Investigating the Roles of Motivation and Technological Pedagogical Content Knowledge (TPACK) in Computer-Mediated-Communication (CMC) Speaking Skills Instruction

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Abstract

The computer-mediated approach is deemed as an effective way to assist in improving the communicative skills among ESL learners. This study presents a mixed-methods research. It aims to identify the level of motivation of the CMC users in learning English speaking skills, and how they relate to speaking achievements. This research investigates how the content knowledge (CK), pedagogical knowledge (PK) and the technological knowledge (TK) of the facilitators influence the motivation of the learners. Data is analysed comparing the Pre-Post tests. Inferential Statistics method which uses the correlation analysis is carried out to see the relationship between the factors and the level of the speaking competency. Moreover, the data is triangulated with the inclusion of audio-taped interview data. 154 students and 4 language facilitators were randomly selected from one of the institutes of higher education in Malaysia. The findings indicate that the learners’ speaking competency levels show significant improvement compared to the early stage of the research. However, there is no significant difference between the results of pre-post tests in terms of the motivation level and results also did not show significant relationship between motivation and the improvement of the speaking competency level. This shows that motivation level was not the leading factor that influenced improvement in the proficiency levels of the students. The interviews with the ESL learners showed that they had dissatisfactions regarding their online learning programme and they also indicated that their facilitators lacked of Content, Pedagogical and Technological Knowledge (TCPK) in facilitating their online learning as these knowledge are important in the online learning environment. As the conclusion, ESL learners improved their speaking proficiency through CMC learning but there are other external factors beyond the scope of this research that need to be investigated further.

Keywords: CMC, motivation, ESL, speaking skills, TPCK/TPACK

1. Introduction

1.1 Research Background

In Malaysia, English is widely used in education and business. The use of English and technology has progressed tremendously in educational courses especially in adult education programs. However, choosing the most useful and appropriate technology tools is complex due to different hardware and programs created. The most important consideration is that the tools used in the task of acquiring a second language must not be made difficult by utilising excessive and unnecessary complicated tools, (Coryell & Chlup, 2007 cited in Rodriguez, 2010, p.1). Therefore, careful instructional design and pedagogy need to be planned before any implementation and the implementation needs to be enhanced from time to time as technology evolves drastically.

Globalisation has revolutionized and heightened the impact of English. Thus, English has gained its popularity in foreign languages (New Sunday Times, 2009). Hence, the new generation of young Malaysians needs to learn and master this language, and it is important for educators of English to provide effective learning instruction so that learners will be able to learn the language effectively. The English language, especially communicative competence, should be made as compulsory courses in institutes of higher learning. With this being the case, this study intends to investigate the instruction of speaking skills in our tertiary education in improving the communicative competence among the undergraduates.

In line with the development of online instruction, researchers began to compare the performance of learners in online and face-to-face (FiF) learning environment. Gibson, J.W. (2008) also stated that there were many studies that were exceptionally interesting to academics as the performance of online vs. traditional students were compared and measured. There were also many studies comparing this ‘traditional’ method to online learning environment (Gibson et. al., 2001; Cooper, 2001; Hagie & Hughes, 2005 cited in Gibson, J.W. 2008). Bui, (2006) stated that English lessons are very much “teacher-dominated, i.e. teachers speak whilst students listen and take notes - a format greatly lacking in interaction.” He also added that past researches have revealed that students could not practice oral skills efficiently when they were in “teacher-dominated classes instead of learner-centred classes,”(e.g. Westgate, Batey, et al., 1985; Edwards, 1987; Pace, 1992). Therefore, Institutes of Higher Learning in Malaysia are advised to take further steps to
improve the quality of language learning, especially speaking skills, by upgrading the teaching pedagogy. CMC has the potential in enhancing language learning and based on past studies, it can promote learners’ motivation in learning a language.

1.2 The Impact of CMC on Learners’ Motivation.

Studies by various researchers have found advantageous effects from the use of Computer-Mediated-Communication (CMC) in terms of improved performance, motivation and attitudes in learning English as a second language as mentioned in (Kelm, 1992; Kern, 1995; Warschauer, 1996; Meskill, Swan and Frazer, 1997; Warschauer, 1999). "Motivation is defined as the learner's orientation with regard to the goal of learning a second language" (Crookes and Schmidt, 1991 cited in Norris, 2001). In other words, learners are responsible for their own willingness and interest to learn the language. CMC can provide the tool to enhance the learning. Warschauer (1997) stated that CMC which places emphasis on the uses of multimedia, the Internet and the WWW can give such a big impact on language teaching. He rationalises that the online communication provides linguistic nature which is advantageous in language learning. Electronic communication seems to be more “lexically and syntactically” complicated compared to oral discourse and the electronic discourse highlights numerous linguistic functions which are beneficial for language learning (Warschauer, 1996; Kern, 1995; Chun, 1994; Wang, 1993). Warschauer (1997) suggests that CMC can increase students’ motivation. He believes that with the aid of CMC, interaction between speakers and learners of the target language is no longer time and space reliant. Thus, he suggests that CMC is used to facilitate collaborative language learning activities in the classroom. Besides that, CMC can also improve learning instruction as Warschauer (1997) states CMC which uses multimedia and the Internet can be a big influence on language teaching.

Yu H. C. (2005) also concurred that CMC has the potential to elevate the motivation in learners. He said, by getting the learners involved in ‘authentic and meaningful interactions’ via the Internet with learners from all around the world, motivation can be promoted to keep them learning. In addition, motivation to learn can reinforce learners to be more responsible and the willingness to engage in their own learning will be higher. This is described as ‘learner autonomy’ (Blin, 1999; Lightbown & Spada, 1999; Toyoda, 2001, all cited in Yu H. C., 2005). “Motivation, learner autonomy, social equality, and identity can also be encouraged through the use of CMC inside and outside of the classroom” (Yu H.C., 2005). CMC has a host of facilities that can encourage students’ willingness and positive attitudes in language learning. Studies have shown that CMC can lessen anxiety and provide a conducive environment for language learning (Lane, D. R., 1994; Yu H.C., 2005; Vahid. N. L. 2011). Studies by various researchers have also found potential effects from the use of CMC in terms of improved performance, motivation and attitudes in learning English as a second language as quoted in Kelm, (1992); Kern, (1995); Warschauer, (1996); Meskill, Swan and Frazer, (1997); Warschauer, (1999). “Motivation is defined as the learner's orientation with regard to the goal of learning a second language” (Crookes and Schmidt, 1991 cited in Norris, 2001). Motivation can be inculcated intrinsically or extrinsically among students. Attitudes in language learning also influence the motivation level of the students in language learning. If the students are highly motivated, satisfaction will be achieved in language learning making language learning more effective and interesting. Therefore, in this study, the motivation levels of the student are investigated to determine the influence of CMC in learning speaking skills.

