CHAPTER 1

INTRODUCTION

1.1 Introduction

This initial chapter aims at providing the background and the rationale for the study, i.e. to explore the language performance of low-proficiency learners framed within the field of computer-assisted language learning (CALL). This chapter also consists of the statement of the problem, the objective of the study depicts the research questions, the conceptual framework of research as well as the significance of the study. The limitations of the study and the list of key terms are also described.

1.2 Background of the study

Computer-assisted language learning (CALL) is a technique of teaching-learning a second-language where the computer and computer-based assets such as courseware are used to present, support and assess material to be learned. It, usually, comprises an extensive interactive aspect. Therefore, Computer-assisted language learning has been invested in teaching-learning Basic English course to enhance the low-proficiency language learners' language performance in Masterskill University College of Health Sciences in the year 2005.

The use of CALL is still investigated to support its practise in language teaching-learning. CALL also encounters problems regarding the theoretical sides of its application (Faizah & Nazeri, 2009). Midst, the lack of an integrated theoretical

framework for creating and evaluating CALL methods, the concerns is also on the shortage of convincing empirical evidence (Chapelle, 2005).

Furthermore, language learning can be done without being accompanied by a real teacher. A computer can act as a teacher. Therefore, many teachers conduct the teaching-learning process using a computer as a medium. Many people think that the mere introduction of computers in language teaching will make it useful. This is misleading as there are many other factors attributed to the usefulness of using computers in teaching-learning basic language skills including the subject, also depending on the learners' language proficiency level. Using computers without considering the pedagogical aspects associated with the teaching of language will make the practice ineffective. The introduction of computers in teaching should also come with appropriate teaching strategies. Therefore, useful teaching in the classroom demands changes (Faizah & Nazeri, 2009). With this vague assumption concerning the effectiveness of using computers in the classroom, choices are made independently to employ many resources on the purchasing of large quantities of computers and commercial courseware in education (Faizah & Nazeri, 2009). They are not quite aware that a study on the usefulness of using computers in language teaching is necessary to make a conclusive justification for allotting such resources in the use of computers in the classroom.

A number of studies focused on researching the use of CALL compared to other teaching mediums similar to regular classroom teaching, for example, face-to-face classroom teaching, textbooks in teaching, the teaching material from CALL and more. While a number of studies have examined CALL and face-to-face learning in an academic setting and has revealed no significant difference between the two modalities.

Therefore, more studies on how useful CALL is for continuing education and those students at the lower proficiency level can add knowledge to CALL for the learner variable.

Many studies have been shown to assess the impact of CALL on learning. Further studies have shown the importance of CALL for assisting greater student participation, developing reliable input, and providing chances for linguistic practice, evaluation, and view (Nathan T Carr, Kyle Crocco, Janet L. Eyrivy, 2011). CALL has been revealed to personalize learning with its ability to address different learning styles and learning needs (Gimenez, 2000; Froehlich, 1996). The role of CALL in providing meaningful interaction for technology-related tasks estimated new real-world conditions for communication is motivating (Egbert & Hanson-Smith, 2007; Sanders, 2005; Kenning, 1999).

A great number of studies have tried to identify the problems confronted by low-proficiency English language learners by investigating the differences between successful and unsuccessful learners. These two categories of learners are, usually, notable by their academic performance in tests, examinations, or learning tasks. Researchers found that significant differences lie in aptitude (Skehan, 1998), learning approaches (Abraham & Vann, 1987; Gan, Humphreys & Hamplyons, 2004; Green & Oxford, 1995; Oxford, 1990; Wen & Johnson, 1997), beliefs (Huang & Tsai, 2003), and learning behaviors. For example, the behaviors of underachievers have certain individualistic. They lack good learning attitude, inspiration, or determination. In a class, they need more personal care, take a longer period to finish a learning task, frequently skip class or attend class late, and often delay or do not submit homework assignments (Chang, Chiu & Lee, 2000; McLaughlin & Vacha, 1992; Slavin, 1989).

To make decisions on educational policies on effective methods to teach Basic English course for low-proficiency learners', the academic board of MUCH needs studies on the potential impact of computers, to help them to promote their resources wisely to Masterskill Colleges. Very few studies have been done on the effect of CALL at the University College level in Malaysia. Thus, this study aims to investigate the use of a CALL program on low-proficiency learners and compare this approach to an F2F classroom approach.

1.3 Statement of the problem

Higher education institutions are utilizing computer technology in teaching-learning, and Masterskill University College of Health Sciences (MUCH) is one of them. The University College has invested a sum incorporating technology into learning Basic English. The program was fully implemented at the main campus of MUCH in 2005, was commissioned by the CEO of the University, with the intention of promoting Modern English usage for all Masterskill University College learners in their first year of study.

However, the experience of teaching Basic English to lower proficiency undergraduate learners (after SPM) at MUCH has revealed that these undergraduate learners in the Computer-Assisted Language Learning (CALL) - English Language Learning Instructor System (ELLIS) setting seem to experience more negatives than positives. As in Table 1.1, the researcher of this study has observed that the learners are achieving high scores in the CALL (ELLIS) program, regardless of meeting the standard for language performance.

Table 1.1: Test Report – All Scores in the ELLIS Program

Class ELLIS - Masterskill ELLIS Intro3: Test Report - All Scores run on Thursday, Feb 17 12:42:38 MST 2011
1

Teacher : Ms Inthu
Class: ELLIS
District: ELLIS ISD

Esl Teacher: Ms Inthu
School: Masterskill

Test scores

ELLIS ID	Student Name	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Student average
U000001	Alinas, Farah	100%	98%	90%	100%	95%	98%	100%	100%	98%
U000002	Ravi, Vicky	98%	100%	90%	98%	90%	100%	95%	98%	96%
U000003	Bulan, Steffy	98%	95%	98%	100%	100%	95%	98%	100%	98%
U000004	Tan, Tan	100%	90%	100%	95%	98%	90%	100%	95%	96%
U000005	Osman, Muna	95%	95%	95%	90%	100%	100%	95%	90%	95%
U000006	Muniandy, Meena	90%	98%	90%	95%	95%	100%	90%	100%	95%
U000007	Jantan, Comel	98%	100%	100%	90%	90%	98%	100%	95%	96%
	Class Average	97%	97%	95%	95%	95%	97%	97%	97%	

Table 1.1 shows multiple scores for a class, describes information on student's, following that the names of the units. Beneath the units, scores are reported as the percentage of questions the students answered correctly. At the bottom of the page of the class report, the class average is found in bold for each unit. What may render the present investigation more interesting is that learners who met the top score level which is an average of 95% - 98% marks as in Table 1.1, in the CALL (ELLIS) program still show major difficulties in mastering all four skills in the University College-based Basic English final exam. A number of students also reported a growing dissatisfaction in the delivery of the Basic English course with the CALL (ELLIS) program, which consequently leads to poor language learning performance.

Hence, this has fostered the researchers' eagerness to conduct a systematic approach to unveil the reasons causing the disparity of scores between the CALL (ELLIS) program and the Basic English final exam, as well as to collect the information as feedback for the Basic English subjects' curriculum improvement. With that as a background, this study investigated the use of a CALL program to enhance the language performance of

low-proficiency learners. The objective of the study will be discussed in the next section.

1.4 Objective of the study

The main purpose of this study is to investigate the use of CALL (ELLIS) program to enhance the language performance of low proficiency learners. This will help the University College to identify and compare the use of CALL instructional tools that are different from F2F.

This study also aims to find out if the use of CALL (ELLIS) in language teaching and learning will affect the students' perceptions towards learning Basic English as a subject. Language learners hold differing viewpoints about language learning, which influence and hinder their receptivity to the information and activities presented in the program, mainly when the approach is not in agreement with the learners' experience (Cotterall,1995).

The CALL program in this study, therefore, aimed to address significant factors in the learning process by basing individual and program experience on participant perceptions, to examine the students' perceptions of computer instruction. The research focus is encapsulated in the research questions.

The study addressed the following questions:

1. Which instructional method is more effective as measured by the learners' pre and post-test results on the Basic English final exam: ELLIS or F2F classroom learning?

    1.1 Is there a statistically significant difference between the learners instructed by ELLIS and the learners instructed by F2F classroom learning with regard to the scores gained on the reading comprehension, grammar and vocabulary, listening and speaking sections of the Basic English final exam?

2. According to the learners' opinion, in what ways does ELLIS help or does not help the learners?

1.5 Conceptual framework of research

A review of the literature indicates that there is a variety of approaches in CALL to evaluation that have been possibly linked to research in CALL. Today's basic classroom, where second-languages are learned, requires a more comprehensive approach to the evaluation of CALL resources describing learning theories, instructional models, teaching methodologies that influence students' achievement.

Therefore, the conceptual framework of this study is depicts the objectives of the research in the form of the Learning Environment, Learning Process, and Learning Outcomes (LEPO) framework presented by Phillips, R. A., McNaught, C., & Kennedy, G. (2010). The LEPO framework conceptualizes learning as having three mechanisms:

the setting which facilitates learning (Learning Environment), the activities which are part of learning (Learning Processes) and the skills which can be demonstrated (Learning Outcomes). Therefore, student and teacher are the two general performers interacting with these three components. The conceptual framework of this study assesses the use of a CALL program implemented by MUCH to enhance low-proficiency students' language performance, and attempt to draw some recommendations to improve the curriculum of the Basic English course.

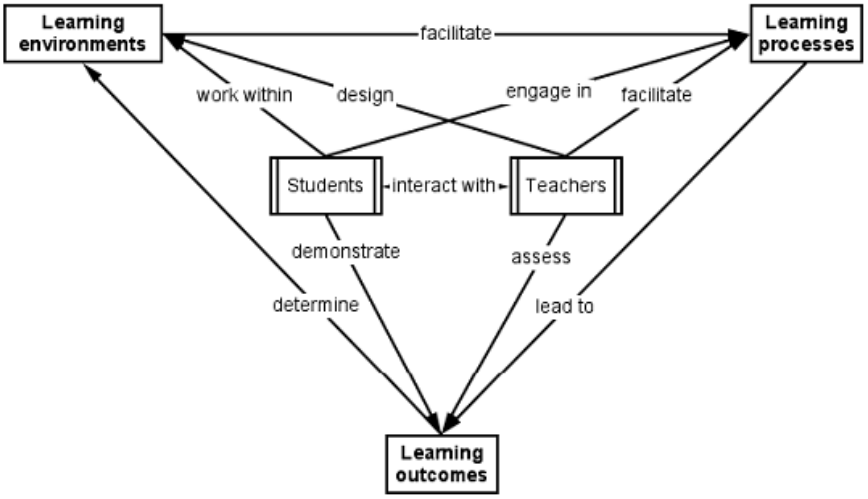

Figure 1.1: Model of the LEPO framework

Figure 1.1 explains Model of the LEPO framework, showing the interrelationship between learning environment, learning processes, learning outcomes, and the roles of students and teachers. At the uppermost level in the concept map demonstrates learning environments facilitate the CALL (experimental group) and the F2F (control group) learning processes, and these lead to learning outcomes (language performance of low-proficiency students), which, in turn, determine the use of the learning environment. The concept map also specifies that teachers plan the learning environments, facilitate learning processes and assess pre-post tests and ELLIS-course experience

questionnaires for learning outcomes, while students work within learning environments, engage with learning processes and demonstrate results of pre-post tests and perception of the CALL (ELLIS) program for the learning outcomes, as well as interacting with their teachers.

The learning environment in the current study features the Basic English course offered at the MUCH campus setting for Diploma level nursing students. These students had a low-proficiency in the English language. It is informed in the pre-study questionnaire on the students' computer accessibility and preference on the mode of study. In addition, both CALL and F2F learning environments specify the teacher's role as a facilitator in the learning processes undertaken by students. The learning environments also specified the time frame of the planned activities. Therefore, the duration of the Basic English course was to remain as an eight-week course in the context of study over a semester, including the learning objectives, evaluations, and the content to be covered for CALL and F2F learning environment.

Learning environments in the present study were designed and then described based on The Natural approach to teaching-learning that have emerged from the works of Krashen & Terrell (1983). Therefore, learning processes are the ways in which students engage with the learning environment; the control group used the F2F classroom and experimental groups used CALL (ELLIS) courseware to learn the Basic English course in the present study. The features of the learning processes in the LEPO framework illustrate on student's interaction with the learning environment created or instructed by their teacher and discuss with their teachers and other learners (T. Anderson, 2005). The learning processes may also contain interaction between the student and technology, whether with resources provided by a computer or learning activities facilitated by a

computer or other device (Phillips, 2004). The character of computers in this study is defined as ideas popularized for CALL by Levy (1997), is to divide computer use according to the functional roles of *tutor* and *tool*. An English Language Learning Instructional System (ELLIS) would describe tutor practices, where the computer in some manner has a teaching function. A language learning activity including a word processor, email program, or web search engine like Google would represent tool uses, where the computer has no overt teaching function. Thus, the current study employed the ELLIS program for learning activities facilitated by a computer for the CALL experimental group while the teacher facilitates the F2F classroom learning with the teaching materials from the ELLIS courseware.

The learning outcomes refer to the things students can demonstrate as a result of their engagement in the course of study. After a duration of eight weeks of their learning, the performance of the students from the groups can be measured by their post-test results. Perceptions of CALL-ELLIS students were taken into consideration. Therefore, the product of the learning process contains the academic achievement and opinions of the students to decide the usefulness of the learning environment.

In the current study, the Basic English course, which was CALL (ELLIS) vs. F2F do not attempt to level one as being more useful than the other. In fact, it is desirable, to identify these, not as opposing philosophies but as end points along the same sort of language teaching continuum, similar to the one that balances teacher-fronted and group work in the classroom. In other words, active language learning can include elements of both. Consequently, in this Basic English course, the researcher will try to strike stability between them so that the University College is prepared to identify the possible benefits of using neither, one or both for a given teaching situation. While recognizing

the existence of these substitute labels, for the purposes of Basic English subject, the researcher will call the CALL program as CALL (ELLIS). The significance of the study will be discussed in the next section.

1.6 Significance of the study

The findings of the study would be one of the main sources for the policy-making decisions on the Basic English subject's curriculum revision and the choice of the instructional mode of teaching-learning in the future for the academic board of Masterskill University College of Health Sciences (MUCH). Intentionally, the current study will validate the program to be promoted to all Masterskill colleges to be implemented for the teaching-learning of the Basic English course. The findings will provide empirical evidence for the University College to decide on the Basic English course settings. Thus, the direct beneficiary from the study is the English unit of the University College, and the findings are of immediate significance for the Basic English course.

Second, the study contributes to the field of CALL by comparing the ELLIS a stand-alone Computer-Assisted Language Learning courseware with an F2F approach in enhancing the language performance of low-proficiency learners. Thus, the scope of the study gives importance to the low-proficiency students in the evaluation of CALL program. The limitations of the study will be discussed in the next section.

1.7 Limitations of the study

In relation to the limitation of the study, the results cannot be applied to a larger population because the present study is directly relevant to the Masterskill University College of Health Sciences (MUCH) and meant for its curriculum review and evaluation purposes. The access to samples was limited since the University College only enrolled 40 low-proficiency students for the Basic English course among 112 students who had registered for a diploma in nursing course (0903/04) intake. Thus, the lack of available samples required the researcher to limit the size of the sample to meet the scope of the study. Since the whole sample size is only 40 it was tough to find significant relationships from the data, as statistical tests typically require a larger sample size to obtain a more normal distribution of the data. Consequently, there is a need for further research by increasing the number of respondents that would be of great help to develop a more reliable conclusion.

Control and experimental groups were not tested for similarity before the study. Furthermore, the language adeptness might differ according to age group. Samples of the study were from different age groups. The majority of the participants were aged between 18 and 20 years. Two participants who were above 20 years (21 and 23 years old) had to be included because of the logistics of scheduling and arrangement according to the intake for the major subject offering. The proficiency level of the samples was noted as low based on their borderline fail or fail score in their SPM English exam. However, the proficiency level of the sample might show a discrepancy because most of them were school leavers, with a number of them having left school earlier. Thus, those who left school earlier might have better language exposure. Hence,

the control and experimental groups should be analyzed for similarity before the study to develop a more consistent conclusion.

The present study has addressed many technical problems faced by CALL (ELLIS) experimental group students throughout the study. Felix (2008) supports that the technologies should be steady and well supported, drawing attention to concerns that technical problems may hinder the learning process. Therefore, the results might not be generalized to all higher education institutions that utilize computer technology in teaching the Basic English subject.

It was the case in this study that, after completing the interpretation of the findings, the researcher discovered that the way in which the data was gathered inhibited the ability to conduct a thorough analysis of the results. Thus, in retrospect, it was felt that including an interview or a systematic observation that could have helped address factors that contribute to learners' performance in F2F that emerged later would have been helpful. Therefore, more significant results can be obtained if this deficiency is acknowledged by stating a need in future research to revise the method for gathering data.

Because the present study utilized a student experience questionnaire in order to collect the necessary data regarding the participants' perception on the CALL (ELLIS) program, another limitation is related to the data obtained from the questionnaire administered. Bias might happen if there was a lack of response from the participants, or the accuracy and nature of responses that are received were questionable. In other words, the participants might not answer the questions according to their judgment but rather follow friends' answers. This is especially for general questions that might have

affected the results as well as misreported their perception on the program; although there is no reason to assume that the participants were doing so. Hence, future studies should consider these limitations and search for other options to categorize the respondents and make effective use of resources and the respondents.

Lastly, time is an aspect of limitation in this study because the duration of the study was only for eight weeks, and it might have affected the level of knowledge, lesson comprehension and the familiarity of the mode of instruction. Therefore, a longer period might produce different results. Next, the key terms that are directly related to the study will be defined.

1.8 List of key terms

The following terms are defined for better understanding.

The use – The act of using a CALL program.

Enhancing - Intensify, increase, or further improve the level of language competency of the proficiency learners'.

Language Performance – Action of an individual's use of English language in terms of the level of competence. This evaluates the achievement of the low proficiency learners' in the CALL program.

Low Proficiency learners – Learners' with the low degree of skill or expertise in English language learning.

1.9 Conclusions

A brief summary of the issues related to the current study, as well as the background of the study, was given in this chapter. The statement of the problem, the objective of the study, research questions, the conceptual framework of research, significance of the study, limitations of the study and key terms were illustrated as well. The second chapter covers the literature review on the development of the Face to Face (F2F) classroom learning in language teaching and learning, the development of CALL, studies on the use of CALL and review on CALL. In the third chapter, issues related to the methodology are presented. In the fourth chapter, the data analysis and the findings are presented and discussed accordingly. In the fifth chapter, a summary of the findings, conclusions and implications, as well as suggestions for further studies are presented.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In the previous chapter, preface for a study of investigating the use of a CALL program to enhance the language performance of low proficiency learners was presented. This chapter elaborates on the development of Face to Face (F2F) classroom learning in language teaching and learning from the traditional methodology to the modern methodology. Besides, the development of CALL from the pedagogical perception in language teaching and learning also applied linguistics was detailed. Studies on the use of CALL that related to developing language skills, CALL versus F2F and use of CALL courseware on English language learners were studied. Lastly, review on CALL was detailed.

2.2 Development of Face-to-Face (F2F) Classroom Learning in language teaching and learning

Earlier, the face-to-face (F2F) classroom learning in language teaching-learning was a traditional way of learning. Since, modern methodologies formed in language teaching-learning, F2F classroom learning was contemporaries, as in the present study. The F2F classroom learning usually requires the teaching-learning interface between the instructor and the learners in a situation. Therefore, larger class sizes limit the opportunity for interaction, and right individual attention students receive. The researcher has generalized these factors as well as considered the learners' language

proficiency level. Thus, an ideal small group with all low-proficiency students were attained in the F2F classroom.

At an earlier time, Kuzu Abdullah (2007) stated that learning in the F2F classroom is deeply teacher-centered. Unlike the traditional methodology, the current methodology is much more student-centered. Briefly, the students are the most active element in this process. According to Jim Scrivener (2005), the teacher is not to describe but to encourage and assist students to explore and attempt as well as make learning enjoyable. Teachers have varying abilities to perform in the class and to motivate the learners to learn. The personal philosophies and mental models of lecturers (Bain & McNaught, 2006; Steel, 2009) extremely affect the methods that instructors structure their learning settings and assist the embedded learning practises. The researcher also believed that a talented teacher can make the classroom an exciting place. The teacher need to be clear on the specific aims of any class or course, as well as the appropriate approach for the type of classroom and content presented (Jim Scrivener, 2005). Therefore, in the present study, the F2F classroom learning puts the responsibility for teaching-learning mainly on the teacher to assist students' in lesson discussion and activities based on the instructional materials provided. Though, teachers' explanation was needed for the low-proficiency learners to understand the lesson. Thus, learners could be able to use the knowledge from the source provided for the further dynamic academic activity.

In view of the present methodology principles, the student-centered interaction is highlighted, which is related to the involvement of the students in everything going on during the lesson. This shifts the teacher's role to not causing the learning but helping learning to happen. The teacher's task is to choose activities appropriate for learners from the teaching materials to direct the lessons and to encourage learners' to try with

the language. The current methodology comprises a rich variety of ways that should have some mutual structures: activities involving students and close to the real-life situations. The methods follow after each other in an appropriate order to be effective, and there should be a balance of teaching dedicated on different aspects of the language.

Previously, the philosophy of F2F classroom learning was discussed, and the fundamental aim of learning Basic English course in the F2F classroom learning in the pattern of the natural approach as a current methodology will be explained further. The primary aim of learning Basic English course is to develop individual pupils' current English usage by integrating four language skills. To achieve this aim, the instructor must utilize focused teaching technique and relate the natural approach in teaching. The natural approach is also recognized as the direct method, Richards, J.C & T.S. Rodgers (1987). In the natural approach, presentation or input is significant, rather than practice; improving emotional concentration for learning; a continued stage of attention to what the language beginners take notice of before the try to produce language; and a eagerness to practise written and other resources as a source of comprehensible input. According to K. Sampath (2001) in his book *Introduction to Education Technology* p.24:

> *'Education, what are its aims and objectives, contains learning. Learning is a modification of behaviour as a result of experience or prior activity. Human learning may occur at different levels of complexity' (K. Sampath, 2001).*

Thus, it is also a traditional way that is largely a functional procedure which focuses on skills and areas of knowledge in isolation. Language skills were given primary attention when talking about face-to-face learning. In the 1970s and 1980s, the four basic skills

were taught in isolation. However, it has recognized that we use more than one skill at a stage, leading to more integrated practices (Holden, Susan, & Mickey Rodgers, 1998). As in the present study reading comprehension, grammar and vocabulary, speaking as well as listening skills were practiced using combined practices from teaching materials to teach the Basic English course for low-proficiency learners.

We can notice another significant aspect of traditional methodology in language teaching that 'rules to be memorized and literal translation' as noted by Tharp James B. (2008) in *modern foreign languages* (p.49). Jack C. Richard (2006) states "methods that were often engaged included memorization of dialogs, question and answer exercise, replacement drills and various forms of directed speaking and writing practice," stimulated students to memorize things and not to form their new sentences and statements. White (1988) proposes that the motive for this academic approach might be reasoned by the strong influence of universities among teachers and students. White (1988) claims that the '*language-teaching conformed to the kind of academicism that the universities considered appropriate*'. The current study aimed to rectify this reason for the disparity of scores between CALL and Basic English subjects' final exam among low-proficiency students.

Since the current method is directing for something different, also the way to attain the goal has changed. As pointed out by Jack C. Richards (2006):

> *Responsiveness shifted to the knowledge and skills needed to use grammar and other aspects of language appropriately for different communicative purposes such as making requests, giving advice, making suggestions, describing wishes and needs and so on* (Jack C. Richards, 2006).

Educators' approaches, courses, and books had to be adjusted to new needs of the learners to fulfill their expectations. As in the present study, teaching materials such as slides, videos, course book and work book were used in teaching-learning the Basic English course. The teaching resources based on ELLIS research-based curriculum contain a series of lively teacher-guided, students-centered communicative activities meant to reinforce learning in listening, speaking, grammar, reading, vocabulary, pronunciation, communication, writing, and also culture.

As an alternative of memorizing grammatical rules and isolated vocabulary, F2F classroom prefers to present contextualized language and to develop the basic skills. As many professionals agree, the task given in the F2F classroom should be realistic and improve skills, not test memory. Agreeing to Jim Scrivener (2006), it is better to assign one task, let the students accomplish it, have feedback, and then assign another task, let the students read or listen to the text again, have feedback. Scrivener (2006) also points out that the tasks should be graded from the most common to the most detailed, and the students must know what the assignments are before the listening or reading itself is done. If the students do not manage to accomplish the task, the teacher should give them more time. In the Basic English course, the students are given a chance to complete the unfinished tasks as their homework because students hold their course book and workbook. Furthermore, students can become discouraged if the teacher expects them to undertake tasks that are too demanding, and tasks that are too difficult can be those not aiming where the teacher wants. Therefore, it is vital for the F2F instructor to think and choice carefully before the lesson so that the activity is useful for low-proficiency learners.

As stated by Richards (2006), current methodology reflects real life situations and which have a goal. The objective of the natural approach is for beginners and is designed to help them became intermediates, Richards, J.C & T.S. Rodgers (1987). Therefore, in the current study the Basic English courses was instructed using teaching materials that covers eight units involving real life situations: meeting people, shopping, getting around, getting together, finding a job, banking going to the bank and having fun. We can review the above-mentioned philosophies by stating that skills should be taught in a context that is close to real life conditions in which students might well find themselves, the practice should be involving and the activities should be well aimed and executed. This approach helps learners to be motivated and interested in the subject matter.

Teaching grammar in a modern way is an essential part too. Unlike the traditional way, students are advised to remember and observe conditions of good grammar presentation in the lesson scripts as an example of real life environments. As it is emphasized, the meaning should be taught before the form that may provide useful exposure to pupils' language practice. This point highlights the requirement for the students' participation and interaction. Correspondingly, teaching grammar skills for low-proficiency students in the present study emphasis on presenting comprehensible input. Instructor talk centers on objects in the classroom and the content of pictures, as with the direct method. To reduce stress, learners are not required to say anything until they feel ready, but they are expected to respond to teacher commands and questions in other ways. When learners are ready to begin talking in English, the teacher provides comprehensible language and simple response opportunities. Teaching resources serve as an important point for questions. Acquisition activities that focus on meaningful communication rather than language structure are emphasized. These techniques

recommended by Krashen & Terrel (1983) are often borrowed from other approaches and adapted to meet the requirements of Natural Approach theory.

Next, vocabulary is a critical part of learning a language. As recommended by Jim Scrivener (2006), the most common methods in modern teaching are the activities as in the workbook; match the words with the group, match the words with the definitions, brainstorm words on a set topic, split these words into two groups (e.g. food words and hobby words), label the items in a picture with the right names, complete gapped sentences with words from a list and chose the correct answer. Seeing these methods, the Basic English course at MUCH offers other ideas too: miming, drawing to indicate the meaning of a word, causing some words for a short preferably funny or personal (probably repetitive) dialogue or story, permitting the students get the meaning from the context, synonyms and opposites, crosswords, riddles. For some tough words, such as abstract items or verbs, translation is beneficial too; yet, it is preferable to elicit the translation from the students (Zemenova, 2006). These lists do not include all the methods a teacher can use in the F2F classroom.

Like all approaches, it has some positive as well as negative aspects, which are highlighted by professionals in their publications. One advantage of the traditional teaching should be stated here. As Chuda (1998) states, the very last thing a teacher does during the lesson is '*he sums up the topic and sets tasks for the next lesson'* (Chuda, 1998). We can perceive that the students always know what follows. First, the previous lesson's subject-matter is revised. The second component is a new subject matter: the instructor's explanation of it, followed by exercises as practice. The last part is revision or quiz and the assignment homework. In the current study, quite similar procedures were applied for 5 hours learning in the F2F classroom learning.

To conclude the F2F classroom learning, the aim of current methodology as the Natural Approach is to provide intensive practice of modern English to communicate. Furthermore, it consists of a great number of activities with different aims that should be balanced. Current methodology hires more contextualized information and practice similar to real life situations, which is attractive for learners. Also, suggests that one has to experiment with the language, to learn using it. On the other hand, the face-to-face classroom learning has been competing with the increasingly popular computer-assisted-language-learning classrooms ever since information technology started to improve. Thus, the present study employed F2F classroom teaching (current methodology) as a control group to investigate the use of a CALL program in enhancing the low-proficiency learners language performance in the Basic English course. Next section will further discuss on the development of the computer-assisted language learning in teaching-learning language.

2.3 Development of CALL

CALL is the abbreviation for Computer-Assisted Language Learning, and it is related to the utilization of computers for language teaching-learning. The word computer-assisted language learning (CALL) was first used in 1983. The meaning of the term is 'any process in which the student uses a computer and, as a result, improves his or her language …' (Beatty, 2003, p.7). Consequently, CALL developed over the years; there has been a general transformation in CALL, with new ideas and uses of computers being introduced.

In understanding of the above, there have been several attempts as CALL became available to a wider audience to establish a CALL typology and to document the changing phases of CALL. Sanders (1995) reflects the period from the mid-1960s to the mid-1990s, concentrating on CALL in North America. Delcloque (2000) papers the history of CALL worldwide, from its beginnings in the 1960s to the dawning of the new millennium. Davies (2005) studies CALL's past and attempts to predict where it is going. Butler-Pascoe (2011) emphases on the past of CALL from a different point of view, namely the evolution of CALL in the dual fields of second/foreign language acquisition and educational technology and the paradigm shifts experienced along the way. The development of CALL has been considered from the pedagogical perspective in language teaching and learning by many researchers. In particular, Warschauer (1996) and Warschauer & Healey (1998) attempt to interpret and analyze developments and advances in the field - phases rather than a typology.

2.3.1 The development of CALL - from the pedagogical perspective in language teaching-learning

Warschauer (2004) has analyzed the development of CALL from the pedagogical perspective in language teaching and learning in three stages. The first stage of CALL development was Structural CALL, a method used during the 1960s and 1970s that monitored the teaching techniques of structural linguistics. Accordingly, CALL mainly took the form of drill and practice programs. Though, by the end of the 1970s, such behaviouristic methods to language learning had given way to communicative approaches focusing on the meaning of language in use rather than on its form, and this was reflected in the changed nature of CALL activities.

