CHAPTER 4

RESEARCH FINDINGS AND DATA ANALYSIS

4.0 Introduction

This chapter is divided into three parts. In the first part, the researcher will reveal the outcome of the research through the data obtained from the tests. Data will be presented in tables, graphs and pie charts in order to augment them. The second part of this chapter reveals the results of the questionnaires given at the initial stage and final stage of the study. The last part of this chapter covers the responses of the interview. The researcher will discuss the findings of the data accordingly while attempting to answer the following research questions:

1. How effective is NETPLUS, commercial CALL software, for the learning of English as a foreign language?
2. Does the CALL software used in this research, NETPLUS, motivate students to learn English as a foreign language?
3. What types of attitude (positive or negative) are shown by the students towards learning of English using NETPLUS?

To gather the data for this study, both quantitative and qualitative methods of collecting data were used.

To answer Research Question 1, quantitative data was collected through the language tests given shortly after students' session in both CALL and Non CALL environment. The scores of the tests were tabulated and presented in charts for better understanding. For each lesson, the average scores of each student in both CALL and

non CALL environments were compared analysed and conclusions were made based on their performance after each test.

To answer Research Questions 2 and 3, qualitative data was collected. Questionnaires and interviews that provided the qualitative data for this research were used as the researcher wanted to get feedback from the students. Such feedback provided rich data that gave the researcher insights into students' motivation and attitude when working in CALL vs. Non CALL environment. The researcher felt that quantitative data would not have captured the actual reasons for e.g., individual preferences why NETPLUS worked better for them.

2 sets of questionnaires and they were given to students who are the subjects of this study. The first questionnaire was given before the students work on NETPLUS. It attempted to seek students' background information and students' initial response to CALL. The second questionnaire was given at the end of the study after the students had completed their sessions on NETPLUS. The data obtained from the questionnaire were analysed and tabulated. The significance of the response was then discussed after the data were tabulated.

The researcher then carried out interviews with both teachers and students to further strengthen and support the data collected through tests and questionnaires.10 students were interviewed to further investigate the effectiveness of CALL. The students were asked questions on feelings towards CALL, advantages and disadvantages of CALL and some suggestions to improve CALL. The findings from the interviews would be used to triangulate the data obtained from the questionnaires.

4.1 Data from the tests.

The tables below show the summary of the data recorded after the tests over a period of 14 days whereby each class has had to complete seven lessons through CALL and seven lessons through Non-CALL method. Table 4.1 and table 4.2 show scores obtained by class 101A and class 101B in CALL environment. While Table 4.3 and Table 4.4 show scores of class 101A and class 101B in a non CALL environment.

Subjects	Lesson 1	Lesson 4	Lesson 5	Lesson 8	Lesson 9	Lesson 12	Lesson 14
A1	20	19	18	20	20	19	19
A2	20	19	19	20	18	17	19
A3	20	20	19	20	19	20	20
A4	20	19	18	20	20	19	19
A5	20	18	20	19	20	20	20
A6	20	19	19	19	19	19	18
A7	20	16	17	16	18	19	20
A8	20	20	20	20	19	19	20
A9	20	19	19	19	20	20	20
A10	20	19	20	20	20	19	18
A11	16	16	16	17	18	19	17
A12	20	20	20	20	20	20	20
A13	20	20	19	20	20	20	20
A14	20	19	20	20	20	20	20
A15	19	17	20	20	20	19	20
A16	20	20	20	18	20	20	20
A17	19	19	20	19	20	19	20
A18	20	20	20	20	19	19	20
A19	20	20	18	20	20	20	19
A20	20	20	19	20	20	20	20
A21	20	20	20	20	20	20	20
A22	20	20	20	18	20	20	19
A23	20	19	18	17	20	19	18
A24	20	16	16	20	20	16	19
A25	20	10	16	19	19	19	19
A26	20	20	20	19	20	20	20
A27	20	19	20	20	20	19	20
A28	20	19	20	20	20	17	18
A29	20	20	17	19	20	18	19
A30	20	20	19	20	20	17	20
AVERAGE SCORE	**20**	**19**	**19**	**19**	**20**	**19**	**19**

Table 4.1 : Scores obtained by students in class 101A during CALL lessons.