1.3 Text-based CMC promotes the learning of speaking skills of English.

CMC provides two modes of communication, which is the Asynchronous mode (delayed response) and the other one is called Synchronous mode (real time). These two modes provide practice for speaking skills. According to Satar, and Ozdener, (2008), CMC tools encourage people to learn and use a foreign language. Learners learn by sharing and getting to know about others. The development of CMC has also offered an opportunity to improve the productive skills of writing and speaking. Satar and Ozdener, (2008) state that Ganem Guti ‘errez, (2003) reiterated Swain’s, (1997), learners can develop their language learning in three techniques: (a) to evaluate their own performance to the target language use, (b) to assess the language, and (c) to ‘reflect and talk’ about the language. This being the case, CMC provides an avenue where learners are able “to try out, evaluate, and reflect on their own performance through real interaction and authentic feedback”. Thus, one can see that CMC does provide authentic face-to-face communication where learners are given time to practice, evaluate and perform.

Young, (1991 quoted in Satar and Ozdener 2008), states that a pair/group work could lower learners’ anxiety levels via text based interaction. “… is likely to help learners break the “vicious circle” of reluctance to speak and low speaking competence” (Compton, 2002, p. 25 cited in Satar and Ozdener, 2008). This shows that text-based interaction has helped students to improve their speaking competence via CMC. This shows that text-based CMC has the potential to help language learners to improve their speaking skills.

Tudini, (2003) mentioned that “chatting may technically be a writing activity, but this does not necessarily mean it is written in genre.” Kern (1995) as referred in Tudini, (2003) recommended that learners work basically within a framework that is similar to oral interaction although it is in written mode. Tudini, (2003) also stated that chatting definitely resembles oral communication than written. He also added that speaking skills and language development can be assisted by this highly interactive and conversational communication tool. This will not only improve the method of communication among users but it can also develop the self-learning attitude among language learners. Therefore, in this study, speaking proficiency of the ESL learners will be determined from their experience in learning speaking skills via CMC.
1.4 Research Gap

Wang and Sun (2000) mentioned in their research that there were abundance of published papers on how to improve student’s reading comprehension and writing skills via CMC. However, there are not many studies on the improvement of student’s speaking ability via CMC. Zha, Kelly, Park, and Fitzgerald, (2006) have also mentioned that an abundance of studies have been carried out to explore the potential of language learning using common interactions among peers via CMC. There are not many qualitative studies on the pedagogical aspect related to communicative competence. This is exemplified in studies carried out by Chun, (1994); Warschauer, (1996); Singhal, (1998); Belz & Kinginger, (2002) commented; where learners who were involved in those studies were engaged in either collaborative learning courses, or individual assignments related to class or group discussions which is shown in Beauvois, (1992); Beauvois, (1997); Kern, (1995). Nevertheless, none of these results compared the outcome of CMC learning tasks on students’ communicative competence in collaborative versus individual task. In addition, Cheol, (1999) reported that there are many assumptions and findings about the features of ‘linguistic interaction’ in text-based CMC and their potential relations between text-based and spoken languages. Those studies have never advanced to experimental studies and findings on the potential pedagogical activities linked to oral competency within the CMC learning environment. Hence, this research aims to find out whether Computer-Mediated-Communication (CMC) does contribute to the improvement of language skills, especially the speaking skills among language learners.

In order to find out whether CMC helps to improve the speaking proficiency, teachers are required to understand and develop proper, context-specific strategies and interpretations of the “teacher’s knowledge”. In Haris & Hofer’s, (2011) study, teachers mentioned that they became more thoughtful and careful in their selection of learning activities in addition to the technologies they used to assist them. The teachers made numerous references to how technologies should be used to enhance learning, rather than using them because they were required to do so. That’s how Technological Pedagogical Content Knowledge (TPCK/TPACK) theory has influenced their instructions. However, having just technological knowledge by itself is not sufficient for teachers to be able to teach using technology well. “The intersection between technological, pedagogical, and content knowledge guides effective teaching; the art and science of teaching is the negotiation of and synergy between these three forms of knowledge (Koehler & Mishra, 2008; Mishra & Koehler, 2006).” Mishra & Koehler, (2006) argued that integration of technology in learning is rather complicated and is a “wicked” problem that the educational technology field has many years struggled to understand, define, and explain. The TPACK model proposes a possible solution where it can urge trainers and researchers to reconsider the knowledge that teachers should have. According to Doering, et.al., (2009), TPACK can “resonate and make sense to teachers, and therefore has promise in shaping the future of technology integration, both in research and practice.” As cited in Doering, et.al., (2009) teachers who were involved in the study reported that the three elements of teacher knowledge are recognisable and common to both teachers and researchers, and integrating them into the professional development is not a problematic task. Furthermore, they found out that teachers felt the TPACK model is helpful and motivating. However, they questioned how to best implement a TPACK framework in a professional development setting, how to measure TPACK growth, and the impact of teachers’ TPACK on student learning. Technology has been described as the “sleeping giant” in language learning (Martorella, 1997 cited in Doering, et.al., 2009) and, up till now, the potential of technology has not been realised (Bolick, Berson, Coutts, & Heinecke, 2003 quoted in Doering, et.al., 2009). Doering, et. al. (2009) also reported that there were only few researches on technology within social studies teacher education being carried out. They urged that additional support is needed to validate any changes or modification of the established TPACK model/framework. For this reason, Doering, et.al. (2009) urged others to “critically question the establishment of TPACK framework in an attempt to further improve our understanding of factors influencing the ways technology is integrated in the classroom.” Unwin’s (2007) study revealed that there was a lack of discussion about learners’ knowledge and the process of learning in TPACK. He argued that TPACK seems to have started with the less developed formulation of PCK (Shulman’s model) and instead of refining formulation made by Shulman, TPACK just adds the components in the framework. Therefore, this research also aims to find out whether TPACK plays roles in contributing to the improvement of speaking skills among language learners.

1.5 Research Objectives

The general objective of this research is to investigate how Computer-Mediated Communication (CMC) impacts the speaking skills of ESL learners. The specific purpose is to identify the level of motivation of the CMC users in learning speaking skills of English and how it is related to the students’ achievements in speaking skills via the CMC mode. This study also aims to investigate how content knowledge, pedagogical knowledge and technological knowledge influence the perceptions of the learners and instructors about the online learning programme in learning speaking skills via CMC.

Based on the research statement, the questions that arise are as follows;

Research Questions

1. Does CMC affect the learners’ performance in learning English speaking skills?
2. Do the activities influence the learners’ motivation in learning experience via CMC?