At this first CALL phase, heavily influenced by behaviourist psychology, students accessed a mainframe computer using terminals and just answered all the exercises prompted by the computer without any teacher intervention. The learning process becomes an activity that did not involve the direct involvement of a teacher since the computer was enough. This CALL teaching paradigm is recognised as 'instructional model' (Phillips, 1987) or 'wrong-try-again' model (Underwood, 1984). Though, the initial popularity of CALL soon came to an end due to the lack of imagination and creativity in designing new and challenging activities and the high cost and maintenance of the computers.

Following a cognitive view of language learning that held that learners develop language as an internal mental system primarily through interaction, communicative CALL took the form of communicative activities performed as a way of practicing English. The content of the communication was not seen as important, nor was the learners' speech or output. Reasonably, the provision of input was seen as essential for the learners to develop their mental linguistic systems. In contrast, the present paradigm of integrative CALL is based on a socio-cognitive view of language learning.

From the socio-cognitive viewpoint, learning a second or foreign language involves apprenticing into new discourse communities. The purpose of the interaction is seen as helping students enter these new communities and familiarize themselves with new genres and discourses. In fact, it is no longer sufficient to engage in communication merely to practice language skills. Thus, task-based, project-based and content-based methods all sought to integrate learners in authentic environments, and also to integrate the various skills of language learning and use. This led to a new term, which is

integrative CALL. In the next section, applied linguistics concerned with the systematic study of CALL will be detailed.

2.3.1.1 Applied linguistics

Many belief that the field as being over technology driven at the expense of philosophy, study and pedagogy (Egbert & Hanson-Smith, 2007). Similarly, others have criticized the field for being too connected to general education rather than focusing on the unique qualities of language learning (Hubbard, 1987). In response to this numeral conceptualizations have been proposed in an attempt to describe the elements of CALL adequately or to guide the field in what the individual authors contend is a more coherent direction (Bax, 2003; Chapelle, 2001; Colpaert, 2004; Hubbard, 1996; Levy 1997; Phillips, 1985; Underwood, 1984; Warschauer & Healey, 1998; and many others). In this section, approaches and theory in the belief that it will help teachers in higher education to ground their future practice will be described.

Richards and Rodgers (1982, 1985) included approach, design and procedure within the overall idea of method, '*an umbrella term for the specification and interrelation of theory and practice'* (Richards & Rodgers, 1985) where approach refers to the beliefs and theories about language, language learning and teaching that underlie a method, design relates the theories of language and learning to the form and function of teaching materials and activities in the classroom; and procedure concerns the techniques and practices engaged in the classroom as consequences of particular methods and designs. Pedagogic approaches are typically learned by both a theory of language and a theory of language learning.

a) The direct method

The basic principle of the Direct Method was that one should try to learn a second language in much the same way as children learn their first language. The method emphasized oral interaction, spontaneous use of language, no translation between first and second languages, and little or no analysis of grammar rules.

Richards and Rodgers (2001) summarized the philosophies of the Direct Method as, Classroom instruction was showed completely in the target language; Only everyday vocabulary and sentences were educated; Oral communication skills were built up in a wisely graded development organized around questions-and-answer interactions between teachers and students in small intensive classes; Grammar was taught inductively; New teaching points were taught through modeling and practice; Concrete vocabulary was taught through demonstration, objects, pictures; Abstract vocabulary was taught through association of ideas; Both speech and listening comprehension were taught; Correct pronunciation and grammar were emphasized. Decoo (2014) recognizes as its weakness the lack of insight into the reality of the classroom situation for most learners, in its aspiration to a mastery of the language that few could achieve. Numerous elements of the Direct Method scheduled above will be familiar to teachers in Higher Education, which, still, now comprises more language use tailored to the needs and experiences of the students, and also a return to 'focus on form' (language structures).

Decoo (200l), makes the significant point that new methods may succeed initially when introduced by skilled and enthusiastic teachers or personalities and are delivered in experimental or well-financed situations with well behaved, responsive and motivated students and small classes. Problems arise, however when attempts are made to widen

such methods out to less ideal conditions, with large classes, little motivation and discipline issues. Nevertheless, such methods may continue to thrive in privileged circumstances with motivated teachers, as has been the case with the Silent Way or Suggestopedia, which continue to find supporters throughout the world.

If 'Method' contains a particular set of features to be followed almost as a solution, it can be suggested that we are now in a 'Post-Method' era where the emphasis is on the looser concept of 'Approach' which starts from some basic principles which are then developed in the design and development of practice. The Natural approach will be detailed in the next section.

b) The natural approach

The Natural Approach, with repeats of the 'naturalistic' feature of the Direct Method, was established by Krashen and Terrell (1983). It highlighted 'Comprehensible Input', distinguishing between 'acquisition' – a natural unintentional practise, and 'learning' – a conscious practise. They claimed that learning cannot lead to gaining. The emphasis is on meaning, not form (structure, grammar). The objective is to converse with speakers of the target language. Furthermore The Natural Approach is for beginners and is designed to help them become intermediates. It has the expectations that students will be able to function adequately in the target situation. Similarly, CALL (ELLIS) lessons follows Watch – Learn – Practice – Play/Perform instructional design that describes the natural process. However, since the Natural Approach is offered as a general set of principles applicable to a wide variety of situations, as in Communicative Language Teaching, specific objectives depend upon learner needs and the skill (reading, writing, listening, or speaking) and level being taught.

In the Natural Approach, there is an emphasis on exposure, or input, rather than practice; optimizing emotional preparedness for learning; a prolonged period of attention to what the language learners hear before they try to produce language; and a willingness to use written and other materials as a source of comprehensible input. The emphasis on the central role of comprehension in the Natural Approach links it to other comprehension-based approaches in language teaching.

Krashen reviews the input hypothesis thus:

> *We acquire language in an amazingly simple way – when we understand messages. We have tried everything else – learning grammar rules, memorizing vocabulary, using expensive machinery, forms of group therapy, etc. What has escaped us all these years, however, is the one essential ingredient: comprehensible input (Krashen, 1985).*

The Input Hypothesis claims to explain the relationship between what the learner is exposed to of a language (the input) and language acquisition. It involves four main issues. First, the hypothesis relates to acquisition, and not to learning. Second, people acquire language best by understanding input that is slightly beyond their current level of competence: An acquirer can shift from a stage 1 (where 1 is the acquirer's level of competence) to a stage I + 1 (where I + 1 is the stage immediately following 1 along some natural order) by understanding language containing I + 1 (Krashen and Terrell 1983). Clues based on the situation and the context, extra-linguistic information and knowledge of the world make comprehension possible. Third, the ability to speak fluently cannot be taught directly; rather, it "emerges" independently in time, after the acquirer has built up linguistic competence by understanding the input. Fourth, if there

is a sufficient quantity of comprehensible input, I + 1 will usually be provided automatically. Comprehensible input refers to utterances that the learner understands based on the context in which they are used as well as the language in which they are phrased. When a speaker uses language so that the acquirer understands the message, the speaker "casts a net" of structure around the acquirer's current level of competence, and this will include many instances of I + 1. Thus, input need not be finely tuned to a learner's current level of linguistic competence, and in fact cannot be so finely tuned in a language class, where learners will be at many different levels of competence.

Types of learning and teaching activities from the beginning of a class taught according to the Natural Approach, the emphasis is on presenting comprehensible input in the target language. Learning activities in CALL (ELLIS) is clearly features in ***3.7.3.1 Treatment***. Techniques recommended by Krashen and Terrell (1983) are often borrowed from other methods and adapted to meet the requirements of Natural Approach theory. These include command-based activities from Total Physical Response; Direct Method activities in which mime, gesture, and context are used to elicit questions and answers; and even situation- based practice of structures and patterns. Group-work activities are often identical to those used in Communicative Language Teaching, where sharing the information in order to complete a task is emphasized. There is nothing novel about the procedures and techniques advocated for use with the Natural Approach. A casual observer might not be aware of the philosophy underlying the classroom techniques he or she observes. What characterizes the Natural Approach is the use of familiar techniques within the framework of a method that focuses on providing comprehensible input as in a classroom environment that cues comprehension of input, minimizes learner anxiety, and maximizes learner self-

confidence. The communicative language teaching approach will be discussed in the next section.

c) Communicative language teaching

Influenced by Krashen, methods occurred during the 1980s and 1990s which focussed on the communicative functions of language. Classrooms were categorised by tries to ensure the authenticity of resources and meaningful tasks. Communicative Language Teaching (CLT) developed as the standard in a second language and immersion teaching. As an extensive approach, there are any number of meanings and clarifications, but the following connected features presented by Brown (2001) offer a valuable overview.

Classroom goals are focused on all of the components (grammatical, discourse, functional, sociolinguistic, and strategic) of communicative competence. Objectives therefore must intertwine the organizational aspects of language with the pragmatic. Language techniques are designed to engage learners in the pragmatic, authentic, functional use of language for meaningful purposes. Organizational language forms are not the central focus, but rather aspects of language that enable the learner to accomplish those purposes. Fluency and accuracy are seen as complementary principles underlying communicative techniques. At times, fluency may have to take on more importance than accuracy in order to keep learners meaningfully engaged in language use.

Students in a communicative class ultimately have to use the language, productively and receptively, in unrehearsed contexts outside the classroom. Classroom tasks must,

therefore, equip students with the skills necessary for communication in those contexts. Students are given opportunities to focus on their learning process through an understanding of their styles of learning and the development of appropriate strategies for autonomous learning. The role of the teacher is that of facilitator and guide, not an all-knowing best over of knowledge. Students are, therefore, encouraged to construct meaning through genuine linguistic interaction with others.

The communicative approach was developed mainly in the context of English Second Language (ESL) teaching. The question must be asked, however, how universal can its application be? Decoo (2014) points out that one can relatively easily reach a fair level of communication in English, which has a relatively simple morphology (e.g. simple plurals with‘s’, no adjectival agreement, no gender markers, etc). Neither is mastery of the highly irregular orthography of English a priority in an oral communication approach.

d) Constructivism

Pedagogical approaches have developed, including the direct method, the natural approach and the communicative approaches outlined above. Others include constructivism, whole language theory and socio-cultural theory while they are not exclusively theories of language learning. With constructivism, students are active participants in a task in which they “construct” new knowledge based on experience in order to incorporate new ideas into their already-established scheme of knowledge. Entire language theory assumes that language learning (either native or second language) moves from the whole to the part; rather than building sub-skills like grammar to lead toward higher abilities like reading comprehension, whole language

insists the opposite is the way we actually learn to use language. Students learn grammar and other sub-skills by making intelligent guesses bases on the input they have experienced. It also promotes that the four skills (reading, writing, listening and speaking) are interrelated, Littlemore J. (2001).

The socio-cultural theory states that learning is a development of becoming part of the desired community and learning that communities rules of behavior. Chen (2003) claims that constructivist approaches to teaching-learning have developed from the work of Bruner, Piaget, and Vygotsky; however, they split into two main strands - cognitive constructivism and social constructivism, which share common perspectives but differ in what they emphasize.

Constructivism is a theory and as such is open to review as differing little from common sense empiricist views, or as providing misleading and incomplete views of human learning (Fox, 2001). An overly enthusiastic endorsement of constructivism might reduce the teacher's role to that of a facilitator, with the students in 'discovery mode'. This is unlikely to be wholly satisfactory in Higher Education, either for teachers or learners, and an element of constructivism is to be predictable. However, Fox (2001) recognises that "the greatest insight of constructivism is perhaps the realisation of the difference made by a learner's existing knowledge and values to what is learned next, both in facilitating and inhibiting it.

Jonassen (1994) review the constructivist learning environments as providing multiple representations of reality. Next, they emphasize knowledge construction inserted of knowledge reproduction. Thirdly, they highlight authentic tasks in a meaningful context rather than abstract instruction out of context. Fourthly, they deliver learning

environments such as real-world settings or case-based learning instead of predetermined sequences of instruction. Fifthly, they encourage thoughtful reflection on experience. Sixthly, they enable context-content dependent knowledge development. Lastly, they support collaborative construction of knowledge concluded social negotiation, not competition among learners for recognition.

What most of these methods have in common is taking the dominant focus away from the teacher as conveyer of knowledge to giving learners learning experiences that are as realistic as possible where they play a central role. Also, these approaches tend to emphasize fluency over accuracy to allow students to take risks in using more student-centred activities and to cooperate, rather than compete. The computer provides an opportunity for students to be less dependent on a teacher and have more freedom to experiment on their own with natural language is natural or semi-natural settings.

However, Egbert and Hanson-Smith claim that ‘educators do not need a discrete theory of CALL to comprehend the role of technology in the classroom; a definite theory of SLA and its implications for the learning environment serves this goal’ (Egbert & Hanson-Smith, 2007). Whether or not theories developing from a CALL view would be of value remains an open question, but to date little progress has been made in that direction. Therefore, a review on CALL theories emerged researcher to adopt LEPO conceptual framework presented by Phillips, R. A., McNaught, C., & Kennedy, G. (2010) for this study. Next, CALL research on the use will be described.

2.4 Studies on the use of CALL

Although development and practice have driven much of CALL, research has also played an important role. Early CALL investigation often focused on attempting to demonstrate the superiority of using computers over traditional language teaching, as the numbers of researchers have noted that this comparative approach is repeatedly leading to 'no significant difference' result (see Dunkel (1991) and Pederson (1987) for reviews). In addition, Conrad (1996) records that since the mid-1980s, CALI effectiveness research has shifted to the comparison between different types of CALI programs, instead of comparing CALI with traditional teaching. Hence, only a few studies on the relative use of CALI vs. Non-CALI were accessible. Although some studies have continued to relate the CALL vs. no-technology options, as the current study that is significant for MUCH to compare CALL vs. non-call. Many studies, in this case, are based on experimental studies due to the nature of the area i.e. development of new technological/educational devices that are used for teaching and learning. Thus, this kind of study is common, still existing and broad. Perhaps, this is the first study conducted by the English unit to investigate the use of a CALL program and to be promoted to other branches.

Furthermore, Noriko Nagata (1996) highlights that when it drives to utilizing computers for second language instruction, the question of whether and when computer programs can be more effective than traditional non-computer instruction is still a primary question to be addressed. The researcher also noted that the F2F classroom learning with the natural approach in the present study is different from the traditional classroom learning. Since, the quality of teaching English with a computer program has been greatly dedicated; the use of the method for teaching the low-proficiency students may

be revealed in the present study and could contribute to the evaluation of CALL research field. Next section will further discuss the use of CALL program in developing language skills.

2.4.1 The use of CALL program in developing language skills

A number of studies focus either on the achievement of language skills such as speaking, listening, writing and reading (Garrett, 1998) or on motivation (Skinner & Austin, 1999; Rico Garcia & Arias, 2000). Concerning grammar instruction, while some studies find a significant advantage of these techniques, others find no significant difference between CALL and other teaching methods. In this section, we look at some of the choices in using computers in teaching practices and research on the use of CALL courseware programs to help students develop oral skills, literacy and underlying language knowledge.

2.4.1.1 Listening and speaking

Adding sound to computers in the 1980s carried listening away from the linear tape and allowed the blending of onscreen graphics and text, leading to multimedia environments. Digitized communication and video offer larger control for the listener, besides the addition of technologies for associate meaning, such as L1 and L2 captions, glosses and instructive notes can improve both immediate comprehension and acquisition (Borrás & Lafayette, 1994).

Until recently, speaking exercise in a CALL situation has mainly been of two types: pairs or groups of students contact to one another as they sit in front of a computer

involved in a task, or different students using the computer to record their voice, often in the context of pre-determined dialogues. However, these applications are far from the kinds of experiences found in typical face-to-face interactions. These forms are available in ELLIS program though, the low-proficiency learners were least interested. Robin (2007) observed ‘the boundary in language learning and technology will not be initiated in what program does what better, but somewhat which students use the ordinary technology to best facilitate their learning in their styles.' Therefore, targeted skills and exercises needed for improvement for low-proficiency students to find learning as effective as a typical classroom.

2.4.1.2 Reading

Reading activities have occurred on the computer as the early days of the field, but until the 1990s carried crisp black on white monitors into widespread use, there were concerns about the efficiency and transferability of skills for reading on screen. Initial on, it was documented that computer programs could assist reading development in at least three ways: by controlling what the readers saw and how long they saw it in order to promote reading strategies and automaticity, by providing comprehension and other exercises, and by presenting glosses and other comprehension aids, which is similar to ELLIS.

Chun (2006) offers a review of CALL reading research from Grabe (2004) that have emerged from text-based reading research and concerned with the learning of vocabulary. Chun (2006) has noted a number of zones in development, ‘promote broad reading; form reading fluency and rate; improve intrinsic motivation for reading, and contribute to a comprehensible curriculum for student learning.' Clearly, there is an

opportunity for improvement since further reading changes naturally from paper to digital form, especially since reading itself is changing due to the increasingly common embedding of hypertext links and multimedia.

2.4.1.3 Grammar and vocabulary

Initial disk-based CALL programs focused on grammar or vocabulary development, not so much because that represented the state of the art language teaching at the time but since such submissions were comparatively easy to program on computers. Today, authoring systems such as ELLIS from the publisher have made it easy for language teachers to build their grammar exercises using multiple choices, gaped sentences and matching formats. Such practices foster grammar awareness. CALL (Intelligent CALL) curriculums have been shown to be effective in assisting grammar learning when used with particular structures so that the range of errors can be anticipated, and the feedback appropriately targeted (Nagata, 1993).

Looking at the current situation, vocabulary is still one of the most mutual applications, partly because it holds such high face value for language learners and partly because it involves the manipulation of discrete items (words, definitions, translations, etc.) and is, therefore, easy to manage. In the next section, comparative studies on CALL vs. F2F will be detailed.

2.4.2 CALL vs. F2F

Chen (2005) measured the effect of regular class instruction with or without a computer on the acquisition of parts of speech such as nouns, articles, pronouns, verbs, adjectives,

adverbs, prepositions, direction and subordination by 2 sets of Taiwanese EFL learners. After 16-hours teaching, both groups were requested to produce a written description. The dependent variable under consideration was the number of errors produced in each group and for each category of errors. Inclusively, there was no difference between the control and the experimental groups statistically. Though, the experimental group achieved better in the error categories of nouns and prepositions while the control group beaten the experimental group for the error types of lexicon and subject omission. The researcher failed to provide research supporting those findings. Joy & Garcia (2000) stressed "much of the literature in the field of instructional technology reasons to have found no important difference in learning helpfulness between technology-based and conventional delivery media" (p. 33).

Most of the studies comparing CALL with a more traditional face-to- face approach have done in academic settings looks at what might be better and has shown no significant difference between the two modalities. Computer-assisted-language-learning is one of the most exciting enhancements to contemporary education. As with any instructional method, the quality of CALL courses varies, but the potential, often met and still expanding, as well as on parity with F2F. Aragon (2002) investigated the students' success and reported comparable success for both learning types. Similarly, Piccoli (2001) showed that learning performance is comparable between the students utilizing technology-assisted learning and those learning from face-to-face instructions.

In a research, Murray (1999) focused on the effectiveness of interactive video program and stressed the importance of experimental learning. Thus, the F2F classroom learning as the experiential learning assumes an interactive nature of learning through experience (Osland, 2001). According to Osland (2001) technology-assisted learning may be less

effective for some aspects of language skills. For instance in face to face classroom learning, by engaging in live speaking drills or role plays, learners can recognize their speaking problems directly that enables them to reflect on enhancement and develop their language abilities for similar scenarios in the future.

Though, multiple investigation combination have demonstrated the efficacy of computers for second language learning (Felix, 2005; Liu, Moore, Graham, & Lee, 2002; Zhao, 2003), with studies indicating that computer technologies may help students to not merely improve language skills, but also improve problem-solving skills and become more creative when associated with students who do not obtain any instruction (Liu, 2002; Marcos, 2001; Sun & Wang, 2003; Weatherford, 1986).

For example, a positive influence of CALL has been established by Nutta (1998) investigating the effect of computer-based instruction compared to teacher-directed teaching on the success of English as a second language. In her study, computer-based instruction students obtained better scores than teacher-directed students. The results guided the researcher to achieve that computer-based teaching can be an effective technique of teaching L2 grammar.

Additionally, Ansel & Jacker (1992) and Hartoyo (2006) studied that the technology assisted learning may better support aspects of language learning pertinent to vocabulary, reading, or grammar because of the convenient access it offers to learn materials that students may study repetitively at their preferred time and pace. Furthermore, the CALL program is dissimilar from traditional books that can be carried around and studied anywhere and when they wish: on a train, at home, in the middle of

the night, and so on (Ansel, 1992; Hartoyo, 2006). Mayer (2003) also believed that the technology-assisted learning can aid certain teaching approaches better than others.

Intentionally, lots of CALL programs are presently available on the internet, at prices ranging from free to expensive and other programs are available only through university language courses. Thus, the present study examined the use of a CALL program in enhancing the low proficiency learners' language performance.

2.4.3 Use of a CALL courseware on English language learners

Numeral high-end packages have been planned to come as close as potential to meeting those requests in terms of English language teaching, and these contain CALI'S Ellis. (Mark Warschauer & Deborah Healay, 1998). What differentiate this program from many other multimedia programs is that they comprise a curriculum, not just distinct basics for practice. The quality of the curriculum and its significance to the target learners is a matter for each institution to determine as each of the packages is intended with a somewhat different group of learners in mind. ELLIS has modules for five different proficiency groups, whereas, the current study used Intro Level for the low proficiency students.

Another similarity in the high-cost products is their comparative immutability. There is slight or no facility for teacher-customized content. After all, it would be problematic to incorporate teacher-generated lessons into a static curriculum. Certain programs have teacher's guides and recommend methods to include the lessons into a regular classroom, but the hypothesis is that learners will tend to work through the computer-based curriculum individually of what goes on in the classroom. The furthermost stand-

alone of these similarly tend to be the least open-ended in the activities they deliver; a human teacher is desirable to assess free responses, where they arise.

Besides, some software programs compromise exercise in a range of skills but without general management systems or rigid syllabuses. Most believe the student, frequently with the assistance of a tutor, to choose what skills to work on and what media to use. These can range from comprehensive to limited, very expensive to quite affordable. The ELLIS product, in particular, offers extensive teachers' manuals to help teachers to incorporate the software into their classroom. This product has some record-keeping though not as extensive as that of the most expensive system. However, how useful this is being implemented with a facilitator in 8 weeks course is significant in the present study.

Miriam Resendez & Mariam Azin (2009) conducted a study on the effects of ELLIS Essentials on English language learners. Planning, Research, and Evaluation Services (PRES Associates), an external, self-governing, educational research stable with over 20 years of experience in applied educational research and evaluation conducted this one-year study to study the effects of the ELLIS Essentials program on the English language skills of ELL learners. This randomized control trial (RCT) was directed during the 2008-2009 school year across three schools. Two schools located in metropolitan areas in Arizona had high proportions of ELL students, and a third school located in a suburban area in Utah had a rapidly growing population of ELL students. Students identified by the schools as ELL students were randomly assigned to treatment and control conditions within classes. Treatment learners used ELLIS Essentials as an addition to their main ELD teaching. "Control" conditions against which ELLIS users were compared consisted of three types. Exactly, ELLIS users were compared to control

students who: used a unlike supplemental computer-based instructional tool(s); learners who contributed in non-computer based classroom instructional activities whereas the ELLIS learners used the program; or learners who expected nothing supplemental above and outside the regular main ELD program used at the school, treatment learners who used ELLIS driven on the program before school. The concluding tester involved of 128 students (67 control; 61 treatment).

Outcomes associating performance among treatment and control learners did not demonstrate any important nor reliable patterns among subgroups in terms of gender and English ability level. Though, the pattern did arise (although not important) in which ELLIS learners at each grade level (3rd, 4th, and 5th) achieved better than control learners in the area of reading. Furthermore, reliable patterns were detected in the performance of treatment learners presented to ELLIS as compared to control learners who were exposed to other instructional situations. Precisely, ELLIS learners improved compared to control learners who used other computer-based programs through all five subtests – while such results were not significant, the patterns were reliable. Likewise, ELLIS learners did better than control students who received no supplemental instruction through all subtests with the exclusion of the MACII Listening subtest. In contrast, ELLIS learners did not tend to achieve better than control learners who expected non-computer based regular classroom instruction during the same period.

The primary attention of the ELLIS Essentials program is to advance students' English language skills, the program comprises computer-based communicating activities that are intended to involve learners as they learn. As such, measures were comprised in the RCT to explore whether the use of the ELLIS Essentials was related with changes in learner attitudes to English language learning as well as changes in instructor practices

and attitudes. Outcomes showed that ELLIS learners stated significantly greater satisfaction for learning English and motivation to learn English than control learners. Moreover, while not statistically significant, ELLIS students tended to appreciate computers more than control students as measured by the post-survey and contributing instructors described more ease and greater acceptance of the role of technology in education.

In overall, treatment learners liked using the ELLIS Essentials program over the course of the school year. Teachers also liked ELLIS Essentials, and many commented that they looked forward to the upcoming school year when all of their English language learners would have an opportunity to use it. Teachers also noted that ELLIS Essentials could be easily integrated into their ELD instruction and was useful for monitoring their students' language skills. For the most part, teachers felt that the Instructor's Utilities used to access class test and quiz reports, as well as information on lesson completion, was easy to navigate through and user-friendly. Teachers also liked the thematic approach used by ELLIS Essentials. Teachers felt that the program was well organized and that the sequence of the lessons provided an excellent flow from one lesson to the following. They also noted that the instant feedback, repetitive quizzes and testing that arises during the program was supportive for learners since it allowed them to monitor their understanding. In sum, teachers felt that the supplemental ELLIS Essentials program was beneficial and helped them meet the unique needs of their English language learners. In sum, results from this RCT show that students who used the ELLIS Essentials program performed significantly better than control students in reading. In addition, the reliable patterns perceived in the supplementary subtests of writing, speaking, and listening, as well as the state assessment outcomes, all gives

support to the inference that ELLIS Essentials is a useful program that aids elementary learners develop their English language skills.

2.4.3.1 Use of CALL on low-proficiency learners

Nowadays, CALL is gaining immense popularity in language teaching; yet, applying CALL in teaching also has some effects depending on the learners' proficiency level. Many researchers have tried to identify the problems faced by the low English proficiency language learners by studying their theoretical performance in tests, examinations, or learning tasks. Studies initiated that significant changes lie inability (Skehan, 1998), learning strategies (Abraham & Vann, 1987; Gan, Humphreys & Hamplyons, 2004; Green & Oxford, 1995; Oxford, 1990; Wen & Johnson, 1997), philosophies (Huang & Tsai, 2003) and learning activities.

For example, the behaviours of underachievers have some features. They lack good learning approach, motivation, or persistence. In a class, they want more personal care, take longer period to finish a learning assignment, frequently miss class or join class late, and repeatedly delay or do not submit homework tasks (Chang, Chiu & Lee, 2000; McLaughlin & Vacha, 1992; Slavin, 1989). Furthermore, those incorrect or uneducated opinions about language learning may lead to dependence on less active approaches, causing in insignificance toward learning, poor cognitive performance, classroom anxiety (Horwitz, 1986) and a negative attitude to autonomy (Victori & Lockhart, 1995, p. 225).

Furthermore, the inability to use the English language learning strategies is also common among the low-proficiency students. Ho (1999) surveyed the learners of a

technical college in Taiwan and found that there occur significant differences between capable and less capable learners in their use of English learning strategies. Chen and Huang (2003) made a similar comparison, and the results showed that the learners with high English proficiency stated higher frequency in language learning strategy use than did the low English proficiency learners.

As learning is a socially bound activity, two studies shed more light on the issue by focusing on Chinese EFL students. Huang & Tsai (2003) measured and interviewed 89 senior high school learners in central Taiwan to relate the high and the low English proficiency learners' opinions. They revealed that the low proficiency learners thought that they needed the special capabilities to learn English well, learning English was really tough; translation was a significant skill to aid them grasps the meanings of English texts that they were not able to express any English to communicate with others.

In one more research Gan, Humphreys & Hamplyons (2004) observed the students' attitude, approaches, and motivation by engaging 18 college students from China, through interviews and diaries to differentiate among successful and unsuccessful EFL students. They found that unsuccessful learners often put importance on vocabulary and grammar. These learners have a deep-seated confidence that the simple vocabulary must be learned before any other learning activity could take place. Moreover, the learners practised a sense of learning weakness and loss of sureness. As for strategies, unsuccessful students did not take any measure to strengthen their vocabulary or use cognitive approaches to preview and comprehend a lesson. The study also keens that these learners wanted self-management ability to complete the lesson and the resourcefulness to improve their English through their efforts. Finally, due to their

passive and unsatisfied learning process, the unsuccessful learners had nearly no motivational experiences to keep them moving on in learning. Khaldieh (2000) also highlighted that learning methods can effect performance on a task.

Further, the connection between the language learning strategies and the students' proficiency level is far clearer. More capable language learners use a better variety and frequently a large number of learning methods (Anderson, 2005; Bruen, 2001; Chamot & El-Dinary, 1999; Green & Oxford, 1995; O'Malley & Chamot, 1990; Wharton, 2000). Dissimilarities between more and less proficient language learners have been found in the number and variety of methods used, in how the criteria are applied to the task, and in the suitability of the procedures for the task. Therefore, the present study will try to explore from the student's opinion if there are any weaknesses in using the ELLIS programs strategies.