Subjects	Lesson 2	Lesson 3	Lesson 6	Lesson 7	Lesson 10	Lesson 11	Lesson 13
A1	20	19	18	19	18	20	17
A2	17	18	15	16	14	12	17
A3	17	18	19	19	19	19	18
A4	18	19	5	15	19	19	13
A5	20	19	19	18	16	20	18
A6	16	17	19	13	15	18	16
A7	18	18	5	15	18	20	17
A8	20	19	19	20	20	18	18
A9	20	19	19	20	19	19	17
A10	18	17	20	19	20	15	17
A11	17	18	2	12	13	16	15
A12	20	19	19	20	19	19	18
A13	17	19	19	20	18	18	17
A14	20	19	19	19	19	19	18
A15	16	18	15	19	20	20	16
A16	18	20	20	19	19	20	19
A17	20	19	20	20	19	20	20
A18	20	19	19	20	20	20	20
A19	17	17	18	19	19	18	17
A20	20	19	18	20	17	17	18
A21	17	20	19	19	18	16	19
A22	19	15	17	19	19	18	15
A23	18	17	11	20	17	18	14
A24	19	13	10	20	18	12	17
A25	18	20	15	20	18	17	18
A26	20	19	20	20	17	18	19
A27	20	19	18	19	19	18	20
A28	20	19	20	16	20	17	16
A29	17	12	20	20	18	17	18
A30	20	20	20	19	19	19	20
AVERAGE SCORE	**19**	**18**	**17**	**18**	**18**	**18**	**17**

Table 4.2 : Scores obtained by students in class 101A during non CALL lessons.

Subjects	Lesson 2	Lesson 3	Lesson 6	Lesson 7	Lesson 10	Lesson 11	Lesson 13
B1	20	20	20	20	20	20	20
B2	20	20	19	20	20	20	20
B3	20	19	20	20	20	20	20
B4	20	19	20	20	20	20	20
B5	20	19	20	16	20	20	19
B6	20	17	20	20	20	18	18
B7	20	19	20	20	20	20	20
B8	20	19	18	17	17	17	17
B9	20	20	19	20	20	20	20
B10	19	20	19	20	18	19	20
B11	20	19	19	19	20	20	20
B12	20	19	20	20	20	20	20
B13	18	19	20	20	19	19	17
B14	20	20	18	19	20	20	20
B15	20	20	20	20	20	20	20
B16	19	18	19	17	20	20	20
B17	20	16	17	18	16	19	17
B18	20	19	18	20	20	20	20
B19	19	16	17	19	18	20	17
B20	20	20	19	20	20	20	18
B21	20	20	20	20	20	20	20
B22	20	18	16	20	19	18	17
B23	19	19	18	16	20	19	19
B24	20	16	17	16	18	18	17
B25	20	19	18	20	19	20	19
B26	20	19	17	16	18	17	20
B27	20	19	19	20	20	20	20
B28	20	19	19	19	20	20	18
B29	19	17	18	17	20	18	18
B30	18	18	20	19	20	19	18
AVERAGE SCORE	**20**	**19**	**19**	**19**	**19**	**19**	**19**

Table 4.3 : Scores obtained by students in class 101B during CALL lessons.