The hypotheses of this study are as follow:

H1: There is a significant difference in the level of competency of the speaking skills through CMC before and after the research.
Motivation Test Battery (AMTB), 2004, using a Likert’s Scale on a 5 points scale that ranged from 5 = strongly agree to 1 = strongly disagree. Gardner’s AMTB is adopted in this study because this research deals with the non-linguistic part of language learning such as interest in speaking in English, the desire to continue learning, the motivation that arises from the teaching styles of the learning facilitators (LFs), the anxiety involved in learning the language and attitudes towards learning the language. The linguistic goals, according to Gardner (1985), are the “competence in the individual's ability”, for instance, the ability to understand the language and also to be able to speak, read and write using the language. Non-linguistic goals focus on the “understanding of the other community’s desire to continue studying the language, an interest in learning other languages, etc.” (Gardner, 1985). AMTB has been widely employed in ESL and also EFL studies. The instrument’s validity has been shown in various studies, however in most cases, modification is required. Similarly, in this current study, some parts of the instrument are also modified to make the items more relevant to Malaysian adult distance learners.

Audio-taped semi-structured interviews are also carried out with the ESL learners and the facilitators to gauge their perceptions towards the online learning programme. This process is carried out to find out how the instructors’ content knowledge (CK), technological knowledge (TK) and the pedagogical knowledge (PK) influence the learners’ motivation in learning speaking skills via CMC.

The motivation variable is triangulated with the interview data to investigate whether motivation affects the speaking proficiency levels among the ESL learners with the use of CMC. This also reveals the impact of CMC on motivation of the ESL learners and how the CK, PK and the TK of the LFs impact the speaking proficiency of the learners.

Besides the survey, the respondents also sit for oral tests before and after they have undergone learning via CMC. The speaking test scores are taken and analysed to gauge the respondents’ level of competency in the language. The test scores will also be triangulated with the quantitative and the qualitative data to achieve more comprehensive results. The oral tests are prepared in English medium only as the focus of this study is to identify the effectiveness of CMC on the speaking skills of learners of ESL. Figure 1 illustrates the research design for this study. (Appendix A)

2.2 Subject of the study

Students and LFs were randomly chosen from a local institute of higher education in Malaysia, which uses English as the medium of instruction for all of its courses. The university has several branches all over the country. All of them are Malays, the biggest race in Malaysia and English is their second language. The courses offered in this university are

**H2**: High level of motivation using the CMC to learn the speaking skills will reflect the level of competency in speaking of ESL learners.

**Significance of Study**

The study is meant to identify whether motivation influences the speaking skills learning through Computer-Mediated-Communication in Higher Learning Institutions in Malaysia. The findings will also reveal the level of motivation of the CMC users. This research hopes to propose some solutions to improve communicative competence among the undergraduates and the instructors of speaking skills for Malaysian ESL learners. However, this study is also constraint by some limitations due to some inevitable circumstances.

**Limitations**

This research is subject to the limitations as outlined below:

- This study will be focusing only on the speaking skill of ESL. This skill is among the least mastered skills for the learners of the language in Malaysia. Due to the limited time frame, geographical and financial constraints, this study limits the sample to college students and their learning facilitators from one of the Institutes of Higher Learning in Malaysia.
- This study is also looking at the Distance Learning Programme only which is offered by the same university because this is the only course that requires the students to use CMC in learning. Furthermore, this programme is offered to those who are working. Therefore, the research focuses only on adult Malaysian ESL Learners.
- This is a flexible learning programme (FLP) with fixed course outlines and learning outcomes. Researcher of this study only acts as the observer and is not allowed to change the curriculum or mode of learning for this programme and the assessments of the course.
- The number of samples involved decreased during the data collection. The students were required to do their oral tests for this study but due to time constraints, the students had to leave for other classes.

2. Methodology

2.1 Research Design

In this study, the research design outlines how this research is going to be carried out and how the results are going to be analysed and discussed. This research employs the mixed method design to reach its findings. The quantitative approach is carried out to determine the speaking proficiency and the motivation levels of the ESL learners. The qualitative approach is carried out to know how content knowledge (CK), pedagogical knowledge (PK) and technological knowledge (TK) improve the learners’ performance of speaking skills. In this study, motivation to speak is defined as the level of positive perception towards CMC environment.

Motivation level of the students is measured by using a set of questionnaires adapted from R.C. Gardner’s, Attitude Motivation Test Battery (AMTB), 2004, using a Likert’s Scale on a 5 points scale that ranged from 5 = strongly agree to 1 = strongly disagree. Gardner’s AMTB is adopted in this study because this research deals with the non-linguistic part of language learning such as interest in speaking in English, the desire to continue learning, the motivation that arises from the teaching styles of the learning facilitators (LFs), the anxiety involved in learning the language and attitudes towards learning the language. The linguistic goals, according to Gardner (1985), are the “competence in the individual's ability”, for instance, the ability to understand the language and also to be able to speak, read and write using the language. Non-linguistic goals focus on the “understanding of the other community’s desire to continue studying the language, an interest in learning other languages, etc.” (Gardner, 1985). AMTB has been widely employed in ESL and also EFL studies. The instrument’s validity has been shown in various studies, however in most cases, modification is required. Similarly, in this current study, some parts of the instrument are also modified to make the items more relevant to Malaysian adult distance learners.

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taught in English and it is compulsory for all diplomas students to take the English courses offered by its Languages and Linguistics Academy. The English courses are designed to raise the level of English proficiency of students at the intermediate level to advance level. The course aims to achieve this through an integration of reading, writing, listening, speaking and grammar using a variety of materials. The courses also aim to prepare the students to perform effectively in the Malaysian University English Test (MUET).

In this study, in order to identify the perceptions of the learners towards the online learning portal used in learning speaking skills through CMC and to determine the factors that contribute to motivation of the learners, an English course offered in the Flexible Learning Programme (FLP) in the university was investigated- Preparatory Course for MUET.

2.3 Preparatory Course for MUET

In this current study, this programme was chosen due to its method of learning where CMC is the medium used for teaching and learning. The learning outcomes for the speaking skills component of this course are to make students competent in asking for and giving information, expressing opinions and supporting them, expressing agreement and disagreement, making suggestions and recommendation, giving reasons for action taken, persuading and drawing conclusion. FLP is a programme with fixed course outlines and learning outcomes. Researcher of this study is not allowed to change the curriculum or mode of learning for this programme and its assessments.

As for the speaking component, students learned the communication strategies, language functions and expressions and many other skills related to communicative competence. Students are taught through lectures, discussions, computer conferencing, role-plays, using target language outside classrooms and using learners’ input to create meaningful speaking activities. LFs were assigned to assist the students with the online learning. They facilitated the learning according to the syllabus and they also carried out the face-to-face lectures four times in the semester. The rest of the course was carried out online via the online learning portal developed for the FLP. As for the speaking skills component, the LFs enhanced their online teaching according to their own creativities based on the curriculum. Every week, a component of speaking strategies will be taught to students. LFs are to give handouts to students, make discussion activities synchronously or asynchronously and other speaking tasks. Based on MUET oral test score assessment rubrics, (Appendix C and D) the ESL learners’ speaking proficiency is assessed from the speaking components divided into 3, which are:

1) **Communicative Ability.** The students have to show the ability to communicate / speak in the presentation and they also have to show their ability to contribute to the discussion well;

2) **Task Fulfilment.** The students have to fulfil the task by giving logical points/ideas supported by logical examples or details, and by using all the communicative functions like agreement, disagreement, persuading and promising, in the appropriate context and in negotiating meaning;

3) **Language Control.** They have to display the control of the language confidently, fluently and try to minimise the language or grammatical errors in their individual presentation or group discussion.