Mayer (2003) said that technology-assisted learning can facilitate certain teaching methods better than others, which means that the appropriate question to ask is not simply whether technology-assisted learning is better than face-to-face learning but rather which aspects of technology-assisted learning benefit which kinds of learners in acquiring which types of knowledge. Thus, it is important to utilize the suitable program for the students' level. If it is not correct for their level, the activity cannot be prevented from becoming a chaos of uncertainty (Higgins, 1988). Relating to the (Higgins, 1988) study, the lesson aspect of ELLIS suits the low proficiency students in several ways. First, it simplifies the learning process. As Huang & Tsai's (2003) research showed, the low proficiency students usually perceive English as difficult. Though, ELLIS exercises can make it seem easier. Secondly, the exercises are particularly useful for reinforcing vocabulary and grammar which unsuccessful learners

believe they must enhance (Gan, Humphreys & Hamplyons, 2004). Thirdly, low proficiency learners are not capable of utilizing language learning strategies (Chen & Huang, 2003) and doing ELLIS exercises helps them develop some of the strategies, including memory, cognitive and compensation plans. Most notably, involved on the computer can improve students' academic performance which is critical to their self-efficacy and motivation to learn.

On the other hand, the concern here is a simplistic approach to interject new technology blindly into the classroom without thoughtfully matching student learning problems with appropriate technology use (Bush, 2008). As Cohen's (2001) study shows that the learning medium leads to different learning preferences. The learner's preference was significant to circumvent inadequate results for the study to find whether the CALL-ELLIS program enhanced the low proficiency students' language learning performance. Newby (2002) also observed that higher anxiety among the students in open laboratories than those in closed laboratories and attributes the difference to the relative perceived the availability of instructors. In other words, today's computer technology and its language learning programs are not yet intelligent enough to be truly interactive to suit all level of learners. Next, studies on the use of CALL will be reviewed based on support for learners and learner control aspects.

2.5 Reviews on CALL

Many studies have attempted to review the Computer-Assisted-Language-Learning (CALL) on active learning. Learning is a social activity. Language learning can be done without being accompanied by a real teacher. Whereby, a computer can act as if it is a teacher. On the other hand, many teachers conduct the teaching-learning process

through a computer as a medium. Even, computers can be a good medium to help the students learn English in an easy and enjoyable way. Still, there are some positive and negative perceptions of utilizing the computer in the language learning process from the learners point of view. Therefore, the researcher has identified the use of CALL in view of support for learners and learner control.

2.5.1 Support for learners

There are recent studies reveal that CBL serves to establish more effective learning situations than traditional teaching methods which involve teacher presentation, question and answer techniques, and discussions (Ragasa, 2008). The use of the computer in conjunction with effective teaching strategies has great potential in the teaching and learning process (Hoon, Chong & Azilah, 2010). Using computers to help students to learn through the use of courseware is becoming common in Malaysia. CBL in Malaysia has emerged as an instructional technology with the potential to overcome the limitations of traditional media in supporting the prospect to provide learning environments with strong visual elements (Nordilah, 2010).

Nevertheless, it is not to replace traditional educational methods which are usually carried out by chalk and talk (Nordin & Fatimah, 2011). Even though CBL is being implemented, teachers still remain central to the teaching and learning process (Martin, Khaemba & Chris, 2011). At the end of the last century, the opinion that technologies will replace teachers in the future was common. However, the time has proven that the role of the teacher cannot be played by any computer or any form of artificial intelligence. Warschauer (2004) stated that information and communication technologies had caused a societal change. Thus, it can be concluded

that a teacher who cannot or does not use technologies nowadays cannot progress in teaching. In the current study, the task is not to utilize technologies but to utilize them wisely, purposefully, and creatively. The role of the teacher in the present study as a facilitator is marked as a 'guide'. Hence, her role is to show the learners that learning can be a useful, funny, and interesting activity. Therefore, the teacher can be a powerful, inspiring part of the learning process; she can teach the learners the academic satisfaction of obtaining new knowledge.

However, the world of information is too complicated and cannot be managed without prior instruction. Despite the fact that CALL is blamed for killing the creativity of the learners, it is often stressed by the authors that the teacher's role is to support it. As Pimienta (2002) suggests, the main role of the teacher is to teach how to use the resources combined with their skills and knowledge to create their impact on the world in collaboration with the class. A stand-alone CALL program was used in the CALL environment in the present study, whereby the role of a teacher is a facilitator in the lab. Hence, the CALL (ELLIS) facilitator will only assist the students to follow the right procedure to follow-up in the lab and report to technicians if there were any technical problems.

Furthermore, teachers have varying abilities to perform in class and inspire students to learn. The personal beliefs and mental models of lecturers (Bain & McNaught, 2006; Steel, 2009) strongly influence the ways that teachers structure their learning settings and facilitate the implanted learning processes. Technology can improve learning, however, "technology in and of itself does not encourage learning" (Burge & Roberts, 1993, p. 35), its use does not remove the educator's duty of structuring the learning to confirm these assistances result.

According to Lee (2010), the courseware constructed in her research showed a positive effect on students. She claims that CBL improves students' attitudes, motivation and academic achievement. In addition, the study conducted by Janier, Afza & Wan Fatimah (2008) also receives a positive feedback too. The reason for this is that the CBL enables the students to progress at their own pace and provides them with appropriate alternative ways of learning by individualizing the learning process (Hoon, Chong & Azilah, 2010; Ong & Ruthven, 2010; Mudiana, et al., 2011).

2.5.2 Learner control

The 'learner-centred approach' is taken for granted in language pedagogy in CALL. However, recently an opinion has been expressed that teaching-learning will be 'technology centred.' The learners will naturally use technologies in language learning that is essential for establishing the conditions that allow students to manage and control their learning process as stated by Horvathova (2011). On the other hand, Holubekova & Nemcokova (2007) concluded that teaching learners how to be autonomous is a long-lasting and complicated process.

Learner control has been found to stimulate achievement and improve attitudes and motivation (Kinzie, 1990; Kinzie & Berdel, 1990; Lepper, 1985; Pollock & Sullivan, 1990). Kohn (1993) noted that learner control improved self-attribution, achievement, and behaviour. On the other hand, learners have also proved poor judges of their learning needs, often seeking information that is not needed or terminating lessons prematurely (Hannafin, 1984). Linear lessons and all program-controlled instruction are fundamentally planned. The nature of the structure either limits or manages individual variability. Linear structures provide no opportunity for students to engage selectively

in activities deemed uniquely appropriate, emphasizing as a replacement for activities thought to be of greatest value to all. Highly structured environments are likely to be especially limiting for high-ability and high prior-knowledge students (Hannafin et al., 1996).

Moreover, varying learner control often accommodates differences in learner preferences, knowledge, and styles. In cases of optimal learner control, students individually identify what they will study and seek and revisit lesson segments as they evolve new representations. Doing so involves exploring learning environments many times and from many different perspectives (Spiro, Feltovich, Jacobson & Coulson, 1991).

In addition, hypermedia is nonlinear and presents information in graphic, sound, animation and other forms of information transfer in CALL. Research studies in this area of CBI are in the formation stage (Thompson et al., 1993). Preliminary research indicates that the interactivity afforded by hypermedia environments may positively influence student learning. Hypermedia is an enabling environment that provides high levels of learner control, offers a new way to learn course content, and offers challenges in learning how to learn (Thompson et al., 1993).

The issue of learner control appears to be particularly relevant in the design of hypermedia learning environments (McKnight, Dillon, & Richardson, 1996). However, hypermedia represents two critical problems for designers: (1) many students may have difficulty navigating in hypermedia environments (Park & Hannafin, 1993) and (2)

when given unaided access to information, students may experience difficulties locating and linking information to build meaningful cognitive structures (Hannafin et al., 1996).

Another weakness of hypermedia learning environments is disorientation of the learner. Marchionini (1988), Heller (1990) and Morariu (1988) recommend that learners must be delivered with suitable and perfect navigational and conceptual tools in order to discover the best design system, whether it is by a comprehensive index or a cognitive map. CALL (ELLIS) program has given a suggested sequence for activity completion to direct the learners'. Thompson & colleagues (1993) argue that organizers and cognitive maps could provide too much structure and inhibit the discovery atmosphere of the nonlinear hypermedia environment.

Besides, orientation has evolved a different connotation in the study of hypermedia. Orientation is viewed as an individual's awareness of his or her location within a hypermedia system and the individual's capacity to respond meaningfully given these perceptions. The idea of incomprehension, or of being lost in hyperspace (Edwards & Hardman, 1989), has been used to describe the lost state where users find themselves incapable to decide where they are or what to do. Incomprehension, in the result, is the product of insufficient initial orientation to the system and inadequate ongoing guidance in the environment and use of the system (Hannafin et al., 1996).

Hannafin and his colleagues (1996) argue that the issue with computer research should be how to best utilize computers to redefine, support, or compliment teaching and or learning efforts rather than if computers are effective in promoting learning. Learners often experience difficulty accessing vital lesson content due to poorly integrated knowledge. Some are easily disoriented because of the lesson structure while others are

unable to deal with the cognitive demands associated with increased decision making in hypermedia learning environments (Jonassen, 1989).

Sometimes the problem is the approach the courseware is implemented for teaching-learning (Bortolossi, 2012). Further, it is necessary to study the courseware whether it meets the needs before implementation (Mutalib, 2008). Next, the disparity in Call learning environment will be detailed.

2.5.2.1 Disparity in learning

The disparity in learning is the difference in the learning result, or efficacy, experienced by students coming from different groups. Riding and Rayner (1998) argue that a learners' personal style constitutes a combination of learners' cognitive style and learning strategies, signifying that the two elements are conceptually related. Dornyei (2005) supports this theory, arguing that cognitive style and learning strategies "both signify particular ways learners go about carrying out learning tasks". Riding (2002), cited in Dornyei (2005) argues that methods are practically stable, while strategies can be educated and developed by learners when trying a task.

Moreover, as Cohen (2001) indicates: What is becoming ever clearer is that there is a significant relation between the style preference that students have and the language learning ... strategies that they choose in order to complete language tasks. Moreover, Riding & Sadler-Smith (1997) cited in Riding & Rayner (1998) suggest that '*personalities may not be able to modify their styles but they can improve strategies to make themselves as successful as possible in a given learning condition*'.

Ford directed three comparatively small but rigorous experimental studies of matching and mismatching (Ford, 1985; Ford, 1995; Ford & Chen, 2001) and decided on each case that matching was related with enhanced performance. His most new study, still, recommends that the effects of matching and mismatching '*may not be simple, and may entail difficult communications with other factors such as gender, and different forms of learning*' (Ford & Chen, 2001).

Entwistle (2002) add one more factor that is frequently neglected by the learning theorists: subject matter. Roberts and Newton (2001) added to this debate by arguing that learning is so complex that it is unlikely to be captured by any set of learning style dichotomies. In particular, they contend that we still do not know how adults discover new learning strategies or how they choose between strategies. Hayes & Allinson also make the point that, even if matching is improving performance, '*it will do nothing to help prepare the learner for subsequent learning tasks where the activity does not match the individual's preferred style*' (quoted by Sadler-Smith, 2001, p. 299). One potential conclusion is that it is only premature (and perhaps unethical) to be drawing simple suggestions for practice when there are so much complexity and so many gaps in knowledge. Rita Dunn (1990) claims that the supports of matching teaching and the setting with learners' learning preferences when students have recognized their learning strengths.

One of the few studies outer higher educations about the importance of matching learner and teacher preferences in instructional style was showed by Spoon & Schell (1998). It involved 12 teachers and 189 basic skills learners who were working towards a national education diploma. No significant difference in test results was found between compatible groups (where both teachers and learners favored the same instructional

approach) and incongruent groups and the 'matching' assumption has not been explicitly supported. Where helpful results are claimed – for example, by Rita Dunn (1990) – there are regularly unsettled methodological issues with the studies cited. For example, the training delivered by the Dunns goes far further than the idea of matching instruction to learning style and familiarizes other organized and generic pedagogical changes; for example, in lesson structure and in the nature of homework.

Grasha (1984) asked a related question of matching: '*How long can people bear situations that match their favored learning style before they become uninterested?*' Vermunt (1998) favors what he terms 'constructive friction', where the teacher pushes students to take more responsibility for the content, process and outcomes of their learning. Apter's research (2001) suggests that frustration or satiation is likely to cause a student to switch between motivational methods and disengage from learning. Grasha's disagreement is that people need to be 'stretched' to learn, and stretching may mean intentionally making a mismatch between their learning style and the teaching approaches. So Grasha's aim (1984, 51) would be 'to teach people new learning styles or at least let them sample inexperienced ones'. Gregorc's (1984) research chains Grasha's disagreement in that even those individuals with strong preferences for definite learning styles favored a variety of teaching methods to avoid dullness, although this must be set against Gregorc's other declaration (2002) that mismatched learning styles can 'harm' the student. Exhortations to match or mismatch tend to be based on different ideas about the fundamental purposes of education. For Kolb (1984), the educational objectives of mismatching are personal growth and creativity. The aim is to make the student self-renewing and self-directed.

Felder is complaining here about the undesirable results of unplanned mismatching where, for instance, teachers are unaware of their own learning style and may, as a result, teach only in that style, thus favoring certain students and disadvantaging others. The answer to such problems, according to Felder (1993), is '*not to determine each learner's learning style and then teach to it exclusively*' (p. 289), but to '*teach around the learning cycle*'. Before turning to that strategy, we wish to stress that deliberate mismatching has the status of a spontaneously appealing argument which awaits empirical verification or refutation.

In a recent paper, Entwistle & Smith (2002) have brought together a range of recent studies from both secondary and tertiary levels to present a conceptual map of the most direct effects on student learning. The central notion within this map is the distinction between target understanding and personal understanding. Target understanding defines the understanding that syllabus constructors; teachers and examiners have in mind in setting out the curriculum to be studied while personal understanding includes the range of understandings reached by individual students.

Where the teacher does not decide it, the syllabus will often not just outline the topics to be covered, but also describe the level of understanding to reach a pass mark, and will possibly indicate the defining features of the levels of knowledge required for each grade. When delivered with such a curriculum, instructors have to choose how to interpret it, drawing on their conception of the subject and understanding of the issues. The process of setting up a goal understanding for the learners leftovers as an individual teacher decides the relative emphasis to put on specific topics, how to teach them, and what assignments and formative assessments to use. The methods of teaching and the assignments given contain explicit and implicit messages to the students about the target

knowledge that is required. In higher education, still, the target can be quite problematic for the students to discern. While intended learning results may be definite, staff will be viewing them, and judging the learners' work, in terms of ways of thinking and practising in the subject developed over many years of specialist study and writing. Much of the academic discourse remains implicit within the early years of undergraduate study, and so students can be left confused about what exactly is being required of them to earn good grades.

University students bring to any course unit knowledge and understanding, and experiences of previous education, all of which influence how they make sense both of the subject matter presented and of how they are supposed to go about studying. Students often enter the university with firmly established study habits, some of which are inappropriate for higher education. They then try to interpret the situation in terms of their previous experience, in which teachers may have provided knowledge and also strong guidance about what work to do and when it is required – external regulation – whereas university.

From the discussion above, it is shown that computer technology gives significant effects on students' learning especially in English. To sum up the overall perception on CALL, a variety of technology applications have shown positive and some negative effects for the students learning second languages in the classroom. Courses that solely use computers have shown effective academically as regular classes, especially with certain motivated students (Chenoweth, Ushida & Murday, 2006). Classes which incorporate CALL also produce positive results (Sanders, 2005).

2.6 Conclusions

The majority of the studies comparing CALL with a more traditional face-to-face approach has done in academic settings and shown no significant difference between the two modalities. Thus, CALL is directing to a development that would supplement conventional modes of learning rather than replacing them.

As discussed earlier in this chapter, an F2F classroom is rather important for low-proficiency learners learning to take place. However, incorporating technology in F2F classroom will only be a great help to create a better learning environment. There are some skills that cannot be trained by CALL solely, but practice can be done using CALL to enhance the skill further. Language students cannot obtain certain skills, for instance, conventional skills, without face-to-face interaction with a skilled teacher, but software tools such as ELLIS could facilitate communication and now being used in CALL environments (Graham Davies, 2003).

Although some people strongly believe that learning can only take place in a traditional classroom, this belief has to change because technology has become so essential in education. Computers are not only used for learning, but is has become increasingly popular for testing learners ability, researches are being done to find out how one can fully utilize CALL to achieve optimum results.

As we can see, many researchers agree that CALL has helped in motivating and has created conducive environment for learning to take place. However, the effectiveness of CALL is still a controversial issue. Perception on CALL has been both positive and negative. Though CALL is perceived as an effective tool to enhance the language

learning further there are some limitations that should be taken into consideration. Thus, the current study validate a similar number of subjects for control and experimental group, assign a similar task by using the same syllabus to CALL (ELLIS) group or F2F classroom learning group, and indicate the amount of time spent on lessons to ensure a comparable study. This study highlights whether the CALL (ELLIS) helps the low-proficiency learners and investigates the significant differences between CALL (ELLIS) and F2F classroom learning. In the next chapter, the researcher will describe the methodology of the study in detail.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The extensive use of computer courseware in numerous fields has made quite an impact on education. With the advent of technology, courseware with multimedia elements and interactive content has emerged to assist English language teaching. Therefore, the University College has invested in the ELLIS program to develop students' language performance. The CALL effectiveness research development has shifted to the comparison between different types of CALL programs, instead of comparing CALL with traditional instruction. Hence, only a few studies on the comparative of the effectiveness of CALL vs. Non-CALL are currently available. However, to meet the practical needs of the University College, this study focusing on comparison is still relevant. Therefore, the primary aim of this study was to investigate the use of the CALL (ELLIS) program in enhancing low-proficiency learners' language performance in comparison with face-to-face (F2F) classroom learning. The researcher was also interested to investigate if the use of CALL in language teaching and learning affects the students' perceptions towards the learning outcome, as well as the learning environment.

In view of the above, this chapter explains research questions, research variables, research site, design of the study, participants, data collection instruments, data collection procedures, and finally the data analysis procedures.

3.2 Research questions

The study is essential to provide answers to the following questions:

1. Which instructional method is more effective as measured by the learners' pre and post-test results on the Basic English final exam: ELLIS or F2F classroom learning?

    1.1 Is there a statistically significant difference between the learners instructed by ELLIS and the learners instructed by F2F classroom learning with regard to the scores gained on the reading comprehension, grammar and vocabulary, listening and speaking sections of the Basic English final exam?

2. According to the learners' opinions, in what ways does ELLIS help or does not help the learners?

3.3 Research variables

There were two sets of variables in this study: independent variables and dependent variables. The independent variables selected for the study were the methods in two different settings that the participants had to carry out a similar task. In this study, the two settings were the CALL setting and the F2F setting. The CALL environment used the ELLIS courseware, and the F2F used a course book as well as a workbook that consists of similar content. The dependent variables selected for comparison between the CALL and F2F settings were the quantitative measures of the use of CALL. The quantitative measures were the scores of the pre-post tests.

Finally, an effort was made to eliminate the variables that had been recognised in the literature as possibly affecting the findings. Those variables that were not able to be eliminated are stated as limitations of the study (please refer to *Section 1.5: Limitation of the Study*). The participants' information was gleaned through the pre-study questionnaire that is further described in *Section 3.7: Data Collection Instruments* (please refer to *Appendix A* for the pre-study questionnaire).

The first controlled variable was the language proficiency of the college students. The English scores in the Sijil Pelajaran Malaysia (SPM) exam were used to select the participants for the study. This test would have been taken by all Malaysian students in Form 5 secondary school levels. According to the pre-study questionnaire, all the participants in this study were SPM leavers from the SPM open certification system. Thus, the achievement of each subject was reported in the certificate as in Table 3.1. The SPM English results were used to select the low-proficiency students. Only students in the pass and fail category were selected as participants.

Table 3.1: The SPM Open Certification Grade.

Grades	
DISTINCTION	1A, 2A
CREDIT	3B, 4B, 5C, 6C
PASS	7D, 8E
FAIL	9G

The next controlled variable in the study was the students' computer literacy. More recently, Ayres (2002) studied learners' attitudes towards the use of CALL and described that the subjects' attitudes towards English Learning improved significantly. The study also discovered that there was a connection between pupils' attitudes and their level of computer literacy, language level and age. Therefore, this study selected

students with basic computer literacy. This was to ensure that the participants in the CALL experimental group were computer literate students. In addition, this was also not to influence the language performance results.

Age is acknowledged as a significant learner factor in SLA studies. Age is an unchangeable factor while others like instruction may invalidate aptitude disparity and enable to change (Carroll, 1965). The majority of the participants were aged from 18 – 20 years. Two participants who were above 20 years (21 and 23 years old) had to be included due to the scheduling and preparation of the timetable for their major subjects. This had been mentioned as a limitation of the study in *Section 1.6: Limitation of Study*.

The researcher considered the preferred learning method of the students when selecting participants for grouping into CALL and F2F. The grouping format could also have a significant impact on the outcome. This study had chosen low-proficiency students because only low-proficiency students were required to enrol in this subject in order to graduate. These low-proficiency students were grouped according to the preferred mode of study regardless of Pass/Fail grade in SPM. For details, please refer to *Section 3.4: Participants*.

Table 3.2 presents the learner variables that were controlled, the means by which they were controlled and the means by which the information was obtained.

Table 3.2: Controlled learner variables.

Variables	Variable controlled	Information obtained
Language proficiency	SPM English grade	Pre-study questionnaire:- Language background
Computer literacy	Familiarity with a computer and keyboard ability	Pre-study questionnaire: - Computer knowledge: Question 1 – 3
Age	18 – 20 majority and two above 20 years (23 and 21 years old)	Pre-study questionnaire:- Personal information
Learning Medium	CALL-ELLIS and F2F medium of instruction	Pre-study questionnaire:- Method selection

3.4 Research site

The English Unit that is one of the divisions under the Centre of General Studies, a part of the Associate Studies Department in Masterskill University College of Health Sciences was identified as the site of this study. Furthermore, that was the researcher's place of work, so it eases the collection of data.

The English Unit offers English language courses such as Basic English and Communicative English for all programs according to requirements shown in Table 3.3. Students without a credit in English at the SPM level are required to take the Basic English course in the first semester of diploma studies. Subsequent to completion of the Basic English course, the students are allowed to take the Communicative English subject in the third semester. Therefore, students with a credit in their SPM English are allowed to take the Communicative English course in the third semester and are exempted from the Basic English subject.

Table 3.3: English language courses offered at Masterskill University College of Health Sciences.

Course Code	Course Title	Level / Program
ENL 1000	Basic English	All Diploma Programs
ENL1012	Communicative English	Diploma in Nursing & All Allied Health Diploma Programs
ENL1023		Diploma in Pharmacy

The English Language Learning Instructional System known as ELLIS was introduced to Masterskill University College of Health sciences in the year 2005 by the head of the English Department to be practiced in the Basic English teaching and learning session. In the ELLIS program, lessons were categorized into the Basic, Intro, Middle Mastery, Senior Mastery, and Master Pronunciation levels. Therefore, the low-proficiency students in the Basic English course utilise the Intro level for learning. In the present study, the CALL (ELLIS) group uses the computer laboratory while a classroom is a venue for F2F classroom learning.

An instructor from the English Unit facilitated the CALL (ELLIS) and instructed the F2F classroom learning. Studies on the teacher's background have recognised features of effective instructors in multicultural situations (Banks, 1994; Bennett, 1995; Campbell & Farrell, 1985; Ladson-Billings, 1994; Larke, 1992; Zeichner, 1993) showing concern, having high hopes, having tolerance, showing interest and more precise qualities related to working with lesser students. For the current study, the researcher considered qualities such as being knowledgeable about ethnic characteristics, having the intercultural competence and having the ability to recognize and minimise inequalities in the curriculum. Thus, a bilingual instructor who can converse in English and Bahasa Malaysia was selected for the study. It was believed

that such an instructor would be able to handle low-proficiency students from different cultural backgrounds from the Malaysian education system.

Furthermore, the instructor was an experienced English language teacher for more than ten years. In addition, the instructor has been instructing with the CALL (ELLIS) program since it was introduced to MUCH in the year 2005. In this case, MUCH anticipated that an experienced teacher in language teaching and CALL may serve as an active resource.

The personal background is recognised as an important factor in influencing what is taught, interpretations of classroom situations and students' behaviour and pedagogical decisions (Noordhoff & Kleinfeld, 1993). For that reason, MUCH has selected an optimistic instructor to facilitate the current study.

3.5 Research design

The study was conducted in the course of qualitative and quantitative mixed research methods (Creswell & Clark, 2011). This quasi-experimental design is adopted as it includes a pre-post test design with a control group to compare the scores of the pre-post tests. The design of the study will be discussed based on Figure 3.1.

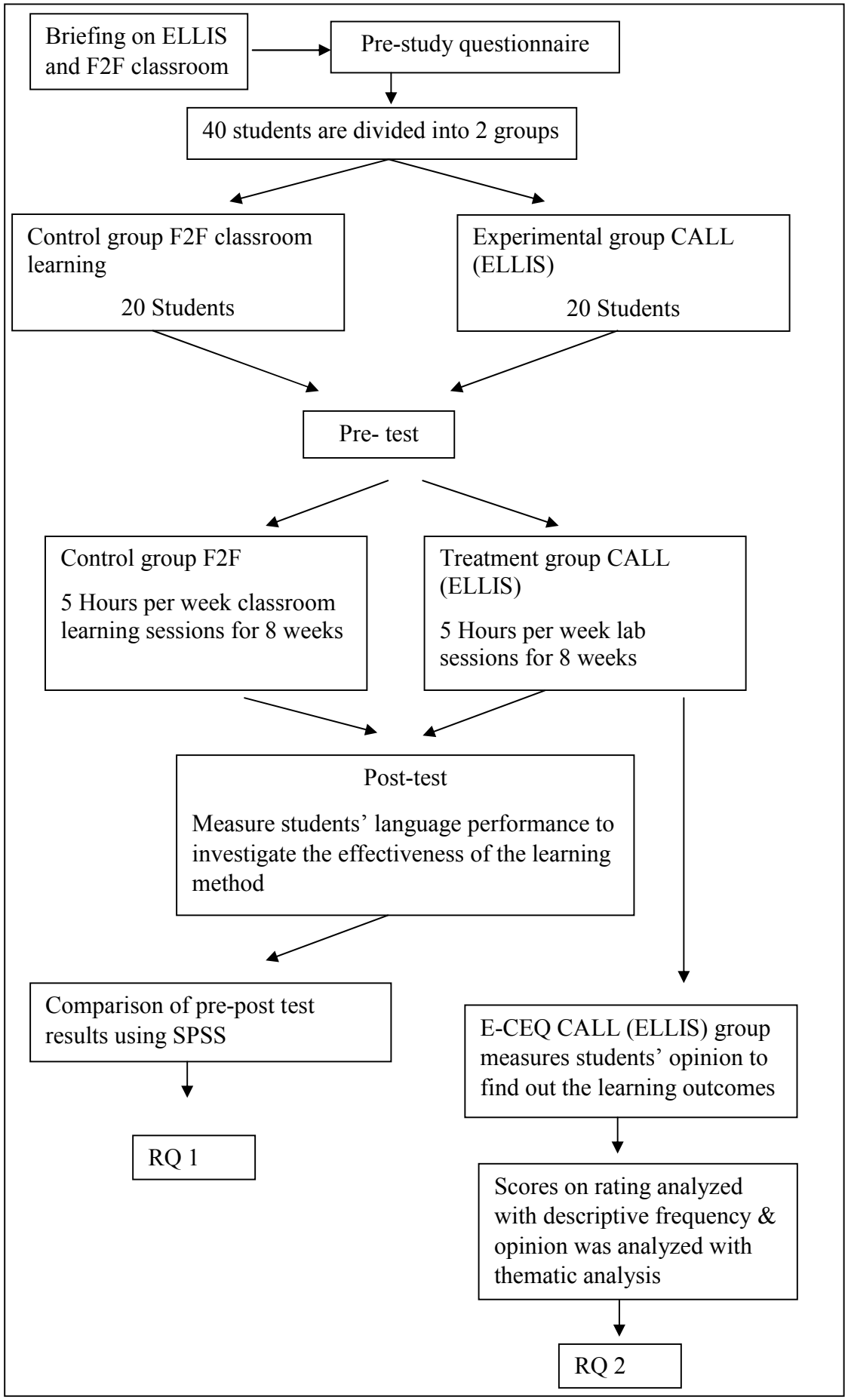

Figure 3.1: Pre-post test design with a control group.

The study design consists of ten sessions over the course of eight weeks. The participants were briefed on the CALL (ELLIS) program and F2F classroom learning in the first session. Then, the participants were given a pre-study questionnaire to respond. Later, forty students selected as the sample of the study were assigned into two groups according to the pre-study questionnaire. Twenty students were allocated to the experimental group that received CALL (ELLIS), a stand-alone courseware, and another twenty students were assigned to a control group where F2F classroom learning was conducted. After that the CALL (ELLIS) group was given a learner ID with a password to access the ELLIS program. The F2F classroom learning group was given a course book and workbook (instructional materials). Subsequently, a pre-test was administered to both CALL (ELLIS) and F2F group learners in the first session.

Starting with the second session to the ninth session, the CALL (ELLIS) group went through the CALL (ELLIS) program in the ELLIS language laboratory and the instructor only provided technical assistance when it was necessary. Besides, the same instructor facilitated the ELLIS program and instructed in the F2F classroom learning as an attempt to control the teacher variable. The F2F classroom learning group was carried out in the classroom and used exactly the same syllabus as the CALL (ELLIS) program with the instructional materials.

As listed in Table 3.4, both groups utilized lessons followed the Natural Approach captured the learning process for the Basic English course. Both groups were having five contact hours per session. The teaching and learning were carried out with INPUT – INTAKE – OUTPUT instructional process. Furthermore, CALL (ELLIS) lessons follow a predictable instructional system known as Watch – Learn – Practice - Play/Perform that captures and repeats the natural process by which language is

acquired. Besides, the F2F teaching session uses Review – Lesson – Quizzes – Game/Test instructional design which describes the natural approach. This has been detailed in *(3.7.3 Treatment)*.

Table 3.4: Breakdown of contact hours

Groups	**Venue**	**Learning Process**	**Contact Hours Per Session**
CALL (ELLIS)	Computer lab	**The Natural Approach**	5 hours
F2F	Classroom	**Input → Intake → Output**	5 hours

In the second session, CALL (ELLIS) students were given a suggested sequence for activity completion as shown in Figure 3.2. It was meant to give the students an overall idea of the structure of the program. Thus, from the second session to the ninth session, CALL (ELLIS) students may follow the suggested sequence to complete the activities. Four hours should be spent on lessons along with the game in each unit with the last hour used to complete the unit test.