Subjects	Lesson 1	Lesson 4	Lesson 5	Lesson 8	Lesson 9	Lesson 12	Lesson 14
B1	18	17	17	19	19	20	17
B2	17	16	17	17	19	19	19
B3	19	19	18	19	19	20	19
B4	19	18	18	19	19	20	20
B5	19	16	19	20	19	20	17
B6	16	15	17	19	17	19	16
B7	17	18	17	17	20	20	19
B8	18	13	15	5	18	17	17
B9	16	17	19	19	19	20	16
B10	16	19	14	18	19	18	19
B11	17	17	19	17	18	20	19
B12	19	19	20	19	17	20	18
B13	16	15	18	18	16	20	19
B14	18	18	16	19	19	19	18
B15	18	18	19	20	18	20	19
B16	18	13	15	17	13	20	19
B17	18	19	17	18	17	19	17
B18	19	18	19	19	19	20	18
B19	16	16	4	19	20	15	16
B20	19	17	18	20	19	15	18
B21	18	19	19	19	19	19	19
B22	17	17	15	11	18	12	17
B23	19	14	15	19	18	16	15
B24	14	15	9	19	20	13	13
B25	20	19	18	20	15	17	18
B26	17	14	5	17	17	20	19
B27	19	17	19	20	20	20	19
B28	15	19	13	14	19	17	14
B29	17	16	11	15	17	14	16
B30	18	17	18	18	15	18	17
AVERAGE SCORE	**18**	**17**	**16**	**18**	**18**	**18**	**18**

Table 4.4 : Scores obtained by students in class 101B during non CALL lessons.

4.2 Analysis of Tests

Below are individual graphs of each test. A detailed analysis of each test will be given in the following section to enable readers to understand further why such marks were obtained by the students in each group. Not only that, the type of question asked also will be discussed in this section.

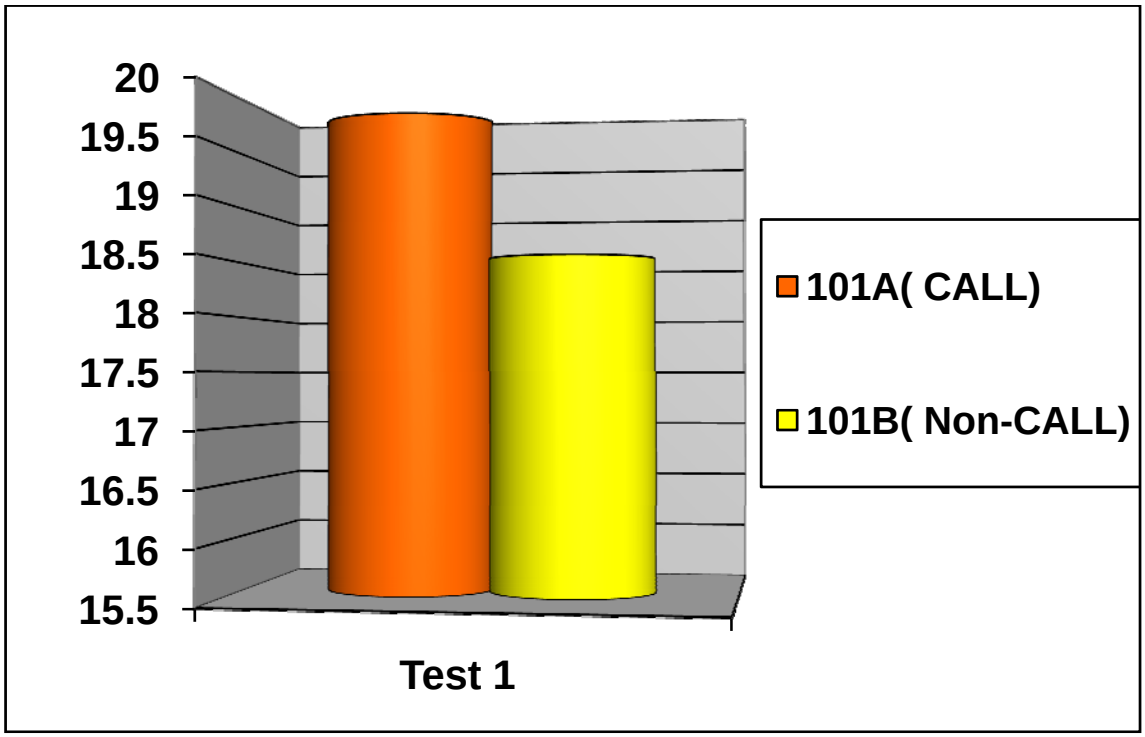


Chart 4.1 : Analysis of Test 1

The graph above shows the scores obtained by classes 101A and 101B. Although both the groups were given the same test on paper, a difference in scores can be seen in the graph above. Test 1 which comprises of cloze questions, true or false and sentence rearrangement was given to both classes. As we can see, class 101 A scored higher than class 101 B in Test 1 with a difference of 2 marks. Class 101 A scored 20 and class 101 B scored 18. Students of 101 A seemed to have better understanding of the questions and therefore performed slightly better than the other group. The individual scores reveal that 27 out of 30 students in Class 101 A managed to get full