2.4 Sampling

The respondents for this research purpose include two groups of people. The first group consists of undergraduate students who enrol in the FLP offered by the Education Development Centre at the university; FLP caters to distance learners only. These students are selected randomly from 3 different branches of the university. The branches involved are those in the north, central and southern parts of Malaysia. According to Israel, (1992), the appropriate sample size is 30% of the population. In this study, there are approximately 500 students from all the branches of this university and about 10 LFs assisting the distance learners. This being the case, respondents of this study are about 154 students and 4 LFs. The LFs involved in this study are the ones facilitating the learning of these 154 students. Table 1 shows the size of the sample for this research.

<table>
<thead>
<tr>
<th>Population</th>
<th>10</th>
<th></th>
<th>Samples</th>
<th>154</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC Facilitators</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESL Learners</td>
<td>500 x 30%</td>
<td></td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>510</td>
<td></td>
<td>154</td>
<td></td>
</tr>
</tbody>
</table>


The FLP requires four hours of face-to-face sessions with their Learning Facilitators (LFs) in a semester while the rest of their course is conducted online via CMC. These students use CMC to learn the speaking skills and these are the students who take an English course as part of their program requirement. They are currently in their third semester and the English course will prepare them for the Malaysian University English Test (MUET) as part of their course requirement. Learning is carried out via (CMC) approach also known as the self-learning method, using forums, email
and chat rooms. The second group of the respondents in this research is a group of Learning Facilitators (LFs) who assist students’ learning via CMC. These 4 LFs are the ones who facilitate the 150 learners chosen for this study. The respondents for this research as mentioned earlier were selected randomly from a few classes in each branch of this institute of higher learning.

2.5 Data Analysis of the Research

SPSS is used in the data analysis. For research objectives 2, Descriptive Statistics method is used to determine the percentage, average / mean, frequency, standard deviation, etc. T-Test is implemented to compare the Pre-Post tests. Inferential Statistics method, which uses the Correlation analysis, is used to see the relationship between the factors and the competency level of speaking skills among the ESL learners using CMC. Figure in Appendix B (Figure 2) shows the process of analysis of the mixed-methods design for this study and how the data is triangulated.

In Phase 1, questionnaires were given before CMC learning takes place (Pre-Test). This was to identify the samples’ first perceptions of learning speaking skills using CMC and to identify their levels of motivation before research. In Phase 2, questionnaires were given after they have undergone the learning process using CMC (Post-Test). This was also to determine their perceptions and levels of motivation of learning speaking skills using CMC after they have undergone the learning process using specified methods mentioned. Therefore, the data from Phase 1 and 2 were compared to determine significant difference in the level of the motivation of the students towards learning speaking skills via CMC before and after the research.

Besides questionnaires, respondents had to sit for speaking skills Pre/Post Tests before and after they had undergone learning via CMC. The exam scores from Phases 1 and 2 were analysed and compared to determine any significant difference in the respondents’ level of competency in the language after the learning process via CMC. These results were then triangulated with the levels of motivation of the students to determine whether there were any correlations between those variables. All the results gathered from Phases 1 and 2 were also triangulated to the audio-taped interviews. This was to determine whether the TPACK of the LFs and the perceptions of the CMC learners towards their online learning programme are linked to their levels of motivation towards the learning process via CMC.

Furthermore, this study aims to find out whether those mentioned above correlate with the students’ proficiency level in speaking of English.

3. Findings and Discussions

The analyses revealed that there is a significant difference between the pre-test and the post-test stages based on measures of the level of speaking competency via CMC p=0.000. The result denotes that there is an improvement in the level of competency of speaking skills with the use of CMC in the speaking instructions throughout the research period from the pre-test to the post-test. It means, after using CMC in their learning, the speaking proficiency of the ESL students has improved. This improvement is shown in Table 2.

![Table 2. T-Test Matched Pair -Value on the Level of Speaking](image)

<table>
<thead>
<tr>
<th></th>
<th>Pre-test (N=59)</th>
<th>Post-test (N=59)</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking Level</td>
<td>7.3208</td>
<td>8.6698</td>
<td>-3.991</td>
<td>0.000</td>
</tr>
</tbody>
</table>

p<0.05-Significant difference

In tandem with the overall speaking skills, the components of the speaking skills which are evaluated in the pre-post oral tests, such as task fulfilment, language control and communicative ability also show significant improvement. The percentage of the speaking proficiency of the ESL students in this study shows significant increase from low level of proficiency to medium level of proficiency. This is shown in Table 3.

![Table 3. Level of Speaking Competency](image)

<table>
<thead>
<tr>
<th>Level of Speaking *</th>
<th>Pre-Test Frequency</th>
<th>Percentage (%)</th>
<th>Post-Test Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (10.1 – 15)</td>
<td>8</td>
<td>13.5</td>
<td>6</td>
<td>10.1</td>
</tr>
<tr>
<td>Medium (6.6 – 10)</td>
<td>23</td>
<td>39.0</td>
<td>46</td>
<td>78.0</td>
</tr>
<tr>
<td>Low (0 – 6.5)</td>
<td>28</td>
<td>47.5</td>
<td>7</td>
<td>11.9</td>
</tr>
<tr>
<td>N = (59)</td>
<td>100</td>
<td>N = (59)</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

* includes level of task fulfilment, language control, and communicative ability
Table 3 shows the post-test results of the percentage for the speaking level / proficiency in terms of task fulfilment, language control and communicative ability. The table shows the level of speaking competency (high, medium or low proficiency) based on the MUET specifications (Appendix C & D), which consists of 1) task fulfilment, 2) language control and 3) communicative ability. Due to a significant increase in the percentage of those in the medium proficiency level, from 39% (pre-test) to 78% (post-test), the number of students with high scores shows a slight decrease, from 13.5% to 10.1%. The results also reveal that the percentage of those in the low level speaking proficiency group has decreased from 47.5% (28 out of 59 students) to 11.9% (7 out of 59 students). This shows that ESL learners with low proficiency level of speaking earlier have benefited from the use of CMC in their learning. Although technology has evolved and expanded the use of the Internet to the use of mobile phone technology, twitter, Facebook, Whatsapp, Skype, Iphone, Ipad, android and etc; it would seem that CMC is still a viable option in assisting the teaching and learning of ESL speaking skills in this study, based on the positive results of the study. The results proved that CMC or technology did help the students improve their speaking competency. Based on the post-test results, the learning facilitators (LFs) seem to have helped the students in improving their speaking skills. This is supported by statements made by some of the informants in this study who felt that they improved due to the guidance provided in the course.