Figure 3.2: Suggested sequence for the ELLIS program within each unit and lesson.

The F2F students were given an explanation on the overall structure to use the course book and workbook, as well as recommended sequence for activity completion in the second session. In each session after the second session, students review the previous

lesson. Following that, the lesson will be conducted with a course book as well as with other teaching materials. Next students' practice the lesson with activities, quizzes and games based on instructors' instruction. Lastly, the test will be administered for that particular unit for an hour with the Student Workbook. Thus, during the 5 hours in each session students will utilise 4 hours for learning and an hour for the test. In each session, the students signed the attendance sheet to show evidence of attending the F2F classroom teaching. This record was used by the researcher to ensure that the students finished assigned contact hours at the end of the course.

In the tenth session, both CALL (ELLIS) and F2F classroom students sat for their Basic English final exam that serves as a post-test (please refer to *Appendix D*). After the treatment, the CALL (ELLIS) students were administered with the ELLIS-course experience questionnaire.

Pre-post tests were utilized to answer the first research question to determine whether there was a significant difference between the CALL (ELLIS) group and the F2F classroom learning group. Subsequently, an ELLIS-course experience questionnaire was utilized to answer the research question two and to find out whether the CALL (ELLIS) program helps or does not help the low-proficiency learners. Finally, the quantitative data, the pre-post test scores were analysed using the SPSS program. While the qualitative data, the ratings in the E-CEQ used the frequency distribution whereas the responses to the open-ended questions on the questionnaire were labelled to prepare the thematic analysis.

3.6 Participants

The investigation engaged 40 students, aged between 18 – 20 years old from the total number of 112 students from the (0903/04) intake, who have joined the Diploma in nursing course and in their first year. The students' demographic information was obtained through the pre-study questionnaire.

Table 3.5: Demographic and characteristics of the forty respondents.

Demographic and Characteristics	**Respondents**		
Diploma / Semester	Diploma in Nursing 0903/04 Semester 1		
SPM English Result	D7	E8	F9
	10	15	15
Computer Knowledge	All Basic Users		
	Learners' Accessibility to Computer		
	Skills Students	8/11 5	9/11 13	11/11 22
	Experience in Learning English using….	Tape / Video 22	Software -	
Method of Delivery Preferred	ELLIS	F2F	ELLIS/F2F (Neutral)
	20	15	5

Referring to Table 3.5, ten students scored D7, 15 students scored E8, and another 15 students scored F9 in SPM English according to the results obtained from the pre-study questionnaire. The researcher analyzed the grades to confirm that the respondents were low-proficiency language performers. Nevertheless, the grades were not considered for grouping the CALL (ELLIS) and F2F classroom learners.

The computer knowledge of learners was examined through the pre-study questionnaire. According to the data, the majority of the students were accessible to all 11 basic skills in using a computer. However, there were 13 users who could only access nine basic

skills and another five users who could only access eight basic skills. A point to be stated is that the learners' computer competency levels were examined. Since, the investigator planned to confirm that the CALL (ELLIS) group students who utilized the ELLIS computer-assisted language learning program had at least a basic level of computer knowledge. Based on the results of the students' computer competency level, all 40 students of the study were computer savvy because they possessed at least eight basic computer skills.

Furthermore, the researcher also studied the students' experience in learning English using the software. None of them has used software to learn English, but they have experience using tape and video for learning English.

3.6.1 Sampling process

The present study utilizes purposive sampling using data from the pre-study questionnaire. The researchers used quota sampling which was identified as a strategy for purposive sampling (Onwuegbuzie & Nancy, 2007), to decide on the particular characteristics and quotas of sample members to be selected. The main control of this method of sampling is that only those who are accessible at that time of selection have a chance of being selected.

Therefore, the researcher with the assistance of the University College's administrative staff grouped the students into those with credits in SPM English and those without credits in SPM English. At the time of selection, there were 72 students with credits in SPM English, who continued with other required core subjects from MUCH. The remaining 40 students without credits in SPM English were selected for the study.

Many textbook writers (e.g., Charles, C., & Mertler, C. (2002); Creswell, J.W. (2005); Gall et al., 2003; McMillan & Schumacher, 2001) recommend smallest sample sizes of 15 for both causal-comparative and experimental designs. Therefore, the researcher continued with a small sample size available and the population in each group was determined at 20 students.

Fortunately, the selected 40 were computer literate and at least familiar using the mouse on a computer that was essential for the study. This verification is necessary to avoid favouritism among students in the CALL group and to simplify the CALL learning. After that, the students were placed according to the preferred method of delivery identified through the pre-study questionnaire. As Cohen's (2001) study shows that the learning mode leads to different learning preferences, the learner's preference was significant to circumvent inadequate results for the study.

The participants were allocated into two groups of equal numbers as the CALL (ELLIS) group and the F2F group according to their preferred method of delivery. The five students who were unsure about group selection were grouped in the F2F classroom learning group, to keep an equal number of students in both groups.

The researcher also confirmed that the students chose the mode of learning according to preference and not because of peer influence through the pre-study questionnaire. The researcher found that the students who preferred the CALL (ELLIS) mode agreed that learning English is easier by reading from a computer screen compared to a printed page. On the other hand, the students who preferred the F2F mode agree that learning English is easier by reading from a printed page. Following that, the same number of students who preferred CALL (ELLIS) chose to use a computer for exams and the same

number of students who preferred F2F chose to read a hard copy test paper and write their answers on an answer sheet for exams.

This shows that the researcher studied and grouped the samples according to their preference because previous studies found that the behaviour of low-proficiency learners has different learning characteristics (Chang, Chiu & Lee, 2000; McLaughlin & Vacha, 1992; Slavin, 1989). Furthermore, Cohen's (2001) study also shows that the learning mode leads to different learning preferences. The learner's preference was significant to circumvent inadequate results for the study to find whether the CALL (ELLIS) program enhanced the low-proficiency students' language learning performance. Thus, the researcher grouped the learners according to preferences to encourage participation in the class.

In the end, the two groups of students who enrolled in this study were rewarded with a certificate of participation as gratitude from the University College as it is a beneficial study for MUCH.

3.7 Data collection instruments

The researcher conducted a quasi-experimental study and used a pre-study questionnaire, a pre-test, a post-test, the ELLIS courseware, F2F classroom learning and an ELLIS course experience questionnaire for this study.

3.7.1 Pre-study questionnaire

The pre-study questionnaire was designed to explore the students' personal information, language background, computer knowledge level and type of learning method they would prefer. The questionnaire was developed by the researcher (please refer to *Appendix A*). It contains four sections: personal information, language background, computer knowledge and type of learning method they would prefer.

The study selected participants through purposive sampling though the researcher confirmed the students' undergraduate program, the intake and the semester of studies for a second time through this pre-study questionnaire. Furthermore, the researcher also obtained the students' identification numbers and age in the personal information section. The researcher required the students to state SPM English language results in the language background section in the pre-study questionnaire.

The researcher studied the students' computer literacy through 3 questions that focus on accessibility to the computer. Question 1 in the computer knowledge section in the pre-study questionnaire was designed to find out the students' computer literacy. Question 2 with 11 sub-questions was intended to find out the learners' accessibility to computers. Question 2 used 'yes' or 'no' closed-ended answers. Question 3 investigated the users' experience in learning English using audio and video or computer software.

Finally, the type of learning method preferred by the students was also found through the pre-study questionnaire. Students were asked to choose preferred learning method, and they were allowed to state "not sure" if they were unsure of the mode of study to select. The researcher also continued with another two follow-up questions to ensure

that students have chosen the mode according to their interest and not because of peer influence.

3.7.2 Achievement test (Pre-test and Post-test)

The researcher used the pre-test (refer to *Appendix B*) and the post-test (refer to *Appendix C*) to find out whether the CALL (ELLIS) or F2F classroom learning method is more effective. This was to determine whether there was a significant difference between the CALL group and the F2F classroom learning group. Two sets of Basic English final exam question papers were administered as pre-post tests. The Basic English final exam papers or the pre-post tests were conducted for two hours. In those two hours, students were required to spend 40 minutes for reading comprehension, 40 minutes for grammar and vocabulary, 20 minutes for listening and the last 20 minutes for speaking.

Furthermore, reading passages, grammar, vocabulary, listening and speaking components were tested in the pre-test and post-test. The Basic English final exam included four parts that were Part A: Reading passages, Part B: grammar and vocabulary, Part C: listening and Part D: speaking. The Basic English final exam consists of 12 questions in the reading comprehension passages. Each passage carried six questions, and both passages added 12 marks to the students' final score. Eighteen questions were administered for the grammar and vocabulary component and this component contributed 18 marks. The text was given to the students for the listening section, and it contributed 10 marks. In the listening test, the instructor read the accurate text to the students, and they corrected the wrong phrases in the text. The students were required to correct only five phrases or words in the text, and it contributed 10 marks to

the score. Finally, in the speaking test, the students were given a non-linear version and were asked questions related to the text and 10 marks were given for this part. Overall, the pre-post tests provided 50 marks that were converted to 100%.

These pre-post tests were generated from the exam department's question bank and were distributed to the CALL (ELLIS) and the F2F classroom learning students after going through the question moderation and vetting process for the comparability of the content validity by the exam department (refer to *Appendix F*- the relevance of content to the achievement tests). In view of the above, the pre-post tests which were administered as the Basic English final exams were relevant to the subject curriculum (refer to *Appendix G* - the relevance of questions to the curriculum). Thus, the practices in the CALL (ELLIS) and the F2F classroom learning help the students to address the skills required to complete the test.

The reading comprehension section in the pre-post tests addressed five different types of questions. The first passage in the reading comprehension section tested the students' ability: to find the main idea of the passage, define vocabulary-in-context, find the function of the character or situation, inference as well as to obtain accurate information. Passage two tested the students' ability: to find the main idea of the passage, to apply, to obtain accurate information and inference. One of the question types for the reading comprehension section in the pre-test asked the students to identify similar tone whereas in the post-test students were required to find a function. The grammar and vocabulary section in the pre-post test examined students' understanding on parts of speech: nouns, verbs, adjectives, prepositions and pronouns. Students answered cloze text through multiple-choice questions in the pre-test and matching the right answers in the post-test. The grammar and vocabulary section in the pre-post test

also used underlining the answers and error correction type of questions. The listening section in the pre-post test asked the students to correct the wrong phrases or words. Lastly, the speaking section in the pre-post test examined students' speaking ability through a non-linear speaking task. Students were required to describe or give opinions for five simple questions asked.

In the pre-test, both reading comprehension passages were relevant to **Unit 8 – Having fun (8.3 Sports)** and **Unit 3 – Getting around** (3.1 Building) from the Basic English syllabus. In the post-test, both reading comprehension passages were relevant to **Unit 3 – Getting around (3.1 buildings)** and **Unit 4 – Getting together (4.2 Rooms in the house).** In the pre-post tests, the grammar & vocabulary questions were developed from six different units from the Basic English syllabus, whereas the topics for the pre-post tests for the listening components were related to unit 2- shopping. Lastly, the speaking section in the pre-test was related to unit-2 and post-test was appropriate to the unit – 8.

3.7.3 Treatment

The study employed ELLIS Computer-assisted language learning and face-to-face classroom learning modes of delivery to teach the Basic English course. The Basic English course was offered to first semester learners who must improve from beginner level to intermediate level in Basic English language skills in order to do well in university-level English courses. With a focus on providing an intensive practice of modern English usage, the course integrated the four language skills – reading, vocabulary and grammar, listening as well as speaking. Therefore, the ELLIS program and F2F classroom learning focused on these four basic skills. Similarly, the F2F

classroom learning was developed using the ELLIS program's syllabus as requested by the MUCH academic board.

3.7.3.1 The ELLIS courseware

The CALL (ELLIS) Intro level is suitable for the low-proficiency students. The CALL (ELLIS) program uses Watch – Learn – Practice – Play/Perform instructional sequence that captures the Natural Approach to cover topics such as making introductions, shopping for food and clothing, phoning, and eating. These procedures provide contextualized learning. The full-motion videos focus on authentic samples of spoken English grounded in situations and topics of general interest. It involves the process of converting input into the intake. Thus, the interactive tutorials explain the grammatical and phonological features. Engaging Flash animation enhances input to help learners discover rules and patterns. Therefore, it balances fluency and accuracy. A rule-based system of tutorials focuses on the rules and patterns of grammar to develop accuracy. Hence, a memory-based system highlights chunks of useful language such as idioms and phrases in vocabulary and communication tutorials. Next, to advance from intake to output, learners get numerous, self-paced opportunities to produce the language in a non-threatening environment. Smart Recorder features build learners' confidence, enabling them to progress from controlled to automatic processing. Students starting at the Intro level should know how to identify the Roman alphabet and numbers in writing and speech and know how to use a mouse before they begin using the program.

An instructor facilitated the CALL (ELLIS) experimental group. The instructor would only guide students if there were any technical assistance needed. Regarding the role of instructor during CALL lessons, Bredekamp & Rosegrant (1992) have recommended a

range of teaching behaviors, from non-directive to directive acknowledge, model, facilitate, support, scaffold, co-construct, demonstrate and direct (Bredekamp & Rosegrant, 1992, p.39-42). Thus, observation of instructor during CALL lessons took a more non-directive role, somewhat different from the more directive role during the F2F classroom lessons. Clements & Nastasi (1993) suggestions were considered to monitor student interactions to ensure active participation of all, provide support and guidance initially, then gradually encouraging self-directed and cooperative learning and to provide scaffolding during CALL lessons.

Figure 3.3: The login screen.

Firstly, the learners in the CALL (ELLIS) group were instructed to navigate the program by logging in through the login screen with a learner ID and PIN given by the instructor in the first session as shown in the Figure 3.3. The students could exit (1) the program as well as seek assistance about the lesson with the help button (2) available in the login screen as described in Figure 3.3.

Figure 3.4: The main menu screen.

Next, the main menu screen as shown in Figure 3.4 will appear as the first screen that the students are exposed to after logging into the CALL (ELLIS) program. Starting from the main menu screen, the students can access the units (1) and lessons (2), games (4), tests (5), test reviews (6) and performance summary (3).Accordingly, the summary is a review of all the grammar, vocabulary, pronunciation, and communication taught in the Intro level. Next, the Bookmark button (7) appears only on the Main Menu. Thus, clicking on the Bookmark button takes the student to the lesson that was on before exiting the previous session. In order for the students' records to be stored, they have to exit Intro from the Main Menu. Lastly, the students are required to click the Exit button (9) to exit the program once they have completed their CALL (ELLIS) learning.

The Intro level is divided into units and lessons. Thus, students should complete each lesson (usually a total of three or four) within the unit. Lessons in the

CALL(ELLIS) Intro level contain a short video, the Script Page, the Skills Menu activities, the Role-play activity, and a lesson quiz. When all of the activities and the lesson quiz are finished, students can return to the Main Menu to play a game and to finish taking the unit test.

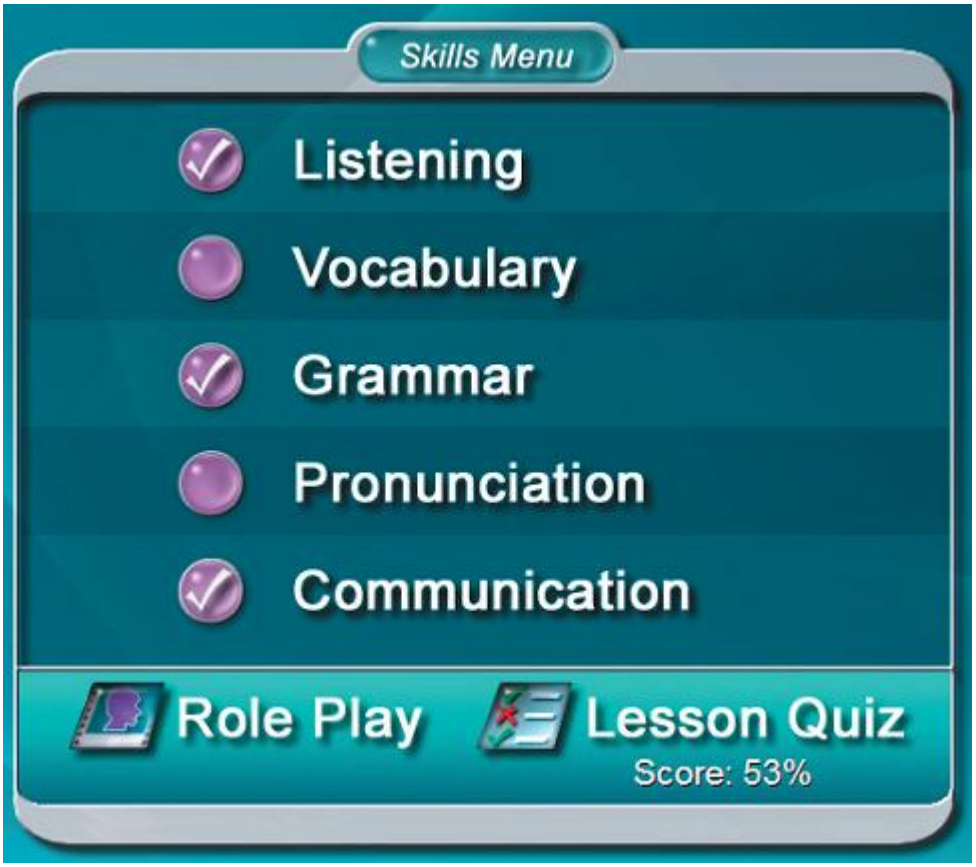

Figure 3.5: The skills menu screen.

Next, the students can access the Skills Menu tool as in Figure 3.5 to begin practice in each lesson in the unit. The Skills Menu tool is divided into six categories: five skill areas and the lesson quiz. When the students have completed the entire tutorial and practice material for a category, a check mark appears by that category instantaneously.

After completing the tutorials, ELLIS automatically takes the students to the practice page which is a lesson quiz. Furthermore, while practicing the students receive immediate feedback so that they know right away whether they have chosen the right answer. If the students choose the wrong answer in the practice pages, they can change their answer. Subsequently, the students are directed to the next practice question once they click on the Next button. The Next button is not available until the students answer the current question correctly.

Figure 3.6: Multiple-choice questions with one answer and more than one answer.

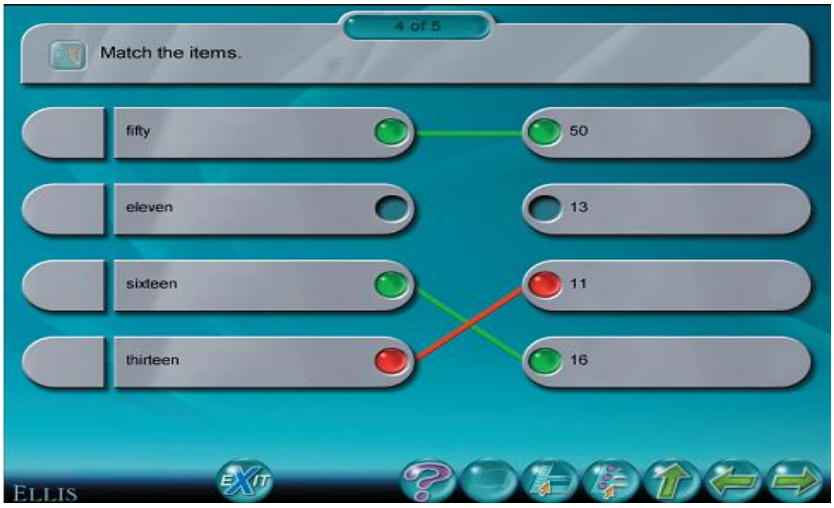

Figure 3.7: Matching question.

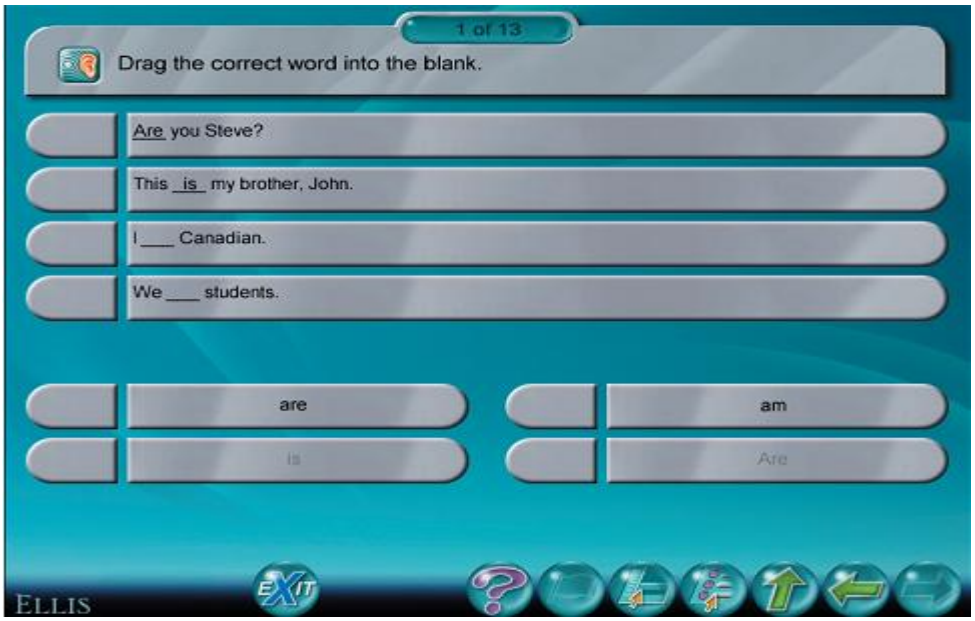

Figure 3.8: Fill-in-the-blank question.

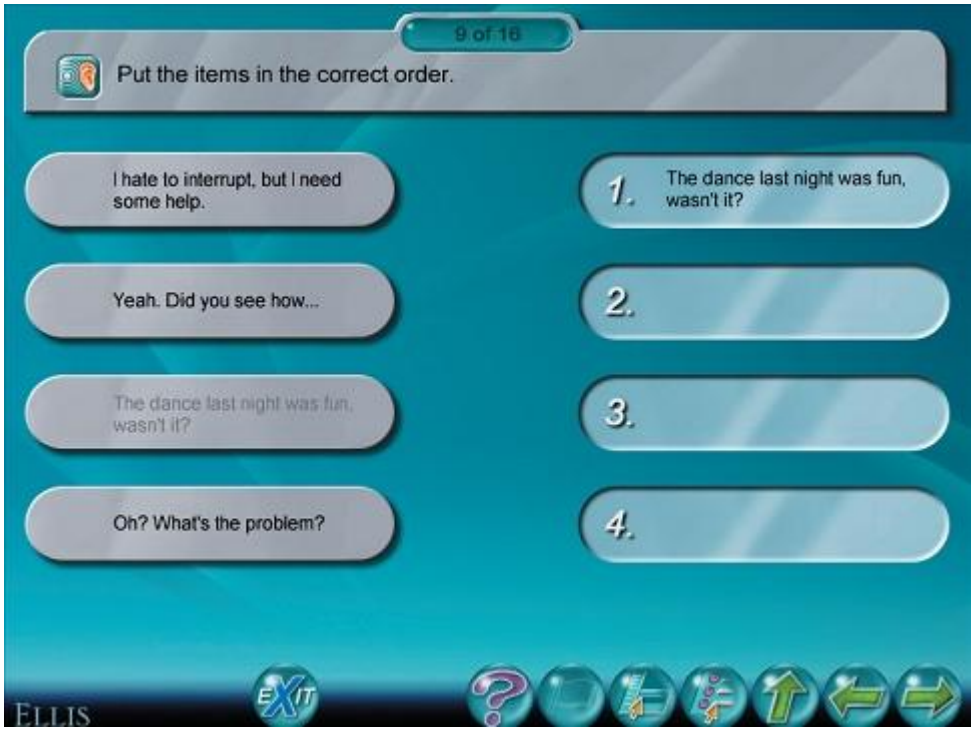

Figure 3.9: Sequencing question.

Accordingly, there are five different types of exercise questions: multiple-choice, true/false, matching, fill-in-the-blank, and sequencing as shown in Figures 3.6 – 3.9. The students read on to learn about how to comprehensive the different types of

questions. The lesson quiz is at the bottom of the Skills Menu tool. The quiz contains 20 questions.

Figure 3.10: The game for one of the units.

After finishing all the lessons in the unit, the students can access the game for the unit as shown in Figure 3.10. The concentration game is a fun and interactive way for students to review the materials learned from all the lessons in the unit. The questions in the ELLIS program are randomly drawn from a large bank of questions, so the game is different each time it is played. Accordingly, once the students match all the tiles correctly, a complete picture appears. The students notice a different picture each time they play the game.

The students take the unit test after finishing the game in the ELLIS program. They go back to the Main Menu to access the unit test. The test consists of 40 multiple-choice questions. Once a student completes a test, the test score is immediately displayed on

the corresponding unit's test review button. The students are permitted to take the test more than once to try for a better score. Moreover, the questions are randomly drawn from a bank of questions, so the test is different each time the students take it. However, they may see some repeated questions. The students can click on the Test Review button to review answers for that unit's test. Before ending the session in CALL (ELLIS) learning, students' attendance from the ELLIS system was observed by the researcher. The following section will explain the study design for the Face to Face (F2F) control group.

3.7.3.2 The F2F teaching session

The F2F classroom teaching and learning session follow a conventional instructional system known as review – lesson – quiz – games/test that captures and repeats the natural process by using slides, videos, a course book and a work book as instructional materials. These teaching resources are to make classroom activities as significant as possible by providing '*the extra- linguistic environment that benefits the learners to comprehend and thereby to gain*' (Krashen & Terrell 1983) which is to review and learn the lesson. These connect classroom activities to the real world and nurture real communication among the learners. Therefore, to switch from input to intake, a course book that has quizzes for each lesson on reading comprehension, the grammatical and vocabulary practices, as well as discussion or role play activities on speaking and listening were practised. Progress from intake to output, learners get many, self-paced chances to produce the language by playing games and perform in the test with a work book. Eight units with different topics that followed similar syllabus of Intro level in the ELLIS program was covered in the F2F classroom : Unit 1 - Meeting People, Unit 2 -

Shopping, Unit 3 - Getting Around, Unit 4 - Getting Together, Unit 5 - Finding a Job, Unit 6 - Banking, Unit 7 - Going to the Bank, and Unit 8 - Having Fun.

The control group was involved in the teaching-learning process with a lecturer who was the instructor in the CALL (ELLIS) experimental group. In the F2F classroom, the teacher's role is to prompt and facilitate discussion. Thus, the teacher is the primary source of comprehensible input in the target language. In this role, the instructor is required to generate a constant flow of language input while providing a variety of non-linguistic clues to assist students in interpreting the information. Furthermore, builds a classroom atmosphere that is exciting, approachable, and in which there is a low affective filter for learning. The teacher is also seen as responsible for collecting materials for teaching-learning.

Learning is interactive in the F2F classroom to build the performance of low-proficiency learners. In consequence, after the students started to practice the lesson in the F2F classroom, they could read the dialogue Script Page from the course book. Each lesson in the F2F classroom learning was divided into six parts: review on the previous lesson, lesson in the four skills and a lesson quiz. There were five different types of questions practiced for each unit: multiple-choice, true/false, matching, fill-in-the-blanks, and sequencing for the lesson quiz. Once the students have completed all the practices or quizzes for a lesson from the course book, they have to put a tick in the checklist. This was to ensure all the components were explored.

The students were guided by the lecturer to play a language game for each unit after completing all the lessons for a unit. The game was a fun way for the students to review the lessons in the unit. Each unit used different language games. The questions used for

the games in the F2F classroom learning were randomly drawn from a large bank of questions by the lecturer. A time limit of 10 minutes to 15 minutes was set for the students to complete the game. The amount of time that the students spent on the game was recorded by the students themselves.

Later, the students took the test using the workbook, once they finished all the lesson quizzes and the game for each lesson in the unit. Once the students completed the test, they discussed the answers in the class with the guided answer script by interacting with the lecturer and the scores were recorded by the students in a record book. The students were allowed to keep the course book and workbook with them. The students could study their lessons that were taught in the Intro level with the course book. They could still access completed lesson quizzes after the discussion. Moreover, after completing the test, the students could review the test in the workbook provided.

3.7.4 ELLIS-course experience questionnaire (E-CEQ)

A number of program evaluation research findings have recognized that students' views and perceptions determine the content and efficacy of learning (Cotterall, 1995, p. 195). Also, considering the studies on learner strategies and perceptions (Cohen, 1996; O'Malley & Chamot, 1990), it was decided by the researcher to complement the research instrument with the ELLIS-course experience questionnaire (refer to *Appendix E*) to reflect student perceptions on systemic issues around students' experiences of the CALL-ELLIS program and to develop ways of improving the learning experiences for the low-proficiency students.

After an extensive reading of the literature, the researcher adopted the most recent form of the Course Experience Questionnaire (CEQ), which is based on a theory that perceives students' perceptions of curriculum, instruction and assessment as key factors of their approach to learning and the quality of the outcomes of that learning (Ainley, 2001). Therefore, this questionnaire was between the author and twenty students (at a time) from the CALL (ELLIS) experimental group. The questionnaire was also customized to cater to the low-proficiency students with simple sentence structure and language use. Adaptations on items are grouped into a few key aspects of the program.

Good program aspect measures respondents' perceptions of the CALL-ELLIS standards. It emphasises on the CALL-ELLIS programs' opinion, motivation, attention, understanding the problems and skills in explaining the concepts. Clear Goals and Standards aspect measures respondents' perceptions of the clarity through the Basic English subject received academic standards and CALL-ELLIS program goals. Appropriate Workload aspect measures respondents' perceptions of the appropriateness of their program workloads. Whereas, appropriate Assessment aspects measures respondents' opinions about the extent to which assessment stresses the recall of information rather than other intellectual skills. High scores specify that respondents perceived that skills other than recall were critical to successful academic performance. Generic Skills Scale aspect measures respondents' perceptions of generic skill development (e.g. problem-solving, basic language learning skills, preparation) achieved in their programs. There are two additional items on the E-CEQ that measures Overall Satisfaction of the program and a further open-ended question that measures students' perception on the ways the ELLIS program helped to achieve better scores. The 28th item asks students to indicate **Overall Satisfaction** with their programs.