marks in the test given. However, only 1 student out of 30 students managed to get full marks in class 101 B. This is perhaps due to the method of presentation by NETPLUS which is fun and interactive, that has managed to capture the students' attention better than the presentation on paper.

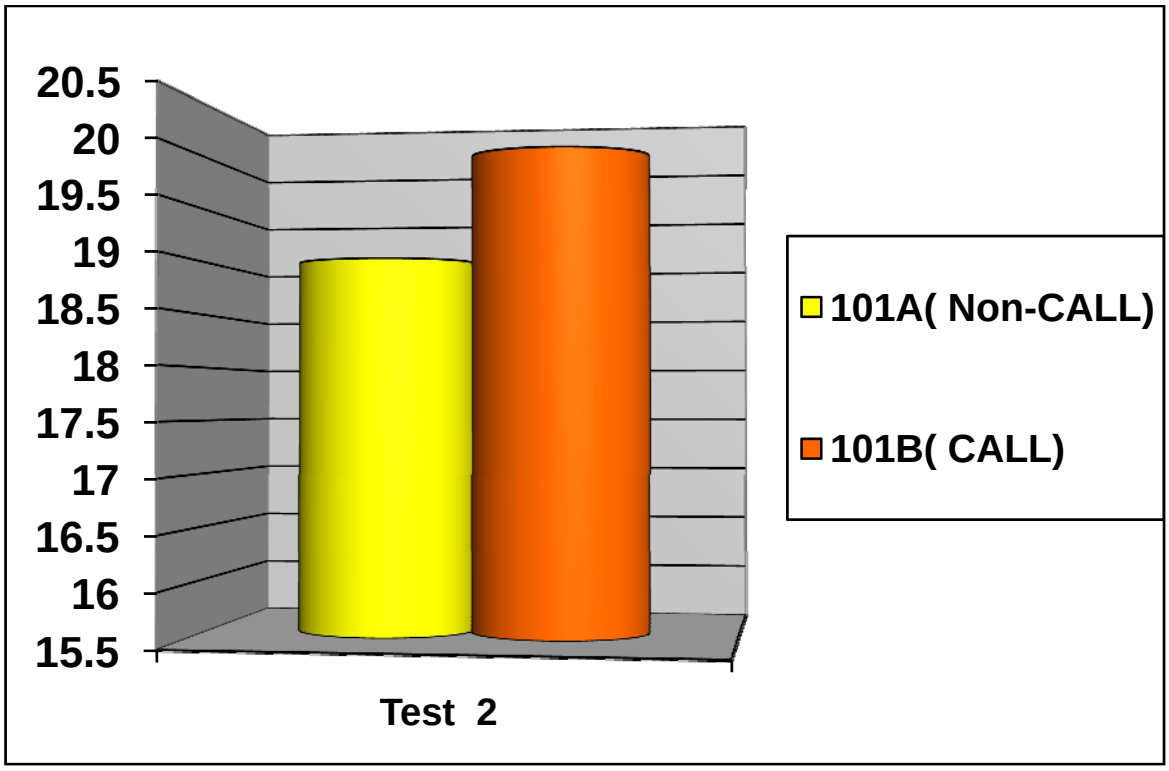


Chart 4.2 : Analysis of Test 2

Based on the graph above, we can conclude that class 101 B scored better in Test 2 compared to class 101 A. Students in class 101 B managed to get an average score of 20 marks (full marks),compared to students in class 101 A who managed to get 19 marks in the same test given. The test given includes cloze questions and true or false questions which covered on the lesson learnt by the students on two different mediums; computer and book. The graph shows us that students of 101B have achieved better scores when they performed the test after their CALL session. Thus, although the questions given were fairly simple and homogeneous, there is a distinct difference in individual scores obtained by the students in the two classes. 13 students or 43.3 % of

students from Class A achieved full marks of 20 in Test 2. On the other hand, 76.7% of students from Class B managed to get full marks in the same test. This shows a huge difference in individual scores. Students in Class B, therefore, performed better after lessons in CALL than students who worked in a non CALL environment.