“My lecturer is... how to say...open-minded and she’s always giving tips although she is strict and we are often reprimanded by her. She gave a lot of pointers. She would correct us or tell us to redo... ask us to do ourselves.”

(Informant 7:372-425)

Although the students show improvement in their speaking proficiency, they reported that they lacked speaking exercises which should be carried out online but they conducted discussions in the E-discussion platform (similar to E-forum) provided by the online learning portal. According to Doering, et.al. (2009), when discussing T-PACK model, the instructors’ pedagogical, content and technological knowledge determine the success of learning a language via technology. Teachers need to adjust their pedagogy to adapt new opportunities for expanding and sharing every time new technology is made available for them. In addition, Abrams’s (2003) study showed that the speaking ability was higher for the group which is prepared for the oral discussions using written Synchronous CMC (SCMC). In other words, LFs who are technologically savvy will make sure the pedagogy via CMC is interesting and exciting. In this research, LFs were supposed to carry out the speaking instruction via CMC and synchronous activities (SCMC) were deemed to be the appropriate method for this learning. However, majority of the students reported that the speaking exercises were performed ‘asynchronously’ (ACMC) where the facilitators posted past year questions or topics for discussion via online. Although these asynchronous activities were carried out in the I-Discuss, which acts very similar to the ‘real time’ speaking discussion but without using the chat room facility, the learning of speaking skills did take place. According to the students, the LFs gave handouts, notes and pointers regarding the speaking skills and communication strategies via the asynchronous mode. Online discussion was often carried out between the LFs and learners. However, there were no synchronous (SCMC) activities carried out with the learners throughout the research period. The statements made by the ESL learners are as follows:

“Speaking exercises? Actually online only writing, right? For speaking, she gave us tasks like the speaking test but the task required us to write what we think and not speak.”

(Informant 17:72-74)

“She gave us like a short title and asked how we could care for our environment. We had to give our points and our reasons. But that’s not synchronous. Not a real-time chat.”

(Informant 10:133-139)

The results show that the students’ speaking proficiency level improved but the interviews indicated that that improvement was not facilitated by the use of ‘synchronous’ activities via CMC (SCMC). CMC can offer creative and exciting methods to enhance language learning. However, in this study, the students reported that they learnt the speaking skills via ACMC only. This result also reveals that the content knowledge (CK), pedagogical knowledge (PK) and technological knowledge (TK) of the LFs are not really evidently shown in this research. Content and pedagogy are two kinds of important knowledge that is deemed important to be mastered by educators. These types of knowledge ensure that the students have quality experience and exposure in the learning process. This will impact the outcome of the curriculum. Shulman (1986; 1987 cited in Kansanen, 2009) defined pedagogical content knowledge as “an intersection between content knowledge and pedagogical knowledge.” According to Kansanen, (2009), this connection is only a portion of the ‘teaching-studying-learning process.’ In addition, Mishra and Koehler (2008) introduced TPK/TPACK (Technological Pedagogical Content Knowledge) which they developed Shulmans’ (1986) teacher knowledge and added the technological knowledge (TK). In this era of IT, there are many technological tools which are available to assist teaching and learning. However, in this present content, it seems that the teacher knowledge is lacking because it was found that teachers lacked the skills in their instructions. Although the results of the post-test speaking test did show a significant improvement (Table 2), the pedagogical knowledge (PK) and the technological knowledge (TK) of the LFs did not really help the instruction of the speaking skills learning via CMC. Although CMC or technology did help the students improve their speaking competency, the students reported that the learning of speaking skills mostly carried out via asynchronous CMC (ACMC), which is also part of CMC mode of communication, (Abram, 2003). In another study, Chun (1993, cited in Warschauer, 1996), suggested that E-discussion shows similar level of language complexity with written texts, however it has the similarity with face-to-face
interaction, for instance in functions performed. Therefore, it can act as a significant ‘bridge for transfer’ of interaction skills from the written to spoken mode. This reaffirms the notion which was brought up by Warschauer (1997), who states that CMC places emphasis on the uses of multimedia and the Internet can create a great impact in communicative skills learning, e.g. speaking. He rationalises that online interaction can be used to promote the linguistic nature of language learning.

Although technology progresses to the use of mobile phone technology, it would seem that CMC is still a viable option in assisting the teaching and learning of ESL speaking skills in this study, based on the positive results of the study.

The second objective of this research is to determine the level of motivation of CMC learners. Motivation has been recognised as by teachers as one of the main factors that induce the rate and success of second/foreign language learning, (Moiinvaziri, 2011). Although the level of speaking of ESL students improved in this study, the motivation level of these learners did not show similar improvement after using CMC throughout the research period.

There is no significant difference between the pre-test and the post-test in terms of the level of motivation for these students. The level of motivation of the L2 students has not improved significantly after they have used CMC. The pre- and the post-test results on measures of level of motivation are (t = -1.266, p= 0.208).

Table 4. T-Test Value Matched Pair on the Level of Motivation

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>t- value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test (N=100)</td>
<td>291.5300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Test (N=100)</td>
<td>293.9100</td>
<td>-1.266</td>
<td>0.208</td>
</tr>
</tbody>
</table>

p<0.05-Significant difference

It is also found that the motivation level is not significantly correlated with the general competency level of the L2 speakers for this study. Table 5 shows that the motivation level is also not significantly correlated with the general competency level of L2 speakers in this study with the significant value 0.926. Therefore, it can be concluded that the students’ level of motivation has not influenced the level of speaking competency for these ESL learners via CMC. This means, although the speaking competency of the students has improved, the motivation level was not the leading factor that influences the competency level. In line with that, the motivation factors have also not influenced the task fulfilment, language control and the communicative ability of these students as shown in Table 6.

Table 5. Correlation between Motivation and Speaking Skills

<table>
<thead>
<tr>
<th>Variable</th>
<th>Speaking Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
</tr>
<tr>
<td>Level of Motivation</td>
<td>0.010</td>
</tr>
</tbody>
</table>

p<0.05-Significant difference

Table 6. Correlation between Motivation and Speaking Skills-Task Fulfilment, Language Control and Communicative Ability

<table>
<thead>
<tr>
<th>Speaking Skills</th>
<th>Level of Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
</tr>
<tr>
<td>Task Fulfilment</td>
<td>-0.002</td>
</tr>
<tr>
<td>Language Control</td>
<td>-0.012</td>
</tr>
<tr>
<td>Communicative Ability</td>
<td>0.063</td>
</tr>
</tbody>
</table>

p<0.05-Significant difference

The results show that the motivation level was not the leading factor that influences the improvement in the proficiency level of the ESL students. However, from the interview carried out with the ESL learners, there are other factors which
are not measured empirically in this research, yet they influence the learners’ speaking proficiency level. The interview data shows that there are several factors that have influenced the motivation level of these students. It is found that the students’ level of motivation had not improved from the pre-test stage due to reasons like the rapid progress of technology has made CMC outdated. They found that the phone technology is more current. The students are experiencing the current trend in technology. Therefore, ESL learners in this study could not find anything new, interesting, creative or exciting about learning a language via CMC, which is considered as ‘outdated’.