The finalized questionnaire for the study consisted of 29 questions. The first 28 closed-ended questions were asked using a 5-point Likert scale questionnaire and the format of a typical five-level Likert item was used as Strongly disagree, Disagree, Neither agree nor disagree, Agree, and Strongly agree. The last closed-ended question also asks students to indicate the overall level of satisfaction (Ainley, 2000). It is seen as a valuable source of data on student satisfaction with university programs (Hand & Trembath, 1999). Furthermore, the additional open-ended question allowed respondents to specify viewpoint on whether ELLIS helped to perform better or not.

Nevertheless, the participants found it difficult to express themselves in the English language for the open-ended question, and the researcher had a 2nd session, where students were free to clarify their statements in either in Bahasa Malaysia or their mother tongue, either to the researcher, or to the instructor, who helped the students feel at ease. This was reworded and reported in the study by the researcher. Please refer to *Appendix F* for the students' opinions that were reworded according to the conversation.

3.8 Data collection procedure

As an essential part of the data collection, the researcher has developed a systematic set of procedures for the achievement tests and the E-CEQ set of data.

3.8.1 Achievement test

In order to obtain reliable results, the content of the achievement test (pre-post tests) was validated by the exam paper vetting team of the English department. The team was requested to validate the content of the test with regard to test instructions, the question

types and the relevance to the curriculum, its suitability to the research goals and Basic English subject's purposes, the number and arrangement of questions, and the suitability of the time allocated to the test (refer to *Appendix F & Appendix G*).

In the present study, both face validity and a curricular validity was used to establish the content validity of the achievement tests. The researcher and instructor have done face validity of the questions of the achievement test to measure a particular construct as viewed by examiners, test users and stakeholders. In other words, it appears to be a reasonable test to evaluate the low-proficiency students' language performance for the Basic English subject. The achievement test was a practical test set to meet the subject objective which was to enable the students to enhance four skills i.e. reading, vocabulary and grammar, listening as well as speaking. Therefore, the researcher selected questions from the Basic English subject's question bank to construct the achievement tests. Thus, these achievement tests were measured equitably. Thus, the curricular validity is the level to which the content of the test matches the objectives of a particular curriculum as it is correctly described.

Besides that, content-related evidence of validity comes from the decisions of five vetting team members: the head of the English department, the basic English subject content expert, two subject experts (who have more than 5 years' teaching experience) and an exam unit staff (to patterned exam paper format). The remarks of the validating team, their notes and suggestions were all taken into consideration, and the researcher made the necessary modifications before applying the test.

The reliability of the post-test was assured through a test-retest method. The test was repeated on the same group to check its reliability two weeks later. The closer each

respondent's scores are on the post-test (T1) and test-retest (T2), the more reliable the test measure and the higher the coefficient of the test-retest will be. The reliability correlation coefficient of the test-retest was calculated as 0.81 using the Pearson correlation formula. The coefficient of the test-retest that is between 0.9 and 0.8 shows good reliability. This is very close to 1 and called a positive correlation. Since, Pearson's *r* is positive, we can conclude that the post-test measures good reliability.

3.8.2 ELLIS – Course Experience Questionnaire

The researcher adopted the most recent Course Experience Questionnaire as the ELLIS-course experience questionnaire (Ramsden & Entwistle,1981; Entwistle & Ramsden 1983; Ramsden, Martin & Bowden, 1989; Ramsden, 1991; Wilson, Lizzio & Ramsden 1997). The CEQ has been used in development, evaluation and investigation for over 20 years. Above that time, it has showed to be a stable and reliable structure and to discriminate between different learning environments (Ainley, 2001).

Once the item list in the CEQ was altered to fit the low-proficiency students with simple sentence structure and language use for the initial questionnaire, an iterative personal interview process (including faculty, teaching assistants, and representative students) was conducted to refine the draft instrument. These interviews enabled the researcher to gauge the clarity of the tasks, assess whether the instrument captured the desired phenomena and verify that important aspects have not been omitted. This process continued until no further modifications to the questionnaire were necessary. Feedback from the interview processes served as the basis for correcting, refining, and enhancing the experimental scales. For instance, items were eliminated if they represented the

same or insignificant aspects and modified if the semantics were ambiguous in order to enhance the psychometric properties of the survey instrument.

Then, after completing the development of the related scale items, several small-scale pre-tests were conducted with five trial low English language proficiency respondents to ensure the completeness and appropriateness of the scale items developed. The trial respondents were not part of the actual study process and were only utilized for testing purposes. After the questions had been answered, the researcher asked the respondents for any suggestions to confirm the further improvement of the instrument. The researcher then excluded irrelevant questions and changed vague or confusing terminologies into simpler ones in order to ensure students' comprehension, according to the suggestions of the respondents.The CEQ survey instrument was adapted and used to collect the qualitative data for this study. Results obtained through the questionnaire, provided further data on how the CALL (ELLIS) program was helpful or opposed in learning the Basic English subject as well as how it could develop students' learning capabilities and their perception of the teaching quality of the CALL-ELLIS program.

3.9 Data analysis procedure

After the process of data collection, the next stage is analysing the data. It involves explaining and establishing descriptive patterns and looking for relationships and linkages among patterns. The quantitative data included scores from the pre-post tests measured by SPSS (version 15.0), a widely used standardized instrument. The qualitative data responses to questions on the E-CEQ questionnaire was analysed using descriptive frequency and thematic analysis as an appropriate tool.

The study was a pre-post test design with a control group. After administering the test, the test papers were marked, and the achievement of each student in the two tests was recorded. A frequency table was constructed to show the distribution of students' achievement. For inferential purposes, paired t-tests were used to examine whether there were significant differences between the first and second achievement tests on the control and experimental groups. Besides that, independent sample t-tests were carried out to examine whether there were significant differences on achievement between the post-test of the control and the post-test of the experimental group.

The E-CEQ was administered to find out whether the CALL (ELLIS) program was helpful or unhelpful for the learners. In the present study, answering an open-ended question in English was a complication for CALL-ELLIS students. Thus, the second session with students to clarify their statements in either in Bahasa Malaysia or mother tongue, either to the researcher or to the instructor was conducted. Then, the close-ended questions (item 1 -28) results were recorded, and the data were analyzed through a pivot table in MS Excel, intended for ordinal level measurement for mean and frequency distribution. Mean showed the central tendency. Whereas, Frequency distribution showed students' negative or positive perception towards CALL (ELLIS) as indicated by the item scores grouped according to the key aspects of the program.

Next, thematic analysis, which is a categorizing strategy for qualitative data, was used to analyse the open-ended question in the ELLIS course experience questionnaire. In the current study, the analysis was done subject to systematic analysis of textual data. By having content of communication available in the form of text, the input is analyzed according to themes for comparison of results, providing evidence of student

perceptions on the CALL (ELLIS) program. The idea was taken from a study by Jonassen (1999) on active constructive learning environment.

The study used an abbreviated set of instructions for initial coding and analysis. At the first stage of coding, the researcher was observing for different concepts and categories in the data, which will form the basic units of analysis. In other words, the researcher broke the data into first-stage concepts or master headings, and second-stage categories or subheadings. The researcher use highlights to distinguish concepts and categories. For example, if students consistently talked about the lack of interaction between the learner and instructor, each time a student mentions that, or something similar to that, the researcher would use the same colored highlight. Lack of interaction between learner and instructor would become a concept, and other things related would become categories – all highlighted in the same colour. Various coloured highlights were used to distinguish each broad concept and category. At the end of this stage, transcripts with two different colours in chunks of highlighted text were available. These were transferred into a brief outline, with concepts being the main headings and categories being the subheadings. Finally, students' perceptions were analyzed to give a clear picture of how they perceive the use of CALL in learning Basic English as a course.

3.10 Conclusions

This chapter presented a detailed account of the research question, research variables, research site, participants, data collection instrument and procedure of the research. It aimed to find the data that would allow the researcher to examine the use of the CALL in enhancing low-proficiency learners' language performance.

This study was conducted using both qualitative and quantitative methods. The instruments used included a pre-study questionnaire, pre-post tests, students' experience questionnaire, and the CALL (ELLIS) courseware. The samples consisted of 40 low-proficiency students who have enrolled in the Basic English course from a University College. The obtained data was analysed to determine the use of a CALL program in teaching Basic English and the students' opinions on the CALL-ELLIS program. This systematic research design revealed the findings of this study in Chapter Four.

CHAPTER 4

RESULTS & DISCUSSION

4.1 Introduction

The aim of the present study is to investigate the effectiveness of the Masterskill University Colleges' CALL (ELLIS) program in enhancing the low-proficiency learners' language performance. This chapter reports the results of the data analysis related to the data obtained from the use of computer assisted language learning CALL (ELLIS) and F2F classroom learning on reading, grammar and vocabulary, speaking and listening components for the Diploma in nursing students. Furthermore, this chapter primarily reports the results of the study after analyzing the quantitative data including the scores on tests and ratings in questionnaire measured by SPSS (version 15.0. The qualitative data includes responses to questions on the ELLIS - course experience questionnaire analyzed using thematic analysis as an appropriate tool.

The researcher used a pre-study questionnaire, pre-post tests, and an ELLIS-course experience questionnaire for this study. The test items for each instrument, procedure on how to conduct the CALL (ELLIS) and the F2F classroom learning group and the actual data collection were described in Chapter 3. The data were documented, transcribed followed by data analysis as outlined in the previous chapter.

In presenting the data, this chapter is organized in the following sequence: the descriptive analysis and frequency distributions of the test scores, the paired samples t-

tests results and finally the results of the frequency distribution and thematic analysis of the students' experience questionnaire.

4.2 Research question 1: Which instruction method is more effective as measured by the learners' pre and post-tests results on the Basic English final exam: ELLIS or F2F Classroom Learning?

4.2.1 Is there a statistically significant difference between the learners instructed by ELLIS and the learners instructed by F2F Classroom Learning with regard to the scores gained on the reading comprehension, grammar and vocabulary, listening and speaking sections of the Basic English final exam?

In this section, the researcher analyzed the differences in the scores on the reading comprehension, grammar and vocabulary, listening and speaking component of the Basic English final exam between the CALL (ELLIS) and the F2F classroom learners. Two sets of Basic English final exams were used as pre-post tests. Based on the data obtained from the administration of the pre-post tests, the researcher analyzed the results.

4.2.1.1 The descriptive analysis of reading comprehension section

The descriptive data analysis for the achievement scores of reading comprehension section on pre-test for the experimental group (CALL (ELLIS)) and the control group (F2F classroom learners) are given in Table 4.2. The post-test scores for the reading comprehension section for both the experimental group (CALL (ELLIS)) and the control group (F2F classroom learners) are also shown in Table 4.3 respectively.

a) Results of pre-test for the reading comprehension section

In statistics, the **mean** defines average. A **median** is called as the number separating the higher half from the lower half of the tester. The **mode** is the amount that occurs the most frequently in scores collected or a probability distribution. The **standard deviation** explains how reliable the data is and how close to the mean the data is.

Table 4.1 represents the Mean, Median, Mode, and Standard Deviation of the pre-test of the control and the experimental groups. With the total scores of 12 marks for the 12 correct answers, the mean of the experimental group is 3.20 which was higher than the control group (mean=2). This is indicative of the fact that the experimental group scored somewhat better than the control group in the pre-test. This is while all the students in both groups were considered as low- proficiency learners based on the data obtained from the pre-study questionnaire. However, the point should be emphasized that most of the students from both groups scored poorly in the reading comprehension section of the pre-test.

Table 4.1: Mean, Median, Mode and Std. Deviation of pre-test for control and experimental group

Reading comprehension	N	Mean	Median	Mode	Std. Deviation
Control	**20**	**2**	**3**	**2**	**1.361**
Experimental	**20**	**3.20**	**4**	**2**	**1.731**

According to the distribution of scores for reading comprehension presented in Figure 4.1, the lowest score of the control group in the pre-test is 2 and the highest score is 6 compared to the total score of 12. So the standard deviation of this set of scores is 1.361, indicating that the scores vary from the mean of 2, by an average of about 1.361. The median is 3, and this shows nearly half of the control group students' were able to

score more than 3 in the pre-test. Figure 4.2 shows that the lowest score of the experimental group in the pre-test is 2, and the highest score is 7. So the standard deviation of this set of scores is 1.731, indicating that the scores vary from the mean of 3.2, by an average of about 1.731. The median is 4, and this showed that a half of the experimental group students' scored 4 or less than 4 in the pre-test.

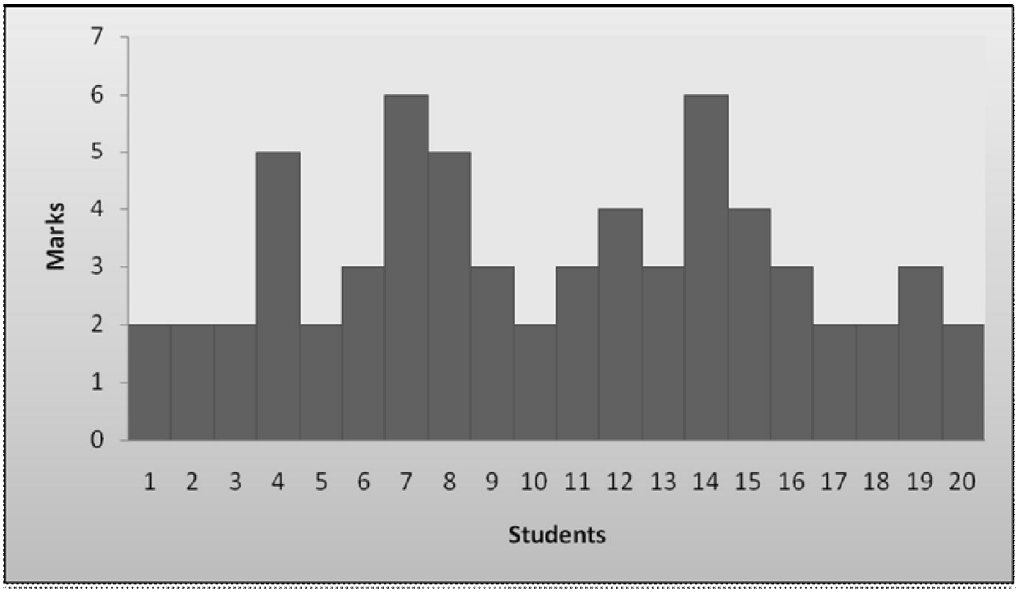

Figure 4.1: Histogram of pre-test (control group)

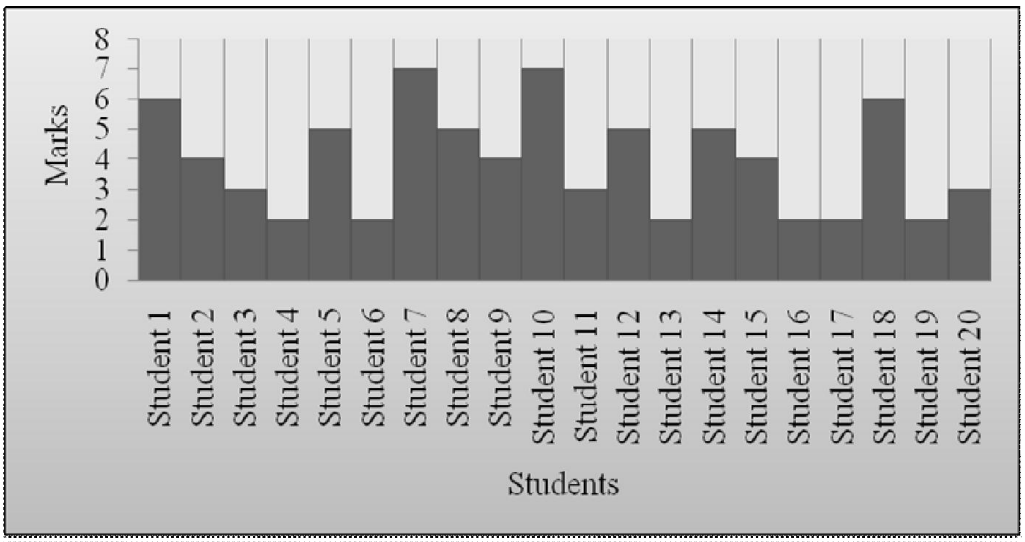

Figure 4.2: Histogram of pre-test (experimental group)

b) Results of post-test for the reading comprehension section

Table 4.2 shows the Mean, Median, Mode, and Standard Deviation of post-test of the experimental and the control groups. The mean of the control group had increased from 2 (pre-test) to 9.7 (post-test), a difference of 7.7 in the mean was shown after the F2F teaching. Table 4.3 also shows the mean of the experimental group increased from 3.20 to 8, a difference of 4.8 in the mean was shown after the CALL instruction. However, the amount of improvement made by the control group was better than the experimental group.

Table 4.2: Mean, Median, Mode and Std. Deviation of post-test for control and experimental group

Reading comprehension	**N**	**Mean**	**Median**	**Mode**	**Std. Deviation**
Control	**20**	**9.7**	**10**	**10**	**0.979**
Experimental	**20**	**8**	**9**	**10**	**1.209**

Refer to figure 4.3, the lowest scores of the control group in the post-test is 8 and the highest score was 11. The median is 10, and this shows that a half of the students from the control group were able to score more than 10 in the post-test. Refer to figure 4.4, the lowest scores in the experimental group in the post-test is 7, and the highest scores is 11. The median is 9, and this shows that nearly a half of the experimental group students' were able to score more than 9 in the post-test.

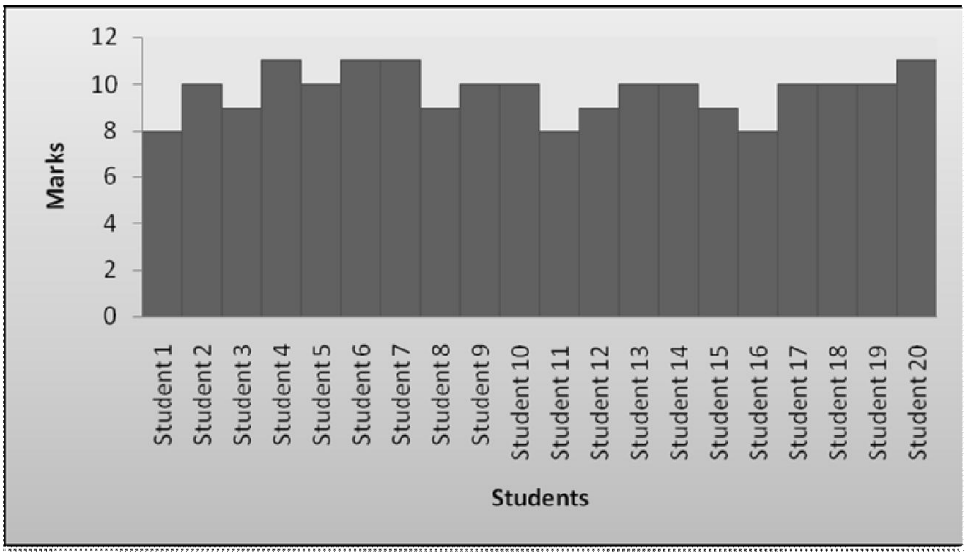

Figure 4.3: Histogram of post-test (control group)

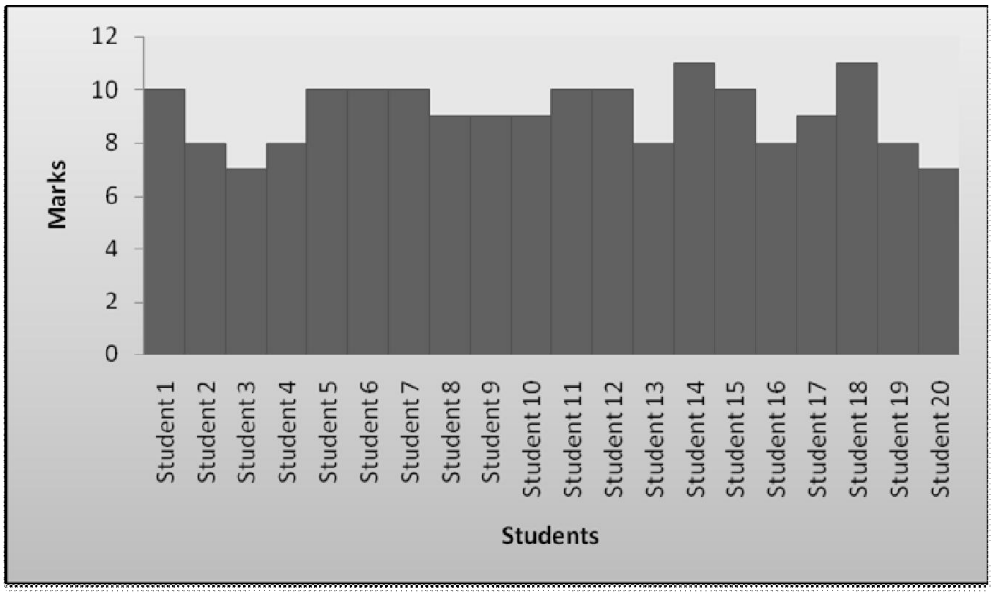

Figure 4.4: Histogram of post-test (experimental group)

c) T-test results

An independent sample t-test was carried out to examine whether there was a significant difference between the post-test marks of both groups in the reading comprehension section. The results of the t-test are presented in Table 4.3.

Table 4.3: Statistical analysis of the t-test for pre-post tests of reading comprehension section

Reading comprehension	ELLIS		F2F		t-test	
	M	SD	M	SD	t	Sig of t
Pre-test	3.20	1.7313	2	1.3611	- 2.736	0.013
Post-test	8	1.2096	9.7	0.9787		

According to Table 4.3, the scores on the post-test show that the CALL (ELLIS) group and the F2F classroom learning group had significant differences in their respective levels of achievement in the course (t = - 2.736). The result of an independent sample t-test related to the scores obtained by both groups in the post-test show that the differences between the two groups in their post-test marks was statistically significant at the 0.013, $p < 0.05$ level.

In order to find out which group of the participants improved their reading skill significantly, a paired sample t-test was run for the data obtained from the pre-post tests of each group separately. According to Table 4.4 and Table 4.5, the improvement for both the F2F and the ELLIS was statistically significant; the control group was statistically significant at the sig.(2 tailed) = 0.00, t= - 18.843, $p < 0.05$ and the experimental group was statistically significant at the sig.(2 tailed) = 0.00, t= - 15.765, $p < 0.05$. However, the improvement for the F2F group was more than that of the ELLIS group. Differently, Chun (2006) has distinguished that CALL encourage extensive reading, construct reading fluency and rate, build intrinsic motivation for reading and contribute to a rational syllabus for learning.

Table 4.4: Statistical analysis of the t-test for the pre-post tests of the ELLIS group

ELLIS	N	M	SD	t-test
Pre-test	**20**	**3.20**	**1.73**	**_15.765**
Post-test	**20**	**8**	**1.20**	p=0.00

Table 4.5: Statistical analysis of the t-test for the pre-post tests of the F2F group

F2F	N	M	SD	t-test
Pre-test	**20**	**2**	**1.36**	**_18.843**
Post-test	**20**	**9.7**	**0.97**	P=0.00

4.2.1.2 The descriptive analysis of Grammar and vocabulary section

The descriptive data analysis for the achievement scores of grammar and vocabulary section on the pre-test for both the experimental group (CALL (ELLIS)) and the control group (F2F classroom learners) are given in Table 4.7. The post-test scores for the grammar and vocabulary section for both the experimental group (CALL (ELLIS)) and the control group (F2F classroom learners) are shown in Table 4.8 respectively.

a) Results of the pre-test for the grammar and vocabulary section

Table 4.6 shows the Mean, Median, Mode, and Standard Deviation of the pre-test of the control and the experimental groups. With the total scores of 18 marks for the 18 correct answers, the mean of the experimental group is 2.9 which was better than the control group (mean=2.8). This is indicative of the fact that the experimental group scored better than the control group in the pre-test. However, this result shows that most of the students from both groups scored poorly in the grammar and vocabulary section of the pre-test.

Table 4.6 The Mean, Median, Mode and Std. Deviation of pre-test for control and experimental group

Grammar and Vocabulary	N	Mean	Median	Mode	Std. Deviation
Control	**20**	**2.8**	**3**	**3**	**0.7677**
Experimental	**20**	**2.9**	**3**	**2**	**1.0208**

According to the data presented in Figure 4.5 and Figure 4.6, the lowest score of the control group, as well as experimental group in the pre-test, is 2, and the highest score is 5 compared to the total score of 18. The mean of the control group is 2.8. So the standard deviation of this set of scores is 0.7677, indicating that the scores vary from the mean of 2.8, by an average of about 0.7677. The mean of the experimental group is 2.9. So the standard deviation of this set of scores is 1.0208, indicating that the scores vary from the mean of 2.9, by an average of about 1.0208.The median is 3 for both groups, and this shows nearly half of the control group and experimental group students' were able to score more than 3 in the pre-test.

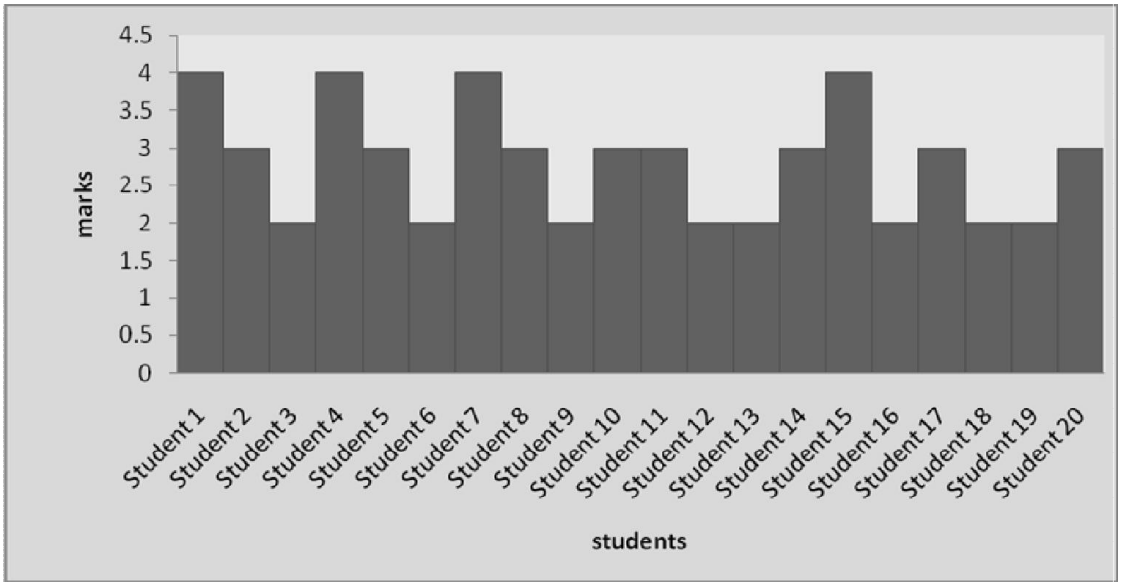

Figure 4.5: Histogram of pre-test (control group)

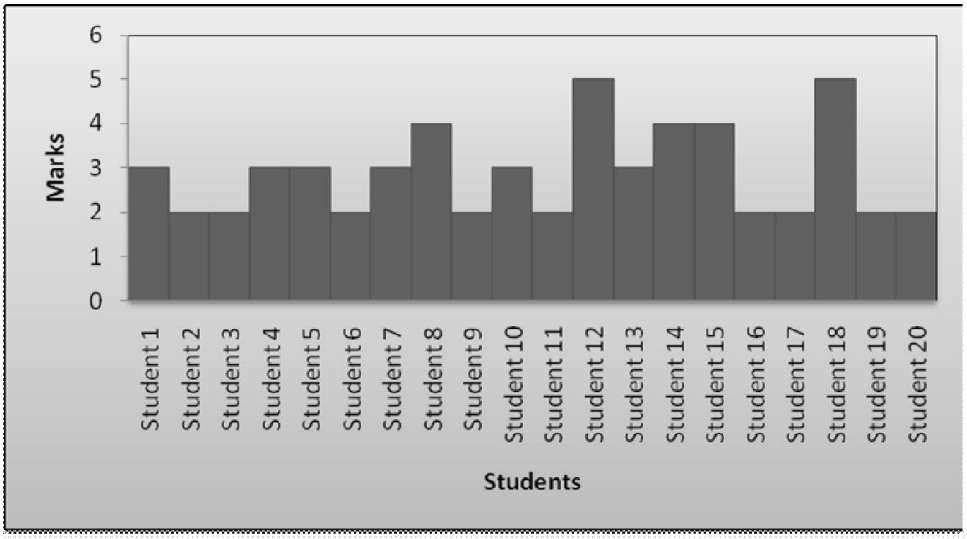

Figure 4.6: Histogram of pre-test (experimental group)

b) Results of the post-test for the grammar and vocabulary section

Table 4.7 shows the Mean, Median, Mode, and Standard Deviation of the post-test of the experimental and the control groups. The mean of the control group had increased from 2.8 (pre-test) to 9.95 (post-test), a difference of 7.15 in the mean was obtained after the F2F classroom learning was carried out. Table 4.8 also shows that the mean of the experimental group had increased from 2.9 (pre-test) to 8.2 (post-test), a difference of 5.3 in the mean was achieved after the CALL (ELLIS) program was carried out. This shows that although the CALL (ELLIS) group of learners scored higher than the F2F group of learners in the pre-test, the post-test gains were not higher than those for the F2F group.

