?
 - d. Will they voluntarily give comments and opinions during class discussions?
- 1.6.2 What are the factors influencing learners' oral participation?
- 1.6.3 What are the strategies used by students when participating in the classroom?

1.7 Significance of the Study

As mentioned earlier, the main purpose of this study is to find out whether there are any differences in the students' oral participation in two different classroom situations; one which uses the language as the medium of instructions and the other which uses the language to learn the language. The findings of this study will give valuable information not only to the language teachers but also many other parties. This includes the syllabus designers, material designers and the curriculum planners.

For teachers, knowing the factors that influence the learners' involvement in classroom discussions enables the teacher to understand the learning process better. As such, language teachers will be able to anticipate what to expect during class discussions. More importantly, the findings of this study enables language teachers to plan on how to help and encourage students who are having problems expressing

their ideas due to their lack of proficiency in the language as well as personality problems such as lack of confidence. From the findings, it is hoped that activities which require language learners to actively speak out their mind can be planned and carried out in the class. It is believed that students should also be given the opportunities to use the language freely so that they do not only develop their proficiency and accuracy in the language but they should also be able to use the language confidently.

The findings of the study will also enable syllabus designers to come up with strategies which can help the learners to improve their oral skills. Factors that can stop students from participating in discussions can be dealt with. Perhaps, based on the findings obtained from this study, special courses could be designed so that the problems faced by the students could be overcome. It is hoped that the newly designed courses will enable us to produce students who can use the language fluently, accurately and confidently.

For the materials designers, the results of this study will enable them to design materials which can cater for the different types as well as the different needs of the students. It is also hoped that newly designed materials can help students develop their confidence in using the language fluently and accurately.

Finally, the findings of this study will also help the curriculum planners to make decisions on whether to use the English language as the medium of instructions for other subjects as well.

1.8 The Scope of the Study

This case study only involved a group of first year Engineering students from Universiti Tun Hussein Onn Malaysia. In this regard, the data obtained from the subjects were based on their experience learning the two subjects mentioned earlier.

In analyzing the data, factors such as students' background and their previous exposure to English language were not taken into considerations in this study. However, if these factors were taken into account, different results and hence different discussions might yield in this study.

It is important to note here that the data obtained were solely from the students' points of view. The researcher did not intend to pursue the opinions of lecturers or instructors involved in the teaching of both papers mentioned. Thus, once again, if the lecturers or instructors were to be involved in this study, the results obtained might be different.

The main purpose of this study, as mentioned earlier, was to find out whether the students' participation in Creativity and Innovation paper differs to in Effective Communication paper. In this sense, the researcher was not interested on the quality as well as the accuracy of the language produced during the classroom participation. In addition to that, the respondents' ability to read and to write in the English language was also not investigated in this study.

1.9 Limitations of the Study

There are some limitations in this study. The limitations are as follows:

First of all, only a group of students attending the two different classes was selected as the subjects for this study. Hence, there was a possibility that their personality as well as the class dynamic would influence the way they participate in both classes. The researcher believes if more groups were selected, different results might be generated.

Secondly, in this study, one of the methods employed was classroom observation. There were eight observation sessions and all these observations took

place within two weeks. Thus, during these observation weeks, there were a lot of variables and factors which might affect the students' classroom performance. Unfortunately, these variables were beyond the researcher's control. Factors such as the topics discussed, learning objectives and learning activities planned by the teachers definitely determined how the lessons were conducted. This inevitably influenced the students' performance as well as the results of the study.

In addition to that, there were a limited number of interviewees selected. Thus, the findings of the study relied heavily on the responses given by the interviewees. The researcher believes if there were more participants involved, more views can be obtained.

It is undeniable that the researcher's presence in the classroom might have affected the way the students behaved during the lessons. The students might have the impression that they were being assessed and this would make them feel uncomfortable. Therefore, the results of the study may not reflect the actual classroom situation.

Apart from the limitations stated above, the timing for the collection of data might also have affected the results of this study. The respondents were at the beginning stage of their university academic years, hence their learning styles might influence their feedback on the questions posed in the questionnaires. There was a possibility that the respondents were not yet familiar with the academic system imposed in the university compared to what they were used to when they were in form six or at the matriculation centres. Therefore, the researcher believes that if the data was to be taken at a later stage of their academic years, the results might differ from the results obtained from this research.