“If I were the facilitator, I will be definitely talking non-stop... talking. Then, I will try to be creative and think how to improve the online learning...”

(Informant 10:259-260)

“We could start with the online chatting. What the facilitator is doing now helping us with the learning is okay. It’s just that not many of us feel excited to do the task anymore... This class is boring!”

(Informant 10:262-264, 312)

It had no longer motivated the students to further utilise the method provided for their learning. From the interview sessions carried out with some of the students, they stated that besides learning using CMC, they felt that they could also improve their speaking skills outside the CMC learning environment, for instance by using the language in their daily conversations or in their job requirements outside the classroom. Consequently, their motivation levels in learning speaking skills via CMC decreased. The following are some explanations by the students for their low motivation levels.

“This is a distance learning course. You have to motivate yourself. If not, you’ll be drifting away. I have to find my own time to study and to do my own work. I don’t feel good about this course. My English proficiency is not good. Therefore, I have less interest and am not really motivated.”

(Informant 5:337-357)

“Not everybody (in the course) can converse in English well. She (the LF) often told us to talk or use the language. So, we have to try using English in our daily conversation.”

(Informant 7:421-432)

The interview with the students also revealed that motivation was low among the students due to work and family constraint. These students tried to motivate themselves by using the language outside their classroom because they were aware of their ability in the second language especially where speaking skills were concerned. They also knew that being distance learners, they had to be highly motivated because they rely on CMC and only met their LFs a few sessions throughout the learning period. From the interview statements, it shows that the students felt they could pick up their language on their own outside the classroom.

“If I ever get good marks for my speaking test, it’s firstly due to my own hard work and secondly the teacher who plays a role. However, 80% is from my own desire and determination. 20% would be from external support. I read, talked to others and I did a lot of practice. The notes from the lecturer did not really help me much.”

(Informant 10: 9-22)

“I also improved my speaking skills by chatting with my friends on Facebook. It’s fun and the response is faster. You can also chat with more than one person at the same time. We can do likewise in this course. It’s not fun but boring.”

(Informant 10:22-36)

The interviews also show that the students’ motivation level was influenced by their activities outside the classroom. Due to the fact that they did not experience and explore the synchronous activities (SCMC) in the learning process, their motivation level was minimally affected. The synchronous (SCMC) interaction is different from the asynchronous (ACMC) activities in Sotillo’s (2000 study cited in Rozina, 2006) who compared synchronous and asynchronous modes of interaction, and claimed that synchronous interactions were similar to face-to-face conversations. This shows that the students in the current study did not experience the synchronous interaction in their speaking lessons due to the lack of pedagogical knowledge (PK) and technological knowledge (TK) of their LFs. The results from this study are quite contrary to the statements made by James and Amy (2001), “when the conversations were done online, the interaction became different. The students became active participants, whereby most of the questions were answered with no prompting” (p.1). In an online conversation, messages can be planned and written before they are posted. This kind of messaging is ‘almost real time’ but still permitting users to have thinking period during interaction (James and Amy, 2001). James and Amy further explained that the ‘sense of belonging’ developed from the online interactions had created significant encouragement for their learning. From the interview that James and Amy carried out in their study, the students explained that “they developed relationships online that they never before developed in the classroom.” However, the ESL students in the current study did not experience what was described in James and Amy’s study. Their sense of belonging to the group was lacking due to the time constraint and work commitments. These students are working adults with family obligations. They seemed to have less time to focus on their studies. This was one of the reasons why they chose the course as it gave them flexibility in their study. Due to their work commitments, the sense
of belonging among the students was also quite low. Interviews with students revealed that they seldom met each other outside the classroom and even if they were online, they were not able to carry out synchronous activities due to time constraint. All these constraints seemed to have affected the motivation levels of the students. They are unaware that it is crucial for them to maintain the social presence among them to assure the success of the CMC learning. They showed relatively low commitment for their own learning process. Learning via CMC needs learners to have positive attitudes and commitment.

Krashen (1987) stated that if positive attitudes are to be fostered and learning to be motivated, an environment conducive to learning ESL must be created. Aspects that help produce that kind of learning environment involve a "low affective filter" learning situation, whereby the students learn to use language in a non-threatening and fun environment. However, from the interviews carried out with the ESL learners, it was found that some of the learners were shy and they felt worried when using the language in the E-discussion. In addition, the content knowledge (CK) of the LFs towards this course is insufficient. The LFs should be guiding the learners in terms of the content of the subject, for instance in this speaking skills the LFs could help the learners to come up with the points, how to develop the points and tips to communicate or speak proficiently. Shulman (1986 in Ball, Thames, & Phelps, 2008, p.391) claimed that it is not sufficient for teachers to just know the content for teaching but they must also know more about the facts and concepts in the content. Shulman also added that teachers must also be equipped with the principles, structures and the rules for the subject. In other words, teachers should not only “understand that something is so; they also must further understand why it is so” (Ball, Thames, & Phelps, (2008, p.391). In the present study, this means that CK is crucial for teachers to be able to assist the learners and make them feel motivated to succeed in learning via CMC. LFs must make sure that the students understand the content of the course and feel comfortable in their learning environment. In this current study, they did not find the online learning fun and some felt that they were ‘alone’ as many of them did not participate in the forum. The speaking activities were not carried out properly and the students felt they lacked of oral practise online. The learners seem to concur with Littlewood’s (1995) statement that learners will feel uncomfortable and insecure in using the language which will promote a "psychological barrier" to ESL learning. ESL learners in this study commented that they were not really comfortable chatting online. The following statements reflect this.

“I feel alone… Sometimes, I feel shy to ask because I’m alone and not in a group. It’s difficult to discuss.”

(Informant 7: 480-489)