Table 4.7: Mean, Median, Mode and Std. Deviation of post-test for control and experimental group

Grammar & vocabulary	**N**	**Mean**	**Median**	**Mode**	**Std. Deviation**
Control	**20**	**9.95**	**10**	**12**	**1.6693**
Experimental	**20**	**8.20**	**8**	**8**	**1.7351**

Refer to figure 4.7, the lowest scores of the control group in the post-test is 7 and the highest score was 12. The median is 10, and this shows that a half of the students from the control group were able to score more than 10 in the post-test. Refer to figure 4.8, the lowest scores in the experimental group in the post-test is 3 and the highest scores is 12. The median is 8, and this shows that nearly a half of the experimental group students were able to score more than 8 in the post-test.

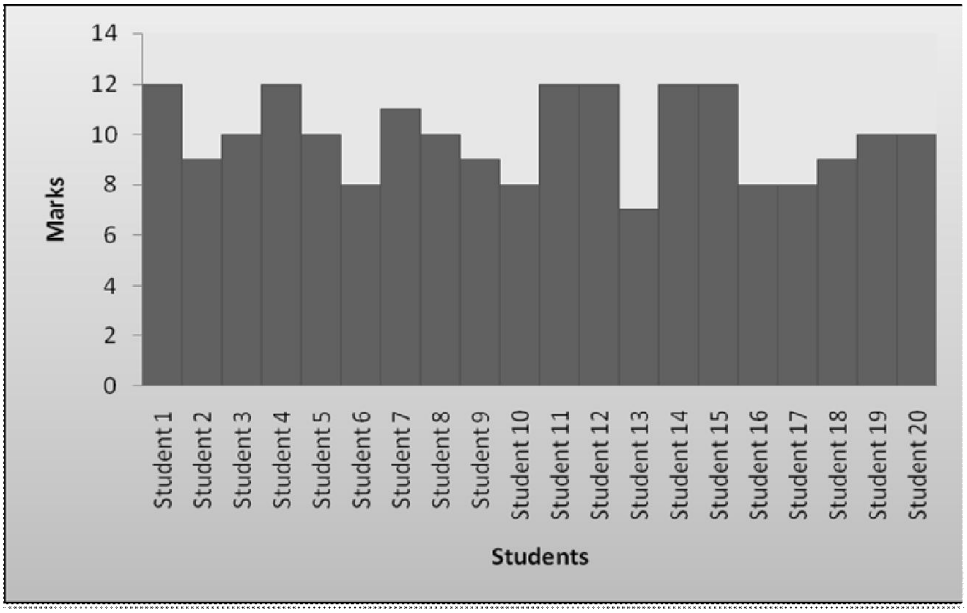

Figure 4.7: Histogram of post-test (control group)

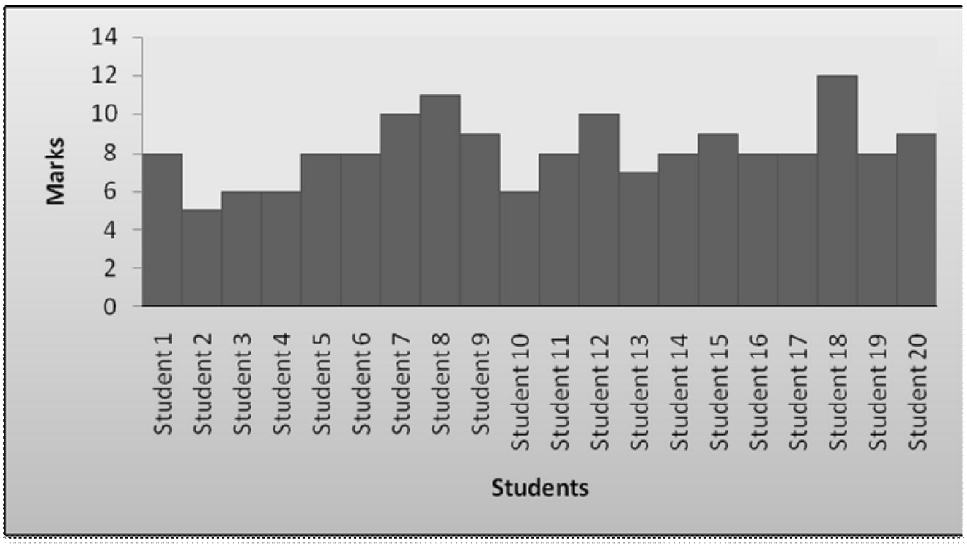

Figure 4.8: Histogram of post-test (experimental group)

c) T-test results

An independent sample t-test was carried out to examine whether there was a significant difference between the post-test scores of both groups in the grammar and vocabulary section. The results of the t-test are presented in Table 4.8.

Table 4.8: Statistical analysis of the t-test for pre-post tests of grammar & vocabulary section

Grammar and Vocabulary	ELLIS		F2F		t-test	
	M	SD	M	SD	t	Sig of t
Pre-test	**2.9**	**1.0208**	**2.8**	**0.7678**	**- 4.234**	**0.0004**
Post-test	**8.20**	**1.7351**	**9.95**	**1.6693**		

According to Table 4.8, the scores on the post-test show that the CALL (ELLIS) group and the F2F classroom learning group had significant differences in their respective levels of achievement in the course ($t = - 4.234$). The result of an independent sample t-test related to the scores gained by both groups in the post-test show that the differences between the two groups in their post-test scores was statistically significant at the 0.0004, $p < 0.05$ level.

In order to find out which group of the participants improved their grammar and vocabulary skill significantly, a paired sample t-test was run for the data obtained from the pre-post tests of each group separately. According to Table 4.9 and Table 4.10, the improvement for both the ELLIS and the F2F was statistically significant; the control group was statistically significant at the sig.(2 tailed) = 0.00, $t= - 23.054$, $p < 0.05$ and the experimental group was statistically significant at the sig.(2 tailed) = 0.00, $t= - 16.716$, $p < 0.05$. However, the improvement for the F2F group was more than that of

the ELLIS group. On the other hand, CALL programs have been shown to be effective in grammar learning when used with the proper scheme (Nagata, 1993).

Table 4.9: Statistical analysis of the t-test for the pre-post tests of the ELLIS group

ELLIS	**N**	**M**	**SD**	**t-test**
Pretest	**20**	**2.90**	**1.02**	**-16.716**
Posttest	**20**	**8.20**	**1.73**	P=0.00

Table 4.10: Statistical analysis of the t-test for the pre-post tests of the F2F group

F2F	**N**	**M**	**SD**	**t-test**
Pretest	**20**	**2.80**	**0.76**	**-23.054**
Posttest	**20**	**9.95**	**1.66**	P=0.00

4.2.1.3 The descriptive analysis of the listening section

The descriptive data analysis for the achievement scores of the listening section on pre-test for both the experimental group (CALL (ELLIS)) and the control group (F2F classroom learners) is given in Table 4.11. The post-test scores for the listening section for both groups are also shown in Table 4.12.

a) Results of the pre-test for the listening section

Table 4.11 represents the Mean, Median, Mode, and Standard Deviation of the pre-test of the control and the experimental groups. With the total scores of 10 marks for the five correct answers, the mean of the experimental group is 2.65 which was higher than the control group (mean=2.20). Although the experimental group scored better than the control group in the pre-test, the majority of students' from both groups scored poorly compared to the total score of 10.

Table 4.11 Mean, Median, Mode and Std. Deviation of pre-test for control and experimental group

Listening	N	Mean	Median	Mode	Std. Deviation
Control	**20**	**2.20**	**2**	**2**	**0.523**
Experimental	**20**	**2.65**	**3**	**3**	**0.587**

According to the distribution of scores for listening shown in Figure 4.9, the lowest score of the control group in the pre-test is 2, and the highest score is 4 compared to the total score of 10. So the standard deviation of this set of scores is 0.523, indicating that the scores vary from the mean of 2.2, by an average of about 0.523. The median is 2, and this shows nearly half of the students from the control group were able to score more than 2 in the pre-test. Figure 4.10 shows that the lowest score of the experimental group in the pre-test is 2, and the highest score is 4. So the standard deviation of this set of scores is 0.587, indicating that the scores vary from the mean of 2.65, by an average of about 0.587. The median is 3, and this showed that half of the experimental group students' scored 3 or less than 3 in the pre-test.

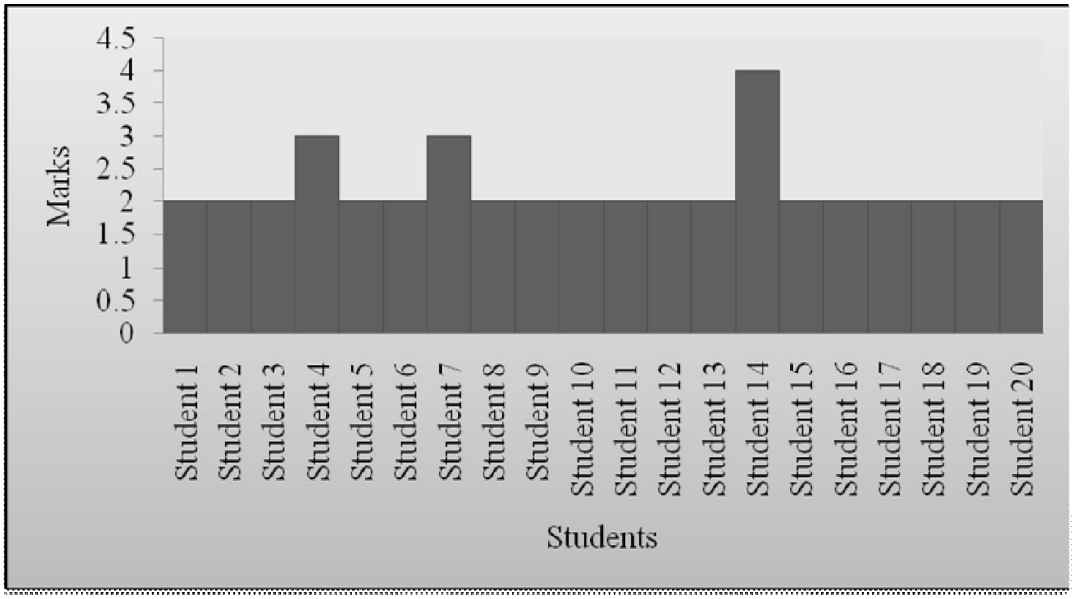

Figure 4.9: Histogram of pre-test (control group)

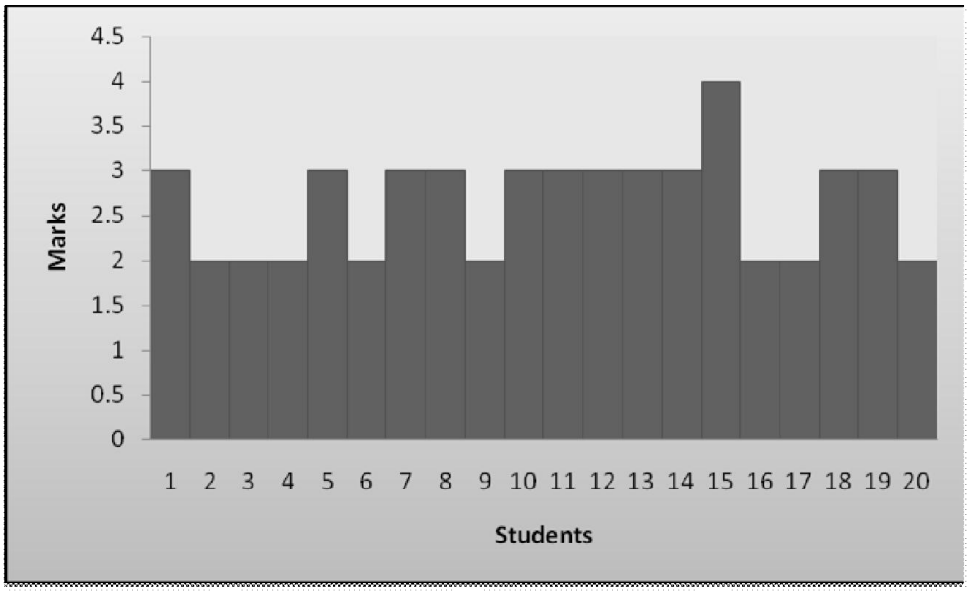

Figure 4.10: Histogram of pre-test (experimental group)

b) Results of the post-test for the listening section

Table 4.12 shows the Mean, Median, Mode, and Standard Deviation of post-test of the experimental and the control groups. The mean of the control group had increased from 2.20 (pre-test) to 5.6 (post-test), a difference of 3.4 in the mean was shown after the F2F instruction. Table 4.12 also shows the mean of the experimental group increased from 2.65 (pre-test) to 5.15 (post-test), a difference of 2.5 in the mean was shown after the CALL teaching. However, the amount of improvement made by the control group was better than the experimental group.

Table 4.12: Mean, Median, Mode and Std. Deviation of post-test for control and experimental group

Listening	N	Mean	Median	Mode	Std. Deviation
Control	**20**	**5.60**	**6**	**7**	**1.500**
Experimental	**20**	**5.15**	**5**	**5**	**1.293**

Refer to figure 4.11, the lowest scores of the control group in the post-test is 4, and the highest score is 8. The median is 6, and this shows that a half of the students from the control group were able to score more than 6 in the post-test. Refer to figure 4.12, the lowest scores in the experimental group in the post-test is 3 and the highest scores is 7. The median is 5, and this shows that nearly half of the experimental group learners' were capable to score more than 5 in the post-test.

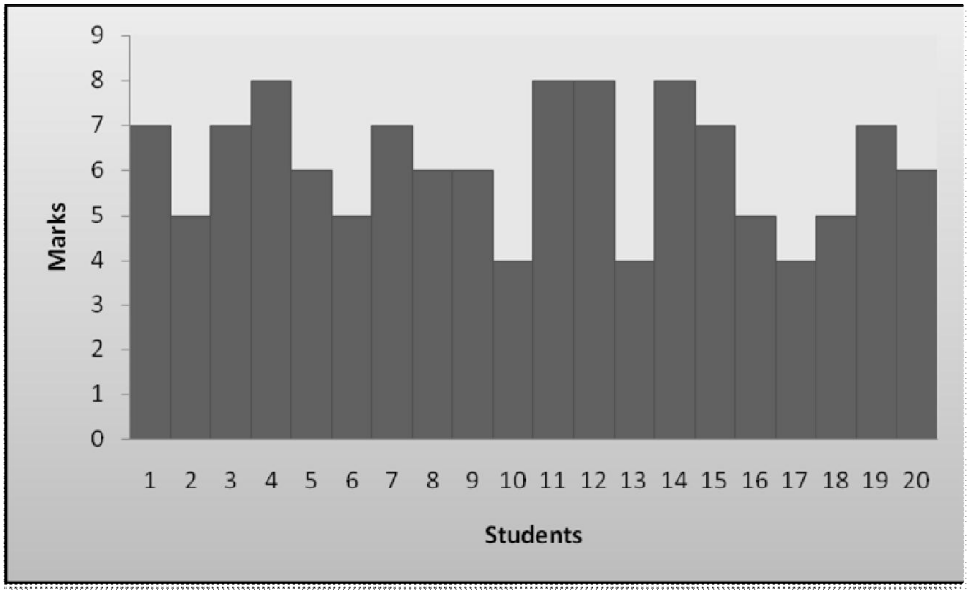

Figure 4.11: Histogram of post-test (control group)

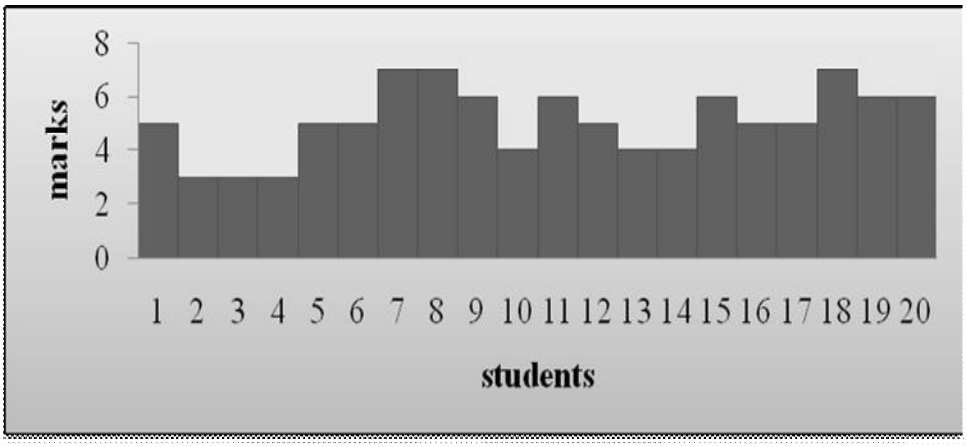

Figure 4.12: Histogram of post-test (experimental group)

c) T-test results

An independent sample t-test was carried out to examine whether there was a significant difference between the post-test scores of both groups in the reading comprehension section. The results of the t-test are presented in Table 4.13.

Table 4.13: Statistical analysis of the t-test for pre-post tests of listening section

Listening	ELLIS		F2F		t-test	
	M	SD	M	SD	T	Sig of t
Pre-test	2.65	0.587	2.2	0.523	- 3.942	0.0009
Post-test	5.15	1.293	5.6	1.387		

According to Table 4.13, the scores on the post-test show that the CALL (ELLIS) group and the F2F classroom learning group had significant differences in their respective levels of achievement in the course ($t = - 3.942$). The result of an independent sample t-test related to the scores obtained by both groups in the post-test show that the differences between the two groups in their post-test scores was statistically significant at the 0.0009, $p < 0.05$ level.

In order to find out which group of the participants improved their listening skill significantly, a paired sample t-test was run for the data obtained from the pre-post tests of each group separately. According to Table 4.14 and Table 4.15 , the improvement for both the F2F and the ELLIS was statistically significant; the control group was statistically significant at the sig.(2 tailed) = 0.00, $t= - 11.943$, $p < 0.05$ and the experimental group was statistically significant at the sig.(2 tailed) = 0.05, $t= - 9.645$, $p < 0.05$. However, the improvement for the F2F group was more than that of the ELLIS group. Nevertheless, hypermedia learning environment present better control for the

listener, can proceed both immediate understanding and achievement (Borrás and Lafayette, 1994).

Table 4.14: Statistical analysis of the t-test for the pre-post tests of the ELLIS group

ELLIS	**N**	**M**	**SD**	**t-test**
Pre-test	**20**	**2.65**	**0.58**	**_9.645**
Post-test	**20**	**5.15**	**1.30**	P=0.05

Table 4.15: Statistical analysis of the t-test for the pre-post tests of the F2F group

F2F	**N**	**M**	**SD**	**t-test**
Pre-test	**20**	**2.20**	**0.52**	**_11.943**
Post-test	**20**	**5.60**	**1.50**	P=0.00

4.2.1.4 The descriptive analysis of speaking section

The descriptive data analysis for the achievement scores of the speaking component for the pre-test for both the experimental group (CALL-ELLIS) and the control group (F2F classroom learners) are given in Table 4.16. The post-test scores for the speaking component for both the experimental group (CALL-ELLIS) and control group (F2F classroom learners) are shown in Table 4.17.

a) Results of pre-test for the speaking section

Table 4.16 describes the Mean, Median, Mode, and Standard Deviation of the pre-test of the control and the experimental groups. With the total scores of 10 marks for the five correct answers, the mean of the experimental group is 2.3 which was higher than the control group (mean=2). This is indicative of the fact that the experimental group scored better than the control group in the pre-test. However, the point should be

emphasized that most of the students from both groups scored poorly compared to the full score of 10 in the pre-test.

Table 4.16 Mean, Median, Mode and Std. Deviation of pre-test for control and experimental group

Speaking	N	Mean	Median	Mode	Std. Deviation
Control	**20**	**2**	**2**	**2**	**0.562**
Experimental	**20**	**2.3**	**2**	**2**	**0.801**

According to the distribution of scores for speaking shown in Figure 4.13, the lowest score of the control group in the pre-test is 1 and the highest score is 3 compared to the total score of 10. So the standard deviation of this set of scores is 0.562, indicating that the scores vary from the mean of 2, by an average of about 0.562. The median is 2, and this shows nearly half of the students from the control group were able to score more than 2 in the pre-test. Figure 4.14 shows that the lowest score of the experimental group in the pre-test is 1, and the highest score is 4. So the standard deviation of this set of scores is 0.801, indicating that the scores vary from the mean of 2.3, by an average of about 0.801. The median is 2, and this showed that a half of the students from the experimental group scored 2 or less than 2 in the pre-test.

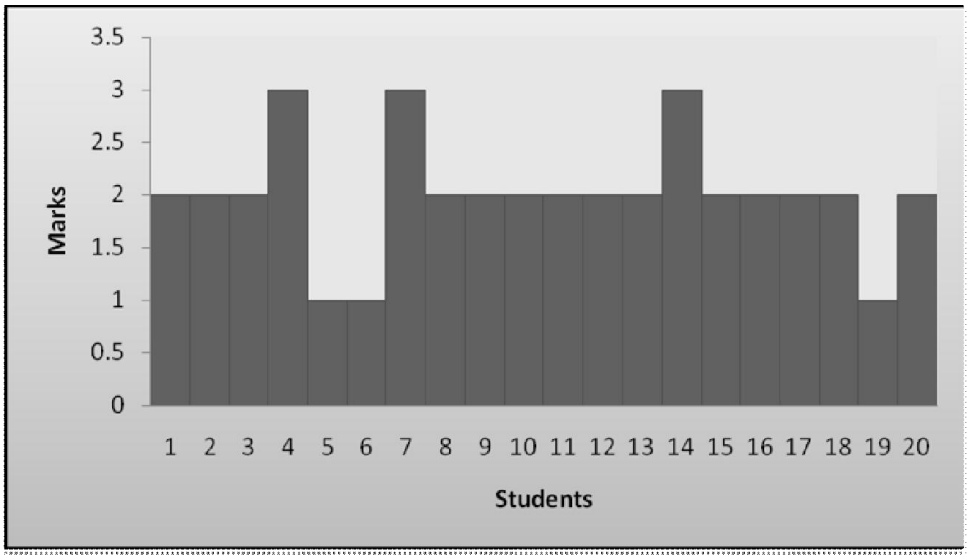

Figure 4.13: Histogram of pre-test (control group)

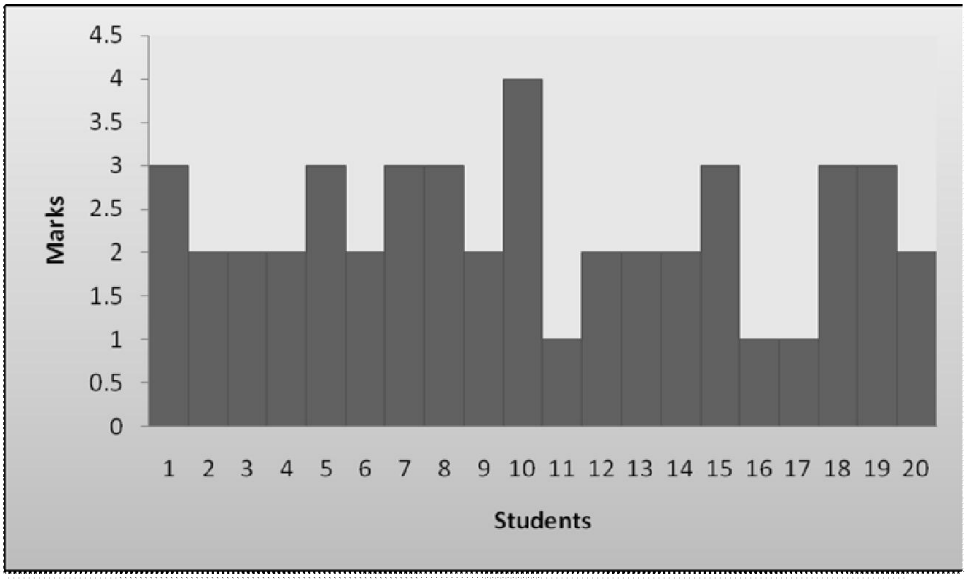

Figure 4.14: Histogram of pre-test (experimental group)

b) Results of the post-test for the speaking section

Table 4.17 shows the Mean, Median, Mode, and Standard Deviation of post-test of the experimental and the control groups. The mean of the control group had increased from 2 (pre-test) to 4.9 (post-test), a difference of 2.9 in the mean was shown after the F2F teaching. Table 4.18 also shows the mean of the experimental group increased from 2.3

(pre-test) to 3.25 (post-test), a difference of 0.95 in the mean was shown after the CALL teaching. However, the amount of improvement made by the control group was better than the experimental group.

Table 4.17: Mean, Median, Mode and Std. Deviation of post-test for control and experimental groups

Speaking	N	Mean	Median	Mode	Std. Deviation
Control	**20**	**4.9**	**6**	**7**	**1.744**
Experimental	**20**	**3.25**	**5**	**6**	**1.712**

Refer to figure 4.15, the lowest scores of the control group in the post-test is 3, and the highest score is 8. The median is 6, and this shows that a half of the students from the control group were able to score more than 6 in the post-test. Refer to figure 4.16, the lowest scores in the experimental group in the post-test is 3 and the maximum scores is 8. The median is 5, and this shows that nearly a half of the students from the experimental group were capable to score more than 5 in the post-test.

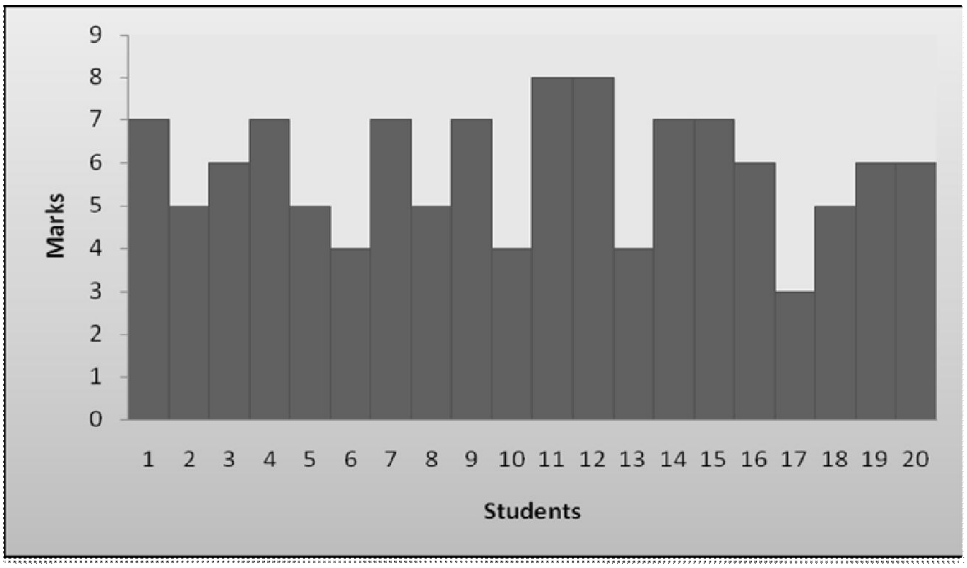

Figure 4.15: Histogram of post-test (control group

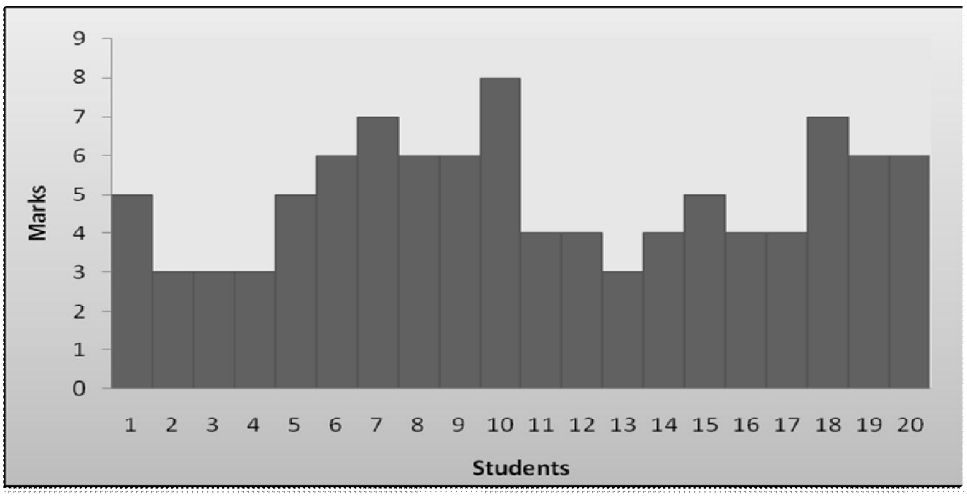

Figure 4.16: Histogram of post-test (experimental group)

c) T-test results

An independent sample t-test was carried out to examine whether there was a significant difference between the post-test scores of both groups in the speaking section. The results of the t-test are presented in Table 4.18.

Table 4.18: Statistical analysis of the t-test for pre- post tests of speaking section

Speaking	ELLIS		F2F		t-test	
	M	SD	M	SD	t	Sig of t
Pre-test	2.3	0.801	2	0.562	- 2.99	0.008
Post-test	3.25	1.71	4.90	1.744		

According to Table 4.18, the scores on the post-test show that the CALL (ELLIS) group and the F2F classroom learning group had significant differences in their respective levels of achievement in the course ($t = -2.99$). The result of an independent sample t-test related to the scores obtained by both groups in the post-test show that the differences between the two groups in their post-test scores was statistically significant at the 0.008, $p < 0.05$ level.

In order to find out which group of the participants improved speaking skill significantly, a paired sample t-test was run for the data obtained from the pre-post tests of each group separately. According to Table 4.19 and Table 4.20, the improvement for both the F2F and the ELLIS was statistically significant; the control group was statistically significant at the sig.(2 tailed) = 0.00, t= - 8.01, $p < 0.05$ and the experimental group was statistically significant at the sig.(2 tailed) = 0.05, t= - 2.219, $p < 0.05$. However, the improvement for the F2F group was more than that of the ELLIS group. Still, the ELLIS program is a well-run and a high-end package designed to meet the english language teaching-learning needs. Therefore, Robin (2007) observed that limitation in language learning and technology will not be established from the program excellence, but rather how students utilise the technology in the right way to best assist them in learning.