This view about their online experiences also emphasises the importance of ‘social presence’ and ‘sense of belonging’ in online learning. The interviews revealed that the social presence of these ESL students was at a low level, thus leading to decreased motivation in wanting to participate in online learning. Gunawardena (1995, quoted in Lowenthal, 2009), described social presence as “the degree to which a person is perceived as a ‘real person’ in mediated communication” (p. 151). Garrison et al. (2000 cited in Lowenthal, 2009), also defined social presence “as the ability of participants in a community of inquiry to project themselves socially and emotionally, as ‘real’ people (i.e., their full personality), through the medium of communication being used” (p. 94). Picciano (2002, cited in Lowenthal, 2009), defined social presence in an online course “refers to a student’s sense of being in and belonging in a course and the ability to interact with other students and an instructor” (p. 22). The definitions show the importance of social presence in learning where the students should feel ‘connected’ with the other students and their teachers. This connection is rather crucial as to create feelings of security to an extent where they can share information, feelings, reactions, and perceptions with the other people who are experiencing the same learning method. Social presence seems to be an important issue in online learning because according to theorists, the students who are undergoing this online learning method should in general have a sense of belonging in that learning environment and the ability to interact with others-tutors and other learners, freely without feeling shy or inhibited. In the current study, interviews with the students showed that the sense of belonging among them and their LFs was not really encouraging and it is similar to Picciano’s study where the students expressed that they felt alone and didn’t feel excited to participate in the online activities set by their LF. This shows that the content knowledge (CK) and the pedagogical knowledge (PK) of the instructors are relatively low. Kansanen, P. (2009) mentioned that with the content knowledge and the planned pedagogy, the teacher will create the ‘relationship’ with the learners. This can happen if the teacher is able to develop the skills to facilitate the student to learn the content of the curriculum. LFs have to understand the nature of online learning and the students are to be guided and the feeling of ‘connected’ with each other should be maintained in CMC learning environment. In this current study, due to low social presence among the learners and their LFs, it thus reflected the content knowledge (CK) and the pedagogical knowledge (PK) of the instructors in the programme.

Kehrwald, (2007) explored the experiences of online learners in determining the ‘role’ and ‘task’ of online social presence. The evaluation of the online learners’ experiences with social presence signified some of ‘social-relational mechanisms’ which denotes information about cues and effects of social presence in the interactive, collaborative online learning. These mechanisms comprise i) commonality-something shared between participants such as common interests or common background; ii) trust and feelings of safety-the feelings of security from negative manners or criticism; iii) respect and rapport-rapport happens when one is willing to discuss, to offer criticism, to expose personal issues and to be ‘close’ to other people; and iv) interdependence-participants support each other. In Kehrwald’s (2007) study, he reported that the respondents repetitively mentioned words of “honesty”, “trust” and “openness” when asked about their online experience. Based on the findings of this current study, the students did not reveal the ‘social-relational mechanism’ described by Kehrwald. They were not interacting well via online because they reported that they did not create good rapport with other participants and also their LFs. Some of them also added that they felt shy to pose
any comments or respond to the online discussion. They were not ‘open’ to communicate online. This could be related to the fact that the LFs’ content knowledge (CK) of the course is insufficient. If their content knowledge (CK) is adequate for this speaking skills learning via CMC, they should be able to carry out the speaking activities online with the learners because the content of their curriculum requires them to do so.

Kansanen, (2009) mentioned that a teacher who has the content knowledge of the subject taught is considered the ‘specialist’ in the subject. Content is defined as the subject in the curriculum. Thus, the teacher should be able to plan the pedagogy for the subject. However, in this study, the LFs did not find the online tasks as crucial and they did not make sure that the students participate in the online speaking activities. Kehrwald, (2007) in his findings also stated that social presence exists when the communicators create a social presence, then they are notified of the presence of the senders as the “other” participant in the interaction. The recipient builds an impression that the sender is ‘real and present’ which includes qualities like personality, background, and attitude which is rather similar to the face-to-face learning. Nevertheless, in this present study, the findings seem to differ from Kehrwald’s study because the learners complained that they seldom participated with their LFs and colleagues in the online environment because of the reasons explained before; time constraint due to work and family commitment. Thus, social presence is minimal in this study. This has affected their motivation level because they did not feel secured when discussing online. They were worried that no one would reciprocate the interaction due to the number of participants involved in the online activities. In addition, they did not establish the rapport with the other participants or their LFs during the learning process. It is reasonable to deduce that motivation level of these students was affected partly due to the social presence issue among them. This could also lead to the issue of feedback given by the lecturers or teachers.

Scalese, (2001) in his study, mentions that learners who enrol in distance education are excited and keen about CMC learning because of their expectations on the flexibility of the course and the fact that they control their own learning. However, there lies also the problem of high non-completion rates. Keller, (1983) also had similar findings that the students complain about the lack of instant feedback by the instructors, support and encouragement – which are the elements of motivation. In their learning condition, they would require more support and encouragement than learners in a traditional learning environment. This current study also has similar results where these L2 learners, who are also distant learners, complained about the late feedbacks from their LFs. They also lack of support and encouragement from their colleagues and instructors where their social presence is low and speaking activities were not carried out properly via online. These students in distance learning education programmes are not from similar background because they are from different ‘social, cultural, economic and family backgrounds.’ This being the case, to build a close relationship between instructors and learners might require a longer period of time. Furthermore, uneasiness might occur during the learning period because of the lack of face-to-face communication between teacher and students, (Scalese, 2001). This current study seems to concur with Scalese because the statements given by the students interviewed stated that their LFs seldom communicated with them and the participation of students online was low. Therefore, the motivation factors did not impact their speaking competency. However, in this current study, the speaking proficiency of the L2 students did show improvement. Therefore, CMC as a tool can be the factor that impacts the speaking skills for these L2 students.

Studies have shown that CMC can lessen anxiety and provide a conducive environment for language learning (Lane, 1994; Yu, 2005; Vahid, 2011). Nevertheless, the present study has proven otherwise where the correlation results on motivation and speaking skills of these students showed that motivation is not the factor that influenced the improvement of the speaking skills. In addition, it differs from Warschauer’s (1997) statement that CMC can increase students’ motivation. He believes that with the aid of CMC, interaction between speakers and learners of the target language is no longer time and space reliant. This study seems to oppose Warschauer’s suggestion which states that CMC is suitable to facilitate communicative language learning activities in the classroom because the results showed that students were not exposed to variety activities via CMC. This is because if the instructors do not have enough Content Knowledge (CK), Pedagogical Knowledge (PK) and Technological Knowledge (TK) to help their instruction via CMC, it might not be as what Warschauer described.

In another study, Wen (1997) mentioned that student’s motivation affects the process and outcomes of language learning. The students will find it easier to use the language if they are highly motivated. Gardner (1985) has also pointed out that, in order for the students to achieve a certain level of proficiency in the target language, he must be highly motivated in learning and communicating in that target language. In Beauvois’s study (1994), it was found that many students showed an improved confidence in speaking. Beauvois hypothesises that the improvement in language use supported by the CMC has lifted the self-confidence in the students. This is quite contrary to the findings of this study whereby motivation seems to have no direct relationship with the speaking competency of the L2 students. The students’ level of motivation was insignificant due to a few reasons like their social presence and the ALS (Attitudes toward the Learning Situation), unlike Wen’s (1997) and Gardner’s (1985) statements where high motivation is needed to achieve a certain level of proficiency in the target language. This study has proven that motivation has not led to language improvement. Although the results show that motivation was not significant in improving the speaking proficiency, it was found that the students’ speaking proficiency had improved. Thus, there were other factors beyond the scope of this research that were responsible for the improvement in speaking levels. Maybe it was due to reasons that the learners improved their speaking skills through the activities like chatting in the Facebook, Skype, Whatsapp or others that was not investigated in this study.
In conclusion, although CMC has proven to be an effective tool for speaking skills learning process based on the results revealed from pre- to post-test, factors of motivation, speaking activities from the online learning programme and the CK, PK and TK of the instructors did not play major roles in improving the speaking competency of the ESL students in this study.