Table 4.19: Statistical analysis of the t-test for the pre-post tests of the ELLIS group

ELLIS	**N**	**M**	**SD**	**t-test**
Pre-test	**20**	**2.3**	**0.80**	**-2.219**
Post-test	**20**	**3.25**	**1.71**	p>0.05

Table 4.20: Statistical analysis of the t-test for the pre-post tests of the F2F group

F2F	**N**	**M**	**SD**	**t-test**
Pre-test	**20**	**2**	**0.56**	**-8.01**
Post-test	**20**	**4.9**	**1.74**	(p=0.00

4.2.2 Summary

In order to answer the first research question, the significant difference between the learners instructed by ELLIS and F2F classroom learning with regards to the scores gained on the reading comprehension, grammar and vocabulary, listening and speaking sections of Basic English final exam was investigated using independent and paired t-test.

To sum up on the findings of the reading comprehension, grammar and vocabulary, listening and speaking sections, it can be said that there were significant differences in regard to the scores of Basic English final exam for the CALL (ELLIS) and compared to the F2F classroom learning setting, hence, less favorable to the CALL (ELLIS) environment.

Thus, the results indicated that the F2F classroom learning instruction method can be an effective instruction as measured by the learners' pre-post test results on the Basic English final exam compared to the CALL (ELLIS) instruction for the low proficiency learners. In this section, the researcher analyzed the difference in scores between CALL and F2F to answer the research question 1. In the next section, the researcher will examine the factors that affect the experimental group students' perception towards CALL (ELLIS) learning.

4.3 Research Question 2: According to the learners' opinion, in what way does ELLIS helps or does not help the learners?

4.3.1 The ELLIS-Course Experience Questionnaire responses

The ELLIS-Course Experience Questionnaires (E-CEQ) were distributed only to the CALL (ELLIS) group students by the researcher to obtain the respondents' view on the CALL (ELLIS) learning. The close-ended questions (item 1 -28) results' were recorded, and the data were analyzed through a pivot table in MS Excel, intended for nominal level measurement for frequency distribution. Following that the students' opinion for the open-ended question (sub-question of item 29) was rephrased by researcher and thematic analysis was applied to identify the themes. Next, the researcher drew a summary for the responses of the E-CEQ. Finally, results of findings were discussed.

4.3.1.1 The frequency distribution of item 1-28

All the students or a total number of 20 students in the CALL (ELLIS) group answered this questionnaire. A 5-point Likert-scale questionnaire was used for close-ended questions (questionnaire item 1 – 28) to determine a comparison of negative or positive perception on the key aspects of CALL (ELLIS) learning. In this section, data were quantified using ordinal level measurement reporting mean, frequency counts and percentages (m, n, % or each level of response) in Table 4.21 for each item in the questionnaire (1 strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly agree), according to the key aspects of ELLIS program learning context: good quality program, clear goals and standards, appropriate workload, appropriate assessment, generic skills as well as overall satisfaction.

Table 4.21: Result of frequency distribution on student-ELLIS program experience questionnaire

Question	**Mean**		**SD 1**	**D 2**	**N 3**	**A 4**	**SA 5**	**Total**
1. I found the ELLIS program interesting.	**3.15**	**(N) %**	**(5) 25**	**(5) 25**	**(1) 5**	**(0) 0**	**(9) 45**	**(20) 100**
2. The ELLIS program has helped me to develop my abilities to work individually.	**3.05**		**(5) 25**	**(4) 20**	**(0) 0**	**(2) 10**	**(9) 45**	**(20) 100**
3. The ELLIS program is more focused in testing our memory than what we have understood.	**2.6**		**(6) 30**	**(0) 0**	**(7) 35**	**(7) 35**	**(0) 0**	**(20) 100**
4. The program is too difficult to achieve better scores.	**3.2**		**(0) 0**	**(7) 35**	**(2) 10**	**(11) 55**	**(0) 0**	**(20) 100**
5. The workload is too heavy to score high marks.	**3.4**		**(0) 0**	**(0) 0**	**(12) 60**	**(8) 40**	**(0) 0**	**(20) 100**
6. ELLIS program has improved my skills in reading.	**2.85**		**(10) 50**	**(0) 0**	**(1) 5**	**(1) 5**	**(8) 40**	**(20) 100**
7. ELLIS program has improved my skills in speaking.	**3.2**		**(2) 10**	**(9) 45**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
8. ELLIS program has improved my skills in listening.	**3.25**		**(1) 5**	**(10) 50**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
9. ELLIS program has developed my abilities to use oral, written and visual communication.	**3.2**		**(2) 10**	**(9) 45**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
10. ELLIS program experiences helped me engage actively in my learning.	**3.25**		**(1) 5**	**(10) 50**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
11. ELLIS program has developed my problem solving skills.	**2.95**		**(7) 35**	**(4) 20**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
12. ELLIS program has given clear explanation for each lesson.	**2.75**		**(10) 50**	**(1) 5**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
13. A lot of questions on reading comprehension section lead me to score better.	**2.9**		**(9) 45**	**(2) 10**	**(0) 0**	**(0) 0**	**(9) 45**	**(20) 100**
14. A lot of questions on grammar section lead me to score better.	**3.25**		**(3) 15**	**(7) 35**	**(1) 5**	**(0) 0**	**(9) 45**	**(20) 100**

15. A lot of questions on vocabulary section lead me to score better.	**3.15**		**(3) 15**	**(8) 40**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
16. A lot of questions on oral (listening & speaking) section lead me to score better.	**3.1**		**(4) 20**	**(7) 35**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
17. ELLIS program make the lesson interesting compare to normal classroom learning.	**3.1**		**(4) 20**	**(7) 35**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
18. Game is the best aspect in the ELLIS program and it directed me to score well.	**3.25**		**(1) 5**	**(10) 50**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
19. Lesson quiz is the best aspect in the ELLIS program and it directed me to score well.	**3.25**		**(2) 10**	**(9) 45**	**(0) 0**	**(0) 0**	**(9) 45**	**(20) 100**
20. Test is the best aspect in the ELLIS program and it directed me to score well.	**3.2**		**(2) 10**	**(9) 45**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
21. Test score appears immediately after test completion, it encouraged me to score well.	**3.15**		**(3) 15**	**(8) 40**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**
22. To do well in this ELLIS program all you really need is a good memorizing skill.	**2.75**		**(1) 5**	**(8) 40**	**(0) 0**	**(11) 55**	**(0) 0**	**(20) 100**
23. To do well in this ELLIS program all you really need is a good understanding on lessons.	**2.85**		**(10) 50**	**(0) 0**	**(1) 5**	**(1) 5**	**(8) 40**	**(20) 100**
24. I feel high competition while enrolled in the program and it leads to score better.	**2.45**		**(10) 50**	**(0) 0**	**(1) 5**	**(9) 45**	**(0) 0**	**(20) 100**
25. I have discovered that high scores are important in this ELLIS program to prove our achievement.	**2.85**		**(8) 40**	**(0) 0**	**(1) 5**	**(1) 5**	**(10) 50**	**(20) 100**
26. I have discovered that comprehending the lesson is important in this ELLIS program to prove our achievement.	**3.2**		**(4) 20**	**(9) 45**	**(0) 0**	**(1) 5**	**(6) 30**	**(20) 100**
27. I am putting enough effort into my language learning because of ELLIS program.	**2.85**		**(1) 5**	**(10) 50**	**(0) 0**	**(9) 45**	**(0) 0**	**(20) 100**
28. Overall, I am satisfied with the quality of this ELLIS program.	**3.3**		**(0) 0**	**(11) 55**	**(0) 0**	**(1) 5**	**(8) 40**	**(20) 100**

a) Good quality program aspect

Respondents' perception on the CALL-ELLIS program standards was measured through item 1, 12, 17, 18 - 21. It focuses on CALL-ELLIS programs' feedback, motivation, attention, understanding of problems and skill in explaining concepts.

Item 1 inquired whether the students agree to the statement that the CALL (ELLIS) program was interesting. According to the statistical result, the mean of the 20 respondents was 3.15. The score is more than 3, which showed that the respondents possessed moderately high perception on the ELLIS program was interesting. Thus, students showed a positive perception.

Item 12 in the ELLIS program experience questionnaire inquired whether they agreed to the statement that the ELLIS program gave a clear explanation for each lesson. The result indicated that the mean was 2.75. The score is less than 3, which showed that the respondents possessed moderately low perception that the program provided a clear explanation for each lesson. So, students showed a negative perception.

Item 17 in the ELLIS program experience questionnaire inquired whether they agreed to the statement that the ELLIS program made the lesson interesting compared to typical classroom learning. The result indicated that the mean was 3.1. The score is more than 3, which showed that the respondents put forward moderately high perception on the ELLIS program made the lesson interesting compared to typical classroom learning. Thus, item 17 showed a high percentage of positive belief.

Item 18-20 in the ELLIS program experience questionnaire inquired whether they agreed to the statement that game, lesson quiz and test were the best aspects of the ELLIS program and directed the learners to score well. The result indicated that the mean was 3.25 for item 18 and item 19 along with 3.2 for item 20. The score is more than 3, which showed that the respondents showed moderately high perception on the game, lesson quiz or test as the best aspect in the ELLIS program that led them to score well. Thus, item 18, 19 and 20 showed a positive result.

Item 21 in the ELLIS program experience questionnaire aimed at finding out whether they agree to the statement that the test scores appears immediately after the test completion helped the students to score well. The result indicated that the mean was 3.15. The score is more than 3, which showed that the respondents presented moderately high perception on the test scores appeared immediately after the test completion helped them to score well. Thus, item 21 showed a positive result.

Overall results showed a mainly positive view of low-proficiency learners on the quality of the ELLIS program. Yet, students were holding low perception on the ELLIS program gave a clear explanation for each lesson. Therefore, the type of software and the tasks teachers set for students had an extensive effect on the environment and quality of student interaction (Abraham & Liou, 1991; Dudley, 1995; Dziombak, 1991; Levy & Hinckfuss, 1990; Meskffl, 1993; Murillo, 1991; Pujol, 1995). However, it is still too early to claim that the design and implementation of CALL software have satisfied the needs of the learners because there are many interrelated factors that have to be considered such as a learning theory and the current approach used in language teaching. Table 2.22 presents summary of students' perception on the good quality of the ELLIS program.

Table 2.22: Summary of students' perception on the good quality of the ELLIS program.

Key aspects of learning context	Items	Students perception
Good quality program	**1**	Students were holding positive perception on the ELLIS program was interesting.
	12	Students perceived negative perception on the program provided a clear explanation for each lesson.
	17	Students had positive belief on the CALL (ELLIS) program, made the lesson interesting compared to typical classroom learning.
	18	Students perceived positive view on game, lesson quiz and test were the best aspects of the ELLIS program and directed learners to score well.
	19	
	20	
	21	A positive result showed that the test scores displayed encouraged the students' to score well.

b) Clear Goals and standards aspect

Clear Goals and standards aspect of the CALL (ELLIS) program were measured through item 4 and 24 – 26. It focuses on the respondents' perceptions of the clarity in learning the Basic English course received along with the academic standards, and the CALL-ELLIS program goals were perceived.

Item 4 inquired whether they agreed to the statement that the program was too difficult to achieve a better score. The result indicated that the mean was 3.2. The score is more than 3, which showed that the respondents showed moderately high perception on the program was too difficult to achieve better scores. Thus, item 4 showed a positive viewpoint.

Item 24 inquire whether high competition during participation leads to scoring better. The result indicated that the mean was 2.45. The score is less than 3, which showed that the respondents possessed moderately low perception on the students needed high competition during participation to score well in the ELLIS program. Thus, item 24 showed a negative result.

Item 25 in the ELLIS program experience questionnaire inquired whether they agreed with the statement that high scores were significant in the ELLIS program to prove achievement. The result indicated that the mean was 2.85. The score is less than 3, which showed that the respondents possessed moderately low perception. Whereas, item 26 inquired whether they agreed to the statement that comprehending the lesson was important in the ELLIS program to prove achievement. The result indicated that the mean was 3.2. The score is more than 3, which showed that the respondents possessed moderately high perception. Thus, the results of clear goals and standards aspect of learning ELLIS program on item 25 showed negative outcomes and item 26 showed a positive outcome whereby students' pay importance to comprehending the lesson compares to high scores. Table 2.23 presents summary of students' perception on the clear goals and standards of the ELLIS program

Table 2.23: Summary of students' perception on the clear goals and standards of the ELLIS program

Key aspects of learning context	**Items**	**Students perception**
Clear goals and standards	**4**	Students had a positive viewpoint that the program was too difficult to achieve better scores.
	24	Students were holding negative perception that they needed high competition during participation to score well in the ELLIS program

	25 **26**	Students viewed positively to pay importance to comprehending the lesson compares to achieving high scores.

c) Appropriate workload aspect

Respondents' perceptions of the appropriateness of their program workloads were measured through item 5 as well as 13 -16. Item 5 inquired whether they agreed to the statement that the workload was too heavy to score high marks. The result indicated that the mean was 3.4. The score is more than 3, which showed that the respondents possessed moderately high perception on the ELLIS program workload is too heavy to score high marks. Thus, students were holding positive perception on the ELLIS program workload that was excessively heavy to score high marks.

Item 13-16 in the ELLIS program experience questionnaire inquired whether they agreed to the statement that many questions on reading comprehension, grammar, vocabulary listening or speaking section led the students to score better. The result indicated that the mean was 2.9 for item 13. The score is less than 3, which showed that the respondents possessed moderately low perception on many questions on the reading comprehension section led them to score higher. Furthermore, the result indicated that the mean was 3.25 for item 14. The score is more than 3, which showed that the respondents possessed moderately high perception on many questions on the grammar section leads them to score better. Correspondingly, the result indicated that the mean was 3.15 for item 15. The score is more than 3, which showed that the respondents possessed moderately high perception on many questions on the vocabulary section leads them to score better. In that order, the result indicated that the mean was 3.1 for item 16. The score is more than 3, which showed that the respondents possessed

moderately high perception on many questions on oral (listening & speaking) section lead them to score well. Thus, the CALL group students showed that many questions on grammar, vocabulary, listening and speaking section were helpful to score better. However, many questions on reading comprehension section were unhelpful to score better in the ELLIS program. Thus, item 14 – 16 showed a positive perception and item 13 showed a negative perception. As a result, this could be marked as the reading comprehension section carries heavy workload but did not direct to score well in the CALL (ELLIS). Table 2.24 presents summary of students' perception on the appropriate workload of the ELLIS program

Table 2.24: Summary of students' perception on the appropriate workload of the ELLIS program

Key aspects of learning context	**Items**	Students perception
Appropriate workload	**5**	The students were holding positive perception on the workload was too heavy to score well.
	13	CALL group students showed a positive view on many questions on grammar, vocabulary, listening and speaking section were helpful to score better. Yet, students showed negative perception on many questions on reading comprehension was helpful to score better.
	14	
	15	
	16	

d) Appropriate assessment aspect

The appropriate assessment key aspect measured respondents' perceptions about the extent to which assessment stresses the recall of information rather than other intellectual skills trough item 3, 22 and 23. High scores indicated that respondents perceived skills other than recall were critical to successful academic performance.

Item 3 inquired whether they agreed to the statement that ELLIS program was more focused on testing students' memory than what the students understood. The result indicated that the mean was 2.6. The score is less than 3, which showed that the respondents possessed moderately low perception on the ELLIS program was more focused on testing learners' memory than learning a lesson. Thus, item 3 showed students had negative belief on the CALL (ELLIS) program was more focused in testing the learners' memory compare to learning the lesson.

Item 22 – 23 inquired whether they agreed to the statement that the ELLIS program learners needed good memorizing skill or good understanding on the lesson to perform well. The result indicated that the mean was 2.75 for item 22 and the mean was 2.85 for item 23. The score is less than 3, which showed that the respondents possessed moderately low perception on they need good memorizing skill also, better understanding of the lesson during participation to score well in the ELLIS program. Thus, the researcher studied that the students' hold negative perception on memorizing neither understanding the lesson to score well. Table 2.24 presents summary of students' perception on the appropriate assessment of the ELLIS program

Table 2.25: Summary of students' perception on the appropriate assessment of the ELLIS program

Key aspects of learning context	**Items**	Students perception
Appropriate assessment	**3**	Students had negative belief on the CALL (ELLIS) program that was more focused in testing the learners' memory compare to understanding the lesson.
	22	Students' were holding negative perception on memorizing neither to understand the lesson to score well.
	23	

e) Generic skills aspect

Generic skills aspect measured respondents' perceptions of generic skill development (e.g. problem-solving, basic language learning skills, preparation) achieved in the ELLIS program through item 2, 6 -11, 27. Item 2 inquired whether they agreed to the statement that ELLIS program helped the students to develop learners' abilities to work individually. The result indicated that the mean was 3.05. The score is more than 3, which showed that the respondents perceived moderately high perception on the ELLIS program helped learners to develop abilities to work individually. As a result, the students had a positive view on the ELLIS program has helped learners to develop abilities to work individually. The reason for this could be CALL provides them with appropriate different ways of learning by individualizing the learning process (Hoon, Chong & Azilah, 2010; Ong & Ruthven, 2010; Mudiana, et al., 2011).

Item 6 - 9 investigated whether the students agree to the statement that the program could enhance the students' language learning skills. Item 6 in the ELLIS program experience questionnaire inquired whether they agreed to the statement that the ELLIS program developed the students' reading skills. The result indicated that the mean was 2.85. The score is less than 3, which showed that the respondents possessed moderately low perception on the ELLIS program improved their reading skills. Item 7, as well as item 9, inquired whether they agreed to the statement that the ELLIS program developed the students' speaking skills and abilities to use oral, written and visual communication. The result indicated that the mean was 3.2 for item 7 as well as item 9. The score is more than 3, which showed that the respondents possessed moderately high perception on the ELLIS program has improved their speaking skills and abilities to use oral, written and visual communication. Item 8 inquired whether they agreed to the

statement that the ELLIS program developed the students' listening skills. The result indicated that the mean was 3.25. The score is more than 3, which showed that the respondents possessed moderately high perception on the ELLIS program developed the students' listening skills. Therefore, students showed negative perception on the CALL (ELLIS) program improved their reading, nevertheless, showed a positive perception on speaking, listening skills as well as abilities to use oral, written and visual communication with the ELLIS course.

Item 10 in the ELLIS program experience questionnaire inquired whether they agreed to the statement that the ELLIS program experiences helped the learners' to engage actively in their learning. The result indicated that the mean was 3.25. The score is more than 3, which showed that the respondents' possessed moderately high perception on the ELLIS program experiences helped the learners' to engage actively in their learning. Therefore, item 10 showed a positive perception.

Item 11 in the ELLIS program experience questionnaire inquired whether they agreed to the statement that the ELLIS program developed their problem-solving skills. The result indicated that the mean was 2.95. The score is less than 3, which showed that the respondents possessed moderately low perception on the ELLIS program developed their problem-solving skills. Thus, majority students showed a negative perception on item 11.

Item 27 in the ELLIS program experience questionnaire inquired whether they agreed with the statement that students have put enough effort towards language learning because of the ELLIS program. The result indicated that the mean was 2.85. The score is less than 3, which showed that the respondents possessed moderately low perception

on the statement that they put enough effort into language learning because of the ELLIS program. Thus, item 27 showed a negative result.

The outcomes of the generic skills showed that majority of the CALL (ELLIS) students claimed that they could enhance their speaking, listening skills as well as abilities to use oral, written and visual communication in English language because of ELLIS course. Perhaps, this could be also a reason for learners who have developed their abilities to work individually as well as involve dynamically in learning. Therefore, exploring learning environments many times involves active learning from many different perspectives (Spiro, Feltovich, Jacobson & Coulson, 1991). However, they perceived that ELLIS could not improve their reading skills. On the other hand, most of the students did not build their problem-solving skills through ELLIS program. Learners' helplessness might be a cause for them to not develop their reading skills. Similarly, according to a study by Gan, Humphreys & Hamplyons (2004), due to their passive and frustrated learning process, the unsuccessful students had almost no motivational experiences to keep moving on in learning. Table 2.26 presents summary of students' perception on the generic skills of the ELLIS program.

Table 2.26: Summary of students' perception on the generic skills of the ELLIS program.

Key aspects of learning context	**Items**	Students perception
Generic skills	**2**	Students had a positive view on the ELLIS program has helped learners to develop abilities to work individually.
	6 **7** **8** **9**	Students had a positive view on the ELLIS program was helpful for students to improve speaking, listening, oral, written and visual communication. However, students showed a negative view on ELLIS program was helpful for them to improve their reading skills.
	10	The CALL group students were holding positive perception on the ELLIS program experiences helped the learners to engage actively in learning.
	11	Students showed negative perception on the ELLIS program developed their problem-solving skills.
	27	The students hold a negative view on taking enough effort into language learning because of the ELLIS program.

f) Students' Overall Satisfaction

Item 28 ask students to indicate Overall Satisfaction about the quality of the ELLIS program. While 'overall course satisfaction' has been established as a total outcome measured by 'general practice' (Ashenden & Milligan, 1999), an argument can be made that affective factors such as perceived interest in course content (Kember, 1996) or students' satisfaction with the programme choice might equally be regarded as signify elements. According to the statistical result, the overall mean of the 20 respondents was 3.3. The score is more than 3, which showed that the respondents possessed moderately high perception on the overall quality of the ELLIS program. Thus, item 28 showed a

positive result. In the next section, an additional question in E-CEQ measured students' agreement on the ELLIS program helped to achieve better scores or in contrast.

4.3.1.2 The frequency distribution and thematic analysis of item 29

Question 29 in the E-CEQ was a close-ended question followed by an open-ended sub-question. In this section, frequency count and percentage (n, %) were measured for close-ended data and thematic analysis was done for the students' perception on the sub-question of question 29.The researcher broke the data and transferred into a brief outline, with concepts being main headings and categories being subheadings. Finally, students' perception was analyzed to give a clear picture of how they perceive the use of CALL in learning Basic English subject.

This question inquired whether learners agreed to the statement that the ELLIS program helped them to achieve better scores. The students were supposed to provide yes or no answers and proceed to sub-question of question 29. If the students answered 'yes,' they were inquired that in what way the ELLIS helped to develop language ability. If the students answered 'no,' they were inquired on how the ELLIS program was unhelpful and suggested approaches that could enhance the low proficiency students' language performance. 20% of the CALL group students said that ELLIS program helped them to achieve better scores. However, the majority of them (80%) felt contradictory as shown in Figure 4.17.

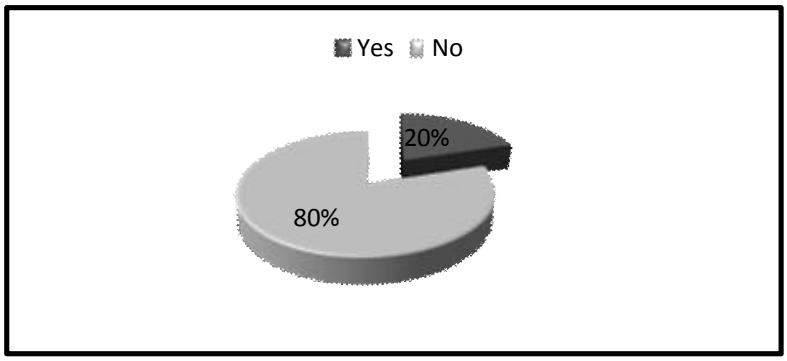

Figure 4.17: ELLIS program was helpful for the low proficiency students' to achieve better scores

The researcher studied that 20% or four students found that ELLIS helped to develop their language ability. Therefore, students' perception (refer to *Appendix E*) was analysed according to the key aspects of CALL (ELLIS) learning environment. As a result, student 1 has noted the CALL (ELLIS) as an exciting program that exposed a good quality aspect of the program. Furthermore, appropriateness in workload and assessment was revealed by student two who has noticed that extensive exercises enhanced learners' language proficiency along with lesson quizzes, games and tests involved learner' to score well. Moreover, student 1 perceived that the CALL (ELLIS) program developed learners' confidence level in learning. Besides, student 2 and student 3 noted that ELLIS program tested and developed learners' language skills. In addition, student four also has enhanced listening and speaking skills and improved in English language communication. Thus, all four students found that CALL (ELLIS) developed their generic skills. Table 4.27 presents students perception on the key aspects of learning context of ELLIS program. A further comparison of the results on student perceptions has reviewed difficulties in the CALL (ELLIS) environment, although they were supposed to talk about, in what ways the ELLIS helped them to develop their language ability.

Table 4.27: Students perception on the key aspects of learning context of ELLIS program

Key aspects of learning context	**Students perception**
Good quality program	*Computerized English language program is interesting....* *Student 1*
Appropriate workload	*A lot of exercises provided can enhance the language proficiency....* *Student 2*
Appropriate assessment	*Lesson quizzes, games and tests attracted me to score well.* *Student 2*
Generic skills	*Increase the level of self esteem....* *Student 1* *ELLIS program tested my language ability.....* *Student 2* *ELLIS program helped me to improve my language ability.* *Student 3* *I have improved my listening and speaking, and I am better in my English language communication now.* *Student 4*

However, sixteen students or 80% of the CALL-ELLIS students felt that the ELLIS program was unhelpful and could be improved. Therefore, thirteen students had a negative perception on the CALL (ELLIS) program. Another three students also rated the CALL-ELLIS program was unhelpful to score well in the Basic English final exam, without providing further opinions and just stated that the program needed to be developed. On the other hand, the three students among four students who have agreed that the ELLIS program helped them to enhance their language proficiency, also have reviewed difficulties in the CALL (ELLIS) environment and given suggestion.

Investigations into learners' opinion on the ways that the CALL-ELLIS helped the learners in learning the Basic English course in the present quantitative inquiry clearly described the important role of a learning approach in the learning process. Accordingly, the complexity and mismatches between learners, teachers, and syllabus were noted by Entwistle & Smith (2002) that tended learners to provide low rating regarding the program. Thus, students' negative perceptions on CALL (ELLIS) were analyzed through rational themes to find out how the ELLIS program was unhelpful for low proficiency learners.

As Riding (2002) pointed out, ineffective learning processing was mainly due to the disparity of learning approaches with instructional design; optimal learning outcome could be achieved when learners could best interact with the learning material. Interaction, however, should by no means be restricted to the interaction only between the learner and content; instead, interaction between learners, learners with the instructor, with non-human factors as well as with the interface and environment should all be addressed in an effective constructive learning environment as stated by Jonassen (1999). Further comparison of results provided data of the students' perceptions on the lack of interaction reasoned the low-proficiency students' to notice ELLIS program as unhelpful to develop their language performance. The results of open-ended questionnaire session showed evidence of lack of interaction among:

a) Learner – instructor

b) Learner - non-human factors

   i) Educational/learning objective

   ii) Teaching aids

   iii) Number of hours devoted

Furthermore, students' suggestions that could enhance the low proficiency students' language performance were also taken into consideration for recommendations of the study.

a) Lack of interaction among learner and instructor

Results measured the lack of interaction among learner and instructor, meanwhile, the CALL (ELLIS) implements facilitation rather than overt teaching as noted by student 2. Following that according to student one, lessons in the CALL-ELLIS program was not well received without a teacher. This happens because the low-proficiency learners could not find the knowledge type they acquire to benefit the ELLIS program without the assistance of a teacher. Similarly, Schulze (1994) noted that computer-assisted language learning could not replace the teacher as the only tool of student language learning.

The response from Student 1:

> *....I think with the assistance of a teacher alike F2F we can perform better.... it was not well received because of…….no teacher. We had many quires, and we just assume particular language problems and didn't get any clarification (Student1).*

The response from Student 2:

> *……. We were not independent to explore everything. Anyhow we needed teacher assistance. It was because the CALL instructor just assists in term of technical*

problems rather than teaching. As we observed F2F lecturer guiding them very well. I think we can perform well if assisted by a lecturer. (Student 2)

Student one also has perceived that learners were confused with particular language problems without teachers' help. According to Chang, Chiu, and Lee (2000), the low-proficiency learners' want more personal attention in class, take a longer time to finish a learning task, and often delay. Besides that mistaken or uninformed viewpoint about language learning may lead to dependence on ineffective strategies, resulting in the lack of interest toward learning (Horwitz *et al.* 1986).

The response from student 20:

..... *Needed translation from the teacher. (*Student 20)

As noted by student 20, learners required the instructor to translate the incomprehensible lessons. Similarly, Huang and Tsai (2003) surveyed the low-proficiency learners believed that they lacked the special abilities to learn English well, learning English was really difficult; translation was an important skill to help them grasp the meanings of English texts. Moreover, 'technology in and of itself does not promote learning' (Burge & Roberts, 1993, p. 35), its exercise in learning environment does not prevent the teachers' responsibility of structuring the learning to ensure these compensates result.

b) Lack of interaction among learner and non-human factors

Negative perception on CALL-ELLIS learning revealed that there were restricted interactions among learner and non-human factors in the CALL-ELLIS learning environment. Students' perceptions refer to the non-human factors such as the educational/learning objective, the teaching aids and the number of hours devoted that affect directly in CALL learning, along with these factors are aroused according to their importance in language learning.

i) The educational/learning objective

According to Smith (1957), 'the educational objectives are derived from the culture.' This culture consists of the philosophy, methods, skills, organization and other made aspects of the environment. In the present study, with a focus on providing an intensive practice of Basic English language usage, the Basic English course integrated the four language skills – reading, grammar and vocabulary, listening and speaking to improve the learners from beginner level to intermediate level. The university college tries to achieve these learning objectives through the Basic English curriculum. Results found that there was limited interaction among learner and educational/learning objective which is a non-human factor. Correctly used, the computer is an excellent instructional tool. The computer is an appropriate instructional medium if the lesson it presents is useful and suitable to the intended learners (Steinberg, 1984).

The response from Student 2:

..... I did not reflect good results in Basic English final exam. (Student2)

Therefore, student 2 perceived that did not produce a good result in the Basic English final exam. The students' response shown learner did not meet the subject objective that to improve from beginner level to intermediate level in Basic English subject. Perhaps, this can be one of the main causes for the students' to note this ELLIS program as not interesting. In fact, attentiveness of the right structure to finish the ELLIS program is significant to achieve the subject objective (*refer to Figure 3.2 for the Suggested sequence for the ELLIS program within each unit and lesson*). Yet, student 8 was not alert on the ELLIS pathway, even, students were briefed on the ELLIS structure in the first session.

The response from Student 8:

> *..... not helpful to score high in Basic English final exam. we didn't know the right pathway to learn as F2F.... (Student 8).*

Besides, results also showed restricted interaction among learner and the learning objectives of the CALL learning environment that reasoned mismatch in learning. Findings have shown that students involved actively in learning. Still, students expressed the need for a better learning setting, which would only show relevant and useful features. For that reason, student 6 stated that the CALL (ELLIS) program come with a heavy workload that is overloading for their low-proficiency level. At times learner also leave the lesson unfinished and complete the test component which is important. This can be said that a weakness of hypermedia learning environments is disorientation of the learner.

The response from student 6:

> *Heavy work load. This is a lot for beginner level. Sometimes we just skip the lesson and complete the test. (Student 6)*

The response from student 7:

> *There are a lot of component in the ELLIS. We cannot complete..... (Student 7)*

The response from student 8:

> *.....ELLIS is a complicated program and need to concentrate well to complete all the lessons...(Student 8)*

Student seven and eight also perceived complication in term of ELLIS program that displayed lots of sections that required learners to be more focused and that reasoned in completion. Initially, the researcher has highlighted that the ELLIS is known and agreed design standards and protocols providing easily understandable and learn able conventions. Mark Warschauer & Deborah Healay (1998) also have emphasized that this program is different from other multimedia programs because comprised a curriculum and not just distinct elements for exercise. However, limited understanding on the suggested sequence to exercise the ELLIS program caused disparity in learning as well as reasoned students' to perceive inconsistency about the ELLIS program. In addition, incomprehension, in the result, is the product of insufficient early orientation to the program and poor ongoing guidance in the environment and use of the program (Hannafin, 1996).

The response from student 19:

> *Need not to complete all the aspects in the intro level.....Skip unnecessary component. (Student 19)*

The researcher noticed that the low-proficiency learners' in the CALL (ELLIS) program were worried that unfinished the program before bonding time, and they skip a number of segments in order to complete the ELLIS program. As an outcome, the low-proficiency students' in the CALL (ELLIS) program managed to finish the program, yet, did not meet the equal standard in the Basic English final exam. As highlighted by Khaldieh (2000), the influence of learning strategies can affect performance on a task. Finally, students 5 perceived ELLIS program was less meaningful, possibly, as a result of the student was too shy to share the scores with others.

The response from Student 5:

> *Low test scores discouraged me to learn. I was very shy to share my scores with other friends. I redo the test in order to get better scores. (Student 5)*

In a study similar to Huang & Tsai's, Gan, Humphreys, & Hamplyons (2004) found that poor learners experience helplessness in learning and low-confidence. As well as needed self-management ability and the inventiveness to get better their English through their hard work (Huang & Tsai's, Gan, Humphreys & Hamplyons, 2004). This can be obviously noticed as the students' hold a negative perception on the test scores displayed encourages students' to score well. According to the study, due to their passive and frustrated learning process, the majority of the unsuccessful students in the

CALL (ELLIS) group had almost no motivational experiences to keep them moving on in learning. As a result, majority of the CALL (ELLIS) students neither of any great concern on the stability, simplicity or meaningfulness of the ELLIS program nor encouraged to learn the English language because of the restricted interaction in the learning objective of the CALL learning environment.

ii) Teaching aids

In the present study, limited interaction also occurred among learner and teaching aids another non-human factor, other than educational objective. Teaching aid is an object such as book or device such as a computer used by a teacher to enhance or enliven classroom instruction. In the current study, the computer was utilised as a teaching aid that served the CALL environment. Lizzio (2002) said that teaching aids help stimulate pupils for language learning and play a significant role.

Besides, the computers used in the CALL learning environment to access the ELLIS program holds technical problems according to students. Student three and student six-teen reported that technical problems lead learners to unfinished the ELLIS program. Thus, Felix (2008) said that the technologies need to be stable and well supported, drawing attention to concerns that technical problems may interfere with the learning process. In view of that, the technical problem in the computer lab in the CALL (ELLIS) program was highlighted by student three, student eleven, student four-teen, student six-teen and student seven-teen. Furthermore, student three as well as student sixteen noted that the accessible hours were not committed totally by the students since the occurrence of technical problems and that caused students to perceive ambiguity in learning with CALL-ELLIS.

The response from Student 3:

> *I did not have enough time to utilize the program completely because of the technical problem.(Student 3)*

The response from Student 16:

> *Technical problem caused student unfinished all the aspects in the program.(Student 16)*

As a result of these technical problems, the students were not excited and skipped insignificant segments in the CALL (ELLIS) program (as responded by student 19) and completed test components in order to finish the program.

The response from student 19:

> *... anyway we didn't complete all because not enough time. Sip unnecessary component. (Student 19)*

Student seven also reported that they should receive other teaching aids such as course book and work book, as the F2F learning classroom so unfinished tasks can be done at home. In the same way, Sanders (2005) also highlighted that when a new textbook with more multimedia and computer support materials was included, it led to improved instruction. Perhaps CALL-ELLIS lessons will become enjoyable and more permanent with the course book and the student workbook. Moreover, Student 11 suggested a blended learning of CALL and F2F to resolve the technical problem.

The response from Student 7:

> *...we should get a module alike F2F so we can do the balance at home as home work. Thus a manual guide needed. (Student 7)*

The response from Student 11:

> *Normal classroom learning comprehended with the ELLIS program. Thus, we can just ignore the computer and continue with module. (Student 11)*

Therefore, a computer can be employed to implement many forms of teaching but if the computer application is underprivileged for the target population, there will probably be little or no learning.

iii) Number of hours devoted

The research found that students perceived negative view on the CALL-ELLIS environment because of limited interaction among learner and the restricted number of hours devoted as a non-human factor to CALL-ELLIS learning environment. Interestingly, the following are some of the responses that were concerned about the duration of the course and realized that the CALL-ELLIS learning did not help students to score well in the Basic English final exam.

The response from Student 1:

> *...it was not well received because of limited time.....(Student 1)*

The response from Student 3:

I did not have enough time to utilize the program completely because of the technical problem. (Student 3)

The response from Student 9:

Duration was too short to utilize all the components in ELLIS. . But our friends in F2F manage to compile all because guided by a teacher. (Student 9)

The response from Student 12:

Not enough time to complete the whole program...(Student 12)

The response from Student 13:

Can't access after class hours. Increasing the number of computer labs..(Student 13)

The response from Student 19:

Anyway we didn't complete all because not enough time. Need not to complete all the aspects in the intro level. Anyway we didn't complete all because not enough time. Skip unnecessary component. (Student 19)

The response from Student 20:

Extra learning time.(student 20)

Agreeing to Ansel (1992) and Hartoyo (2006), technology assisted learning may better support aspects of language learning pertinent to vocabulary, reading, or grammar because of the convenient access it offers to learn materials that students may study repetitively at their preferred time and pace. However, in this study the CALL (ELLIS) group depends to the language laboratory that can only be accessed in restricted hours. Whereas the F2F classroom learning group could practice the exercises even after the class hours with the course book and student workbook provided. Perhaps this might reason the low-proficiency learners' in CALL (ELLIS) group did not perform well compared to F2F group students who could revise the lesson whenever necessary through the teaching aid given.

Therefore, according to student 1, 3, 9, 12 and 19 perceptions, restricted access caused by technical problems as well as learners' time dedicated reasoned students to incomplete the CALL-ELLIS task. In addition, the CALL (ELLIS) students' also requested to provide limitless access to the program after the class or extra learning time. Thus, CALL (ELLIS) learners recognized CALL (ELLIS) environment was unhelpful in learning for the reason of the restricted number of accessible hours. Table 4.28 presents limited interaction reasoned the CALL (ELLIS) unhelpful for the low proficiency learners' to develop their language performance.

Table 4.28: Limited interaction reasoned the CALL (ELLIS) unhelpful for the low proficiency learners' to develop their language performance.

Limited interaction	**Students perception**
Learner – instructor	*I think with assistance of a teacher alike F2F we can perform better..... It was not well received because of .....no teacher. We had many quires and we just assume certain language problems and didn't get any clarification.* *(Student 1)* *..... We were not independent to explore everything. Anyhow we needed teacher assistance. It was because the CALL instructor just assists in term of technical problems rather than teaching. As we observed F2F lecturer guiding them very well. I think we can perform well if assisted by a lecturer.* *(Student 2)* *... Anyway I think we need a teacher.* *(student 8)* **.....** *Needed translation from the teacher.* *(Student 20)*
Learner - non human factors **i) Educational/Learning objective**	*I did not reflect good results in basic English final exam.* *(Student 2)* *....not helpful to score high in Basic English final exam. May be because we didn't know the right partway to learn as F2F.* *(Student 8)* *Heavy work load. This is a lot for beginner level. Suggest to reducing the question. Sometimes we just skip the lesson and complete the test.* *(Student 6)* *There are a lot of component in the ELLIS. We cannot complete.....* *(Student 7)* *..... need to concentrate well to complete all the lessons...* *(Student 8)*

	Need not to complete all the aspects in the intro level.....Skip unnecessary component. *(Student 19)* *Low test scores discouraged me to learn. I was very shy to share my scores with other friends. I redo the test in order to get better scores.* *(Student 5)*
ii) Teaching aids	*I did not have enough time to utilize the program completely because of the technical problem.* *(Student 3)* *Technical problem caused student unfinished all the aspects in the program.* *(Student 16)* *... anyway we didn't complete all because not enough time. Sip unnecessary component.* *(Student 19)* *...we should get a module alike F2F so we can do the balance at home as home work. Thus a manual guide needed.* *(Student 7)* *Normal classroom learning comprehended with the ELLIS program. Thus, we can just ignore the computer and continue with module.* *(Student 11)*
iii) Number of hours devoted	*...it was not well received because of limited time.....* *(Student 1)* *I did not have enough time to utilize the program completely because of the technical problem.* *(Student 3)* *Duration was too short to utilize all the components in ELLIS. . But our friends in F2F manage to compile all because guided by a teacher.* *(Student 9)* *Not enough time to complete the whole program...* *(Student 12)* *Can't access after class hours. Increasing the number of computer labs..* *(Student 13)*

	Anyway we didn't complete all because not enough time. Need not to complete all the aspects in the intro level. Anyway we didn't complete all because not enough time. Skip unnecessary component. *(Student 19)* *Extra learning time.* *(student 20)*

4.3.2 Summary

In order to answer the second research question, the students' perception on the CALL (ELLIS) program was measured through a student-ELLIS experience questionnaire. Result measured shown evidence of students observed positive as well as negative viewpoint on the key aspects of the CALL (ELLIS) program: quality of program, clarity of goals and standards, nature of assessment, level of workload and development of generic skills.

Items were grouped according to the key aspects of the program. Therefore, good quality program element has measured respondents' perceptions on CALL-ELLIS standards. It dedicated on CALL-ELLIS programs'; merit, comprehensible in explaining lesson, prepared the lessons measured to be better than F2F, assessments motivating them to score well, and scores displayed has encouraged the students to score well. The present research indicates a positive perception of students on the quality of CALL-ELLIS program, except on the clarity in explaining lesson.

Furthermore, clear goals and standards aspect measures respondents' perceptions of the clarity with the CALL-ELLIS program that expected academic standards and program goals. Results showed positive perception on complicatedness to achieve better scores, as well as comprehending the lesson is important to prove achievement. However,

negative perception shown on high competition while enrolled in the program that leads to scoring better also students' pay importance to high scores.

Appropriate workload aspect measured respondents' perceptions of the appropriateness of their program workloads. Positive perceptions indicated that workload levels were adequate. Furthermore, grammar, vocabulary, listening and speaking sections were so excessive so as to be favourable to learning except for reading comprehension section.

In addition, appropriate assessment scale measured respondents' perceptions about the level of the assessment stressed to recall the knowledge rather than other intellectual skills. Negative belief showed that the CALL-ELLIS program was more focused in testing the learners' memory, as well as students, also focused on memorising compare to comprehending the lesson to performance in ELLIS program.

Furthermore, generic skills scale measured respondents' perceptions of generic skill development: work independently, improved basic language learning skills, engaged actively in learning, problem-solving and hardworking. CALL students develop abilities to work individually and enhanced the basic language learning skills through the CALL-ELLIS Program. However, the CALL environment has not improved the students' reading skills, engage actively in learning, problem-solving and effortful in language learning.

The item 28 measured overall satisfaction of the program. As a result of that the CALL-ELLIS students established satisfactory with the whole quality of the ELLIS program. More study on the additional item on the E-CEQ measured the manner that the ELLIS program helped the students' to achieve better scores. Outcomes showed that only a

minority of four learners' or 20% has written some positive perception on the CALL-ELLIS learning environment. The majority of six-teen learners or 20% perceived negative perception on CALL (ELLIS) learning. Findings of students' opinion showed evidence of lack of interaction among; learner and instructor, learner and non-human factors as the educational objective, teaching aids as well as number of hours devoted.

4.4 Discussion of results

This section discusses the findings of the research questions intended to address which instruction method is more effective in the learning of Basic English course and program experience on participants' perceptions to examine the use of the CALL program in learning.

As the results indicated after the treatment, both CALL (ELLIS) and F2F classroom learning revealed statistically important differences in the Basic English final exam, yet, the students who were taught by F2F significantly performed better than the students who were taught by the CALL (ELLIS) for reading comprehension, grammar and vocabulary, listening as well as speaking sections in the Basic English course. Though, the F2F learners' had performed poorer compared to CALL (ELLIS) learners' before treatment (pre-test). For that reason, Piccoli (2001) stated that learning performance is equivalent between students using technology-assisted learning and those learning from face-to-face instructions.

Hence, programs similar to ELLIS are educational opportunities that are proposed and prepared learning experiences intended to augment the knowledge and skills for those who are in higher studies institution. Miriam Resendez & Mariam Azin (2009)

conducted a study on the effects of ELLIS Essentials on English language learners and observed ELLIS students did better than control students who received no supplemental instruction across all sub-tests with the exception of the Listening sub-test. In contrast, ELLIS students did not tend to perform better than control learners who received non-computer based regular classroom instruction during the same period. In addition, ELLIS students who began the course at higher proficiency levels (e.g. intermediate or nearing proficiency) inclined to show more enhancement than students who began the course at the lowest English language proficiency levels. Therefore, the effectiveness of the computer-assisted language learning program depends on how a learner exercises it.

For that reason, research on specific skills other than writing has tended to emphasis on learner attitudes toward drills and effectiveness of drills (Abraham, 1985; Al-Juhani, 1992; Botiono, 1992; Dalgish, 1991; Evans, 1993; Kleinmann, 1987; Robinson, 1989; Schaeffer, 1981; Van der Linden, 1993; Wang, 1993). The results have been mixed, largely because the types of software, teacher roles, and student tasks have been quite diverse. Thus, the investigator further studied the results measured through data from the closed-ended question session of the E-CEQ and found that the learners' observed positive and negative perceptions on the key aspects of the CALL (ELLIS) program; quality of program, clarity of aims and standards, nature of assessment, level of workload as well as development of generic skills. While 'overall course satisfaction' measured as a significant factor revealed that the majority of the CALL-ELLIS students established satisfactory with the overall quality of the ELLIS program. Still, the students had perceived that the ELLIS program was unhelpful for the learner to achieve better scores.

As Riding (2002) said, unsuccessful learning was mainly expected towards the mismatch of learning strategies with instructional design; optimal learning outcome could be attained when learners could best interact with the learning material. As a result, investigations into learners' perception on the ways that the CALL-ELLIS helped the learners in learning the Basic English course in the present qualitative inquiry explicitly described the important role that learning strategies play in the learning process. In a study on learning environment, the complexity and mismatches between students, instructors, and curriculum were noted by Entwistle & Smith (2002). Therefore, the current study showed evidence of lack of interaction among learner and instructor as well as learner and non-human factors such as educational objective, teaching aids and number of hours devoted, which were the significant factors that directed learners' to observe unhelpfulness on the CALL (ELLIS) learning process.

Research has started to develop in CALL research that concentrates on students' attitudes for learning language with computers, in line with the extensive practise of computers in language teaching-learning. Hence, the present study found that students had strong negative attitudes towards using CALL alone as a replacement for a teacher. Agreeing to Chang, Chiu & Lee (2000), McLaughlin & Vacha (1992) and Slavin (1989) low-proficiency students' need individual attention, take extra time to comprehensive task, as well as often delay. Also, incorrect or unaware of philosophy about language learning may lead to dependence on less effective approaches, causing in indifference toward learning (Horwitz *et al.* 1986). Thus, the study found that although CALL (ELLIS) is being employed, instructor could be still remaining central to the teaching and learning practise (Martin, Khaemba & Chris, 2011). Hence, researcher stressed that the computer is just an additional aided learning tool for the instructor that require more attention for low-proficiency students. The educational software in the market is an

alternative method to aid the teacher in teaching (Noordin & Fatimah, 2011). Therefore, CALL becomes most exciting innovation in the educational technology. CALL is a set of programming instructions that is used in the instructional process for the low-proficiency students' to mastery over the subject content and not to wholly replace a teacher role.

Moreover, according to Lee (2010), many instructors claim that the courseware is ineffective for certain students. Furthermore, Lee & Kim (2012) claims that courseware has some tough aspects that may de-motivate the students. Even, in the present study, students also observed that the content is too complex and too much to grasp in one go (Lee & Kim, 2012) in the CALL setting. However, lack of number of hours devoted on the student' accessibility to the CALL (ELLIS) reasoned lack of interaction among learner and CALL learning environment. According to Ansel (1992) and Hartoyo (2006), technology assisted learning may better support language learning aspects because of the convenient access it offers to learn materials that students may study repetitively at their preferred time and pace.

In an early study on this issue, Chapelle & Jamieson (1986) investigated the use of computer in English as second language classes and found that students who worked harder at learning English spent much time using computers for their learning and had more positive attitude toward it. Similarly, Ayres (2002) did study in English as a second language setting and reported positive attitudes towards CALL among language learners and that students' value the learning with the use of computers. Thus, lack of accessibility towards ELLIS was one of the reasons for the CALL (ELLIS) students to observe negative perception on the program.

Sometimes the problem is the method the courseware is used as a tool for teaching and learning (Bortolossi, 2012). The way CALL is applied in teaching-learning can affect its effectiveness. Therefore, new studies are needed to clarify the effect of CALL in the current students' environment (Hassan, 2008). Besides, it is required to study the courseware whether it meets the requirements before it is being used (Mutalib, 2008). In fact, CALL allows the educators to expand their selection of methods, tools and strategies beyond those that are frequently used in the classrooms. So, in relation with that, the courseware needs to be tested (Mudiana, 2011). Conclusions on the research findings will be detailed in the chapter five.

CHAPTER 5

CONCLUSION

5.1 Introduction

In chapter 4, the researcher analysed the data of a pre-study questionnaire and pre-post tests results collected from the control and experimental groups. This is followed by the analysis of an ELLIS-course experience questionnaire (E-CEQ) with the experimental group pertaining to students' perceptions towards the CALL (ELLIS) program. These findings are summarised to present an overall account of this study. Finally, the researcher will draw conclusions as well as discuss and describe the implications of the findings, followed by recommendations for future research.

5.2 Summary of the findings

The study is carried out for the specific purpose of investigating the use of a CALL program to enhance the language performance of low proficiency learners in the instruction of the Basic English course. Besides that, this study also aimed at finding the causes for the disparity between the scores obtained for the ELLIS program and the students' language ability.

The first research question attempted to find out whether CALL(ELLIS) or F2F classroom learning instruction is more effective as measured by the learners' pre-post tests results. For this purpose, the data obtained from the pre-post tests were retrieved. The results for the reading comprehension section showed that the difference between

the two groups in students' post-test scores was statistically significant at the 0.013, $p < 0.05$ level, favouring the F2F classroom learning group. This is followed by the results for the grammar and vocabulary section showing a statistically significant difference between the two groups at the 0.0004, $p < 0.05$ level, favouring the F2F group also. Next, the results for the listening section showed that the difference between the two groups in students' post-test scores was statistically significant at the 0.0009, $p < 0.05$ level, favouring the F2F group. Lastly, the results for the speaking section showed that the difference between the two groups in students' post-test scores was statistically significant at the 0.008, $p < 0.05$ level, favouring the F2F classroom learning group. Thus, based on the results obtained from the t-test for all four basic language skills showed that CALL remains a tool to learn while F2F proved to be more effective in enhancing the language performance of low-proficiency learners.

The second research question attempted to investigate in what way does ELLIS help or does not help the learners. Results measured through data from E-CEQ showed that the students had positive and negative viewpoints on the key aspects of the CALL (ELLIS) program: the quality of the program, clarity of goals and standards, nature of assessment, level of workload and development of generic skills. Besides, the CALL-ELLIS students stated satisfaction with the overall quality of the ELLIS program. On the other hand, learners perceived that the ELLIS program was unhelpful to achieve better scores. This is interesting to note that initially the CALL (ELLIS) students showed a preference to be in the CALL (ELLIS) group. But at the end of the study, they were very disappointed because the program did not help them score better in their Basic English final examination and they felt that they would have learned better in the F2F classroom learning.

Furthermore, the study also found the primary causes for the disparity between the scores obtained from the ELLIS program and the students' language ability in the opinion of the CALL (ELLIS) students. It was found that the use of the computer-assisted language learning program depends on how a learner applies it according to the learning method. As Riding (2002) pointed out, the most favourable learning outcomes are achieved when learners could best interact with the learning material. As a result, lack of interaction between learner and instructor as well as learner and non-human factors were the potential causes for the learners to notice the CALL (ELLIS) program as unhelpful in learning. In addition, the students' computer competency level and the instructional mode selection did not show a significant impact on students' results.

5.3 Conclusions and implication of this study

In this section, the conclusion based on the findings is put forward. Then, the implication of the findings for CALL theory and pedagogy will be considered.

5.3.1 Conclusions

This study examined two research questions mentioned in chapter 1. While the findings of this research cannot be generalized to a different population, some conclusions can be drawn to help the University gain some insights on the current situation in the teaching and learning of the Basic English subject. The results of the first question indicated that there was a significant difference in the pre-post tests of the CALL (ELLIS) and the F2F classroom learning groups. Mainly, the results related to the first research question showed that both groups improved in the post-test, but the F2F classroom learning group scored better after the treatment and the CALL (ELLIS) scored lower. The results

showed that the difference between the two groups in their post-test scores was statistically significant at the 0.013, $p< 0.05$ level for the reading comprehension component, 0.0004, $p< 0.05$ level for the grammar and vocabulary component, 0.0009, $p< 0.05$ level for the listening component and 0.008, $p< 0.05$ level for the speaking component with all favouring the F2F group. Therefore, the study showed that both groups improved. But that control group appears to have done better than the experimental group and this seems to contradict previous research findings.

The results of the second research question which were obtained from the questionnaire identified the possible causes that CALL (ELLIS) was unhelpful in learning. In this case, the lack of interaction faced by learners between various aspects such as an instructor as well as non-human aspects was identified as a cause. The study shows that in the experimental group, the teacher did not play a role in helping the students navigate through the materials unlike in the control group. Basically the students in the experimental group were expected to learn on their own using ELLIS program with no guidance from teacher at all. Furthermore, they did not have access to the materials after class. It is therefore unsurprising that students did not perform better than the control group. Nevertheless, the study clearly highlights the important role that the teacher plays in guiding the low proficiency learners in using CALL materials. The results of the present study are not conclusive, and more research on CALL and F2F learning is required.

5.3.2 Theoretical implications

How to teach the Basic English course in a particular approach are the implications for the future teaching. An important component of the CALL theories is the role of the

language learning environment. More importantly, the results of this study showed that both groups improved in the post-test, but the F2F classroom learning group scored better compared to CALL (ELLIS) after the treatment. This is conflicting reasoned a study on the effect of ELLIS on English language learners by Miriam Resendez & Mariam Azin (2009) shown ELLIS students did better than control group students who used no supplemental instruction exception of the listening test, while such findings were not significant, the patterns were consistent. Results of the study also showed that ELLIS students testified significantly better satisfaction for learning English and motivation to learn English. Sometimes the problem is the way the program is utilized as a tool for teaching and learning (Bortolossi, 2012). The technique CALL is applied in teaching and learning can affect its helpfulness.

Current research findings concerning the importance of the learning environment consist of the complexity and mismatches between learners, teachers, and syllabus which were pointed out by Entwistle and his research team (2003). In addition to other elements, how students approach learning and how students recognize the teaching-learning environment are dominating factors that ultimately impact the quality of learning. In the present study, these two influences are, in turn, influenced by the choice of course materials for the low-proficiency students which was controlled by the English Unit's authority, presented according to the University's needs and assessed for Basic English teaching-learning, delivered through a CALL learning environment.

A closer examination of the latter two issues which were also reflected in respondents' ratings in the E-CEQ may shed valuable insights upon curriculum development. However, learners tended to provide fairly low ratings concerning the ELLIS program. This was especially true when learners pointed out the lack of interaction between

learner and instructor as well as non-human factors in the aspect of instructional design as in the current study.

The application of technology does not only mean the display of technology in the classroom. Technological application and integration should not be implemented for the sake of implementation. On the contrary, it should take into consideration the learners' needs and whether learners' existing learning strategies match the prescribed curriculum. Findings of the current study showed that the low proficiency learners were not aware of the strategies to perform in ELLIS program even it was informed in the beginning of the course. This was also reasoned by the lack of interaction between instructor and student in the CALL environment caused by the influence of the English units' authority. As Riding pointed out, unsuccessful learning processing was mainly due to the mismatch between learning strategies and instructional design; optimal learning outcomes could be attained when learners could best interact with the learning material (Riding, 2002). Thus, correct learning strategies should be measured in the future for an effective learning environment. Furthermore, interaction should not be limited only to the interaction between the learner and content; instead, interaction between learners, learners and the instructor, with non-human factors as well as with the environment should all be addressed in an effective learning environment (Jonassen, 1999).

The actual curriculum development at MUCH, however, reflected the lack of systematic needs analysis, scientific examination of learners' learning approaches as well as integration of all levels of interaction. Still, the ELLIS courseware is a comprehensive curricular program that has undergone a rigorous assessment and has been shown to be effective. The CALL (ELLIS) program provides students with continues

communication skills to lift their results to higher levels through fulfilling a great variety of communicative tasks. However, the students' incomprehension in the CALL environment and use of the program, results from the insufficiency in initial orientation to the program and poor guidance by an instructor. Robinson (2001) also highlighted the vital importance of conducting needs assessment prior to the implementation of the curriculum. How to effectively incorporate learning approaches into instructional design and curriculum development and how to maximize the effectiveness of interaction, require close attention by the University College academic board and the English Unit.

5.3.3 Pedagogical implications

The research findings also have pedagogical implications. The current study found that even though CALL (ELLIS) is being implemented, the instructor could still stay central to the teaching and learning process (Martin, Khaemba & Chris, 2011). Hence, the researcher stresses that the computer is just an additional learning tool for the teacher in some areas that require more attention for low proficiency students. The learning software in the market is an alternative method to assist teachers in teaching (Noordin & Fatimah, 2011). This makes CALL the most exciting innovation in educational technology. Furthermore, computer technology is enabled to deal with learners' unexpected learning problems and respond to learners' questions immediately as the teachers do in the F2F classroom learning but is restricted by the computer's artificial intelligence. Thus, the students also suggested that the program needs to be guided by a teacher in order for the learning aims to be achieved at the end of the Basic English course.

Thus, typical classroom learning can be blended with the ELLIS program as a blended approach for the instructional mode of teaching and learning in the future for the Basic English subject. Furthermore, the findings of the study also indicated that the instructor should translate the incomprehensible lessons. The researcher discovered that low proficiency learners believed that they required the special abilities to learn English well; learning English was really difficult, and translation was an important element to help them grasp the meanings of English texts. Furthermore, as observed in the research, the technologies need to be steady and well supported, drawing attention to concerns that technical problems may interfere with the learning process.

Training in computer mastery for both students and educators is essential, and time constraints may pose additional problems. The teacher can familiarize, improve and compensate for shortcomings in the courseware. The educator must feel comfy in the computer lab and with the medium in order to be able to use it effectively. Thus, training is needed for teachers to have enough technical knowledge about computers, the ELLIS program and Instructors' Utilities in the program to develop more reliable results. The instructor can easily monitor the students' performance and provide further explanations about the programs' administration while learning, after exploring the Instructors' Utilities. Perhaps this can help the students to score better in the future. Thus, the direct beneficiary from the study is the English Unit of the University College, and the findings will have a direct implication on the Basic English course. Hence, the scope of the study gives importance to the low-proficiency students in the CALL research field.

5.4 Recommendations

Several recommendations can be made for future research that complements the research undertaken in this study by extending the regions of the investigation. Needless to say, the use of CALL alone may be insufficient in the teaching-learning for low-proficiency learners. However, creating more opportunities for CALL might show a clearer picture.

Future research can be done on the Basic English course focusing more on the improvement of language performance for low-proficiency students at MUCH. A comparative study that can be conducted by increasing the number of respondents would be of great help to develop a more reliable conclusion. The Basic English course studied over a longer period might produce different results; one in a long semester and the other for the usual eight weeks' duration.

The students were categorized as low-proficiency students based on their SPM English results. However, the language proficiency might be different, according to their age group. Thus, the control and experimental groups are recommended to be tested for similarity before the study in future research.

Felix (2008) qualifies this claim by stating that the technologies need to be stable and well-supported, drawing responsiveness to concerns that technical problems may interfere with the learning process. While, CALL is an instructional tool showed ineffectiveness in enhancing the language performance of low-proficiency students, especially when technical problems arise during implementation. Therefore, the

university must consider students' constraints. Thus, the university must ensure that future studies not be interrupted by technical problems.