4. Conclusion

CMC would have been a success in online learning if the online learning system had been equipped with an updated and efficient online learning system, for example by upgrading the chatting feature which creates social presence among the students and the facilitators. In addition, educational institutes from pre-school to institutes of higher learning have to be equipped with current CMC technology. Educators should be well guided for this method of teaching. Facilitators play crucial roles in ensuring success in the online learning process. Therefore, they have to be trained and equipped with ICT knowledge. Facilitators should maintain their social presence so that the students can feel a sense of belonging throughout the programme. Facilitators should understand their roles in facilitating the online environment. They have to be computer orientated and technology savvy at the same time. In addition, the instructional design for the online course needs to be carefully designed and planned. In short, implementation should complement the context of the pedagogy.

In line with new technological advancements in computers that are available today, learners must be prepared to equip themselves with ICT knowledge, especially in technology that involves CMC. In particular, learners must be ready to take up the challenge. They have to get used to the technology and should not regard facilitators as authoritative figure as CMC learning is unlike classroom based learning. CMC based learning is different from face-to-face (FtF) learning where teachers control the learning process. Traditional learners (Face-to-Face learners) have to change their thinking paradigm and try to adapt to their new role in the online learning environment. They have to be self-initiative and independent and make their own learning choices and decisions. Learners have to be more adaptable to challenges because technology-based learning will keep on changing and evolving.

Acknowledgements

I would also like to gratefully thank Dr. Ng Lee Luan from The Faculty of Languages and Linguistics, University of Malaya (UM), who was abundantly helpful and offered invaluable assistance, support, guidance and useful critiques of this research work. My thanks and appreciations also go to Dr. Jusang Bolong from the Faculty of Modern Languages and Communication, University of Putra Malaysia (UPM) who has also encouraged me and showed me the potential of CMC. To Miss Sheila and Yazmin Yaacob, thank you for your tremendous help in proofreading this research.

References


the Teaching and Assessment of the Speaking and Writing Skills, 27-28 January 2003, University of Technology Mara.


Appendix A

Figure 1. Research Design

Research Design Model
(Quantitative)

Independent variable
The level of motivation of the CMC users in learning speaking skills of English.

Dependent variable
The level of competency in speaking skills of the ESL learners using CMC - Score of the speaking tests.

Research Design Model
(Qualitative)

CK
PK
TK

The LF’s Content Knowledge, Pedagogical Knowledge and Technological Knowledge influence the experience of learning of speaking skills via CMC.
Figure 2. Process of Analysis
# Oral Exam Score Guide (Individual Presentation)

## APPENDIX C:

### Oral Exam Score Guide (Individual Presentation)

<table>
<thead>
<tr>
<th>SCORE</th>
<th>TASK FULFILMENT (5 MARKS)</th>
<th>LANGUAGE CONTROL</th>
<th>VOCABULARY</th>
<th>STRUCTURES (5 MARKS)</th>
<th>COMMUNICATIVE ABILITY (2 MARKS)</th>
<th>FLUENCY</th>
<th>PRONUNCIATION ERROR (3 MARKS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Fulfills task very competently. Speaker uses most of points and develops the points effectively.</td>
<td>Displays very confident control of language.</td>
<td>Excellent range.</td>
<td>Excellent range — minimal errors.</td>
<td>Shows ability to communicate very competently.</td>
<td>Natural intonation.</td>
<td>Minimal errors do not impede comprehension.</td>
</tr>
<tr>
<td>5</td>
<td>Fulfills task reasonably well. Speaker uses most of points and develops the points well.</td>
<td>Displays reasonably confident control of language.</td>
<td>Very good range.</td>
<td>Very good range — few errors.</td>
<td>Shows ability to communicate moderately.</td>
<td>Minor hesitations.</td>
<td>Occasional errors occasionally impede comprehension.</td>
</tr>
<tr>
<td>4</td>
<td>Fulfills task adequately. Speaker uses most of points and develops the points adequately.</td>
<td>Displays satisfactory control of language.</td>
<td>Good range of basic vocabulary.</td>
<td>Good range — occasional errors.</td>
<td>Shows ability in communicating moderately.</td>
<td>Occasional hesitations.</td>
<td>Some errors impede comprehension.</td>
</tr>
<tr>
<td>2</td>
<td>Fulfills task to a limited way. Few tasks met with some difficulty.</td>
<td>Displays poor control of language.</td>
<td>Limited.</td>
<td>Limited range errors.</td>
<td>Does not show ability to communicate.</td>
<td>Little fluency.</td>
<td>Numerous errors — comprehension impeded most of the time.</td>
</tr>
</tbody>
</table>

Adapted from MELT Speaking Exam Score Guide
## Oral Exam Score Guide (Group Presentation)

### Task Fulfillment (6 marks)

<table>
<thead>
<tr>
<th>Score</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fulfills task very completely. Speaker raised sufficient number of points and discusses points effectively.</td>
<td>Fulfills task reasonably well. All tasks met with some difficulty.</td>
<td>Fulfills task moderately. Most tasks met</td>
<td>Fulfills task in a limited way. Few tasks met with some difficulty.</td>
<td>Fulfills task with great difficulty. Often cannot achieve goals and abandon attempts.</td>
<td>Does not fulfill task.</td>
</tr>
</tbody>
</table>

### Language Control (6 marks)

<table>
<thead>
<tr>
<th>Score</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
</table>

### Vocabulary (6 marks)

<table>
<thead>
<tr>
<th>Score</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excellent range.</td>
<td>Very good range.</td>
<td>Good range of basic vocabulary.</td>
<td>Basic - with some difficulty.</td>
<td>Limited</td>
<td>Very limited</td>
</tr>
</tbody>
</table>

### Structures (6 marks)

<table>
<thead>
<tr>
<th>Score</th>
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<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
</table>

### Communication Ability (3 marks)

<table>
<thead>
<tr>
<th>Score</th>
<th>3</th>
<th>2.5</th>
<th>2</th>
<th>1.5</th>
<th>1</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Shows ability to contribute to the discussion very completely.</td>
<td>Shows ability to contribute to the discussion very completely.</td>
<td>Shows ability to contribute to the discussion modestly.</td>
<td>Shows limited ability to contribute to the discussion.</td>
<td>Shows very limited ability to contribute to the discussion.</td>
<td>Shows very limited ability to contribute to the discussion.</td>
</tr>
</tbody>
</table>

### Fluency (3 marks)

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<th>2</th>
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<th>0.5</th>
</tr>
</thead>
</table>

### Pronunciation Error (3 marks)

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<th>2</th>
<th>1.5</th>
<th>1</th>
<th>0.5</th>
</tr>
</thead>
</table>

Adapted from ALEFI Speaking Exam Score Guide