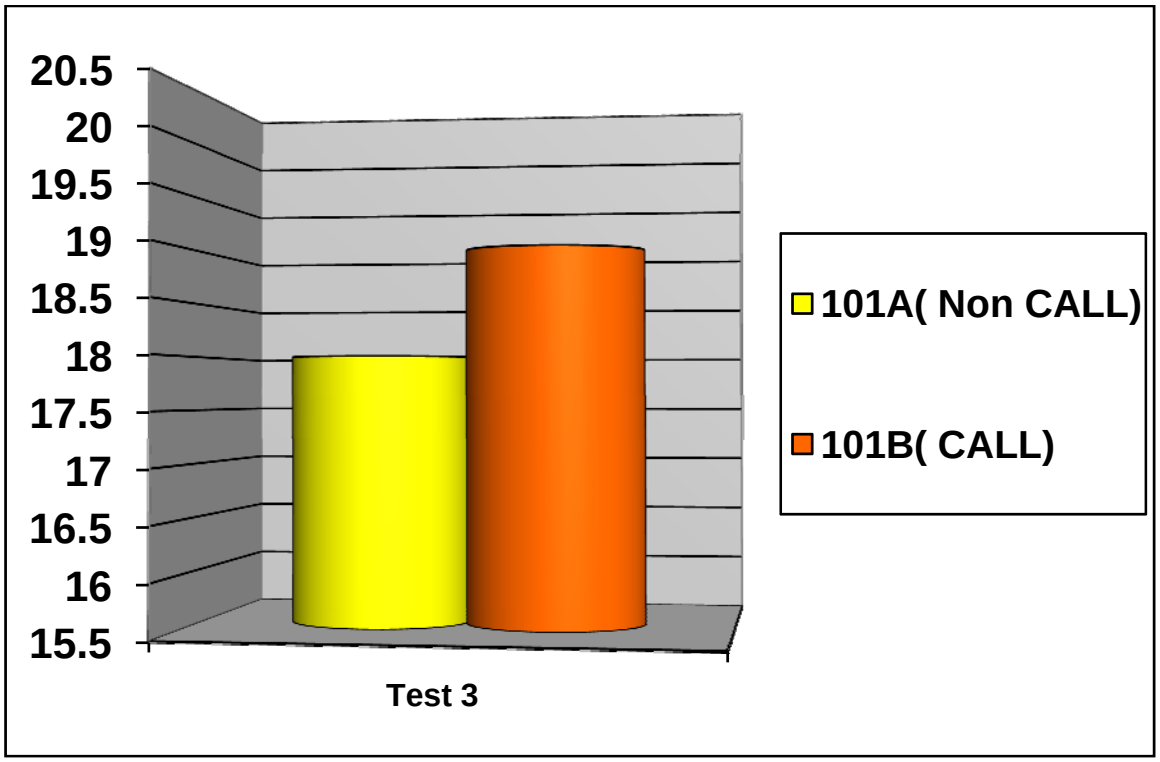


Chart 4.3 : Analysis of Test 3

The above graph illustrates the scores obtained by the students of Class 101A and class 101B after completing Test 3. Students were tested on “Wh” questions and Yes/No questions and the test required them to construct questions based on the answer given. The students of 101A scored 18 marks and students of 101B scored 19 marks. Although the difference in scores seemed insignificant, it still indicates that having had their lessons conducted in a CALL environment, students were able to score better. 8 out of 30 or 26.7% of students in Class 101B managed to score a full mark of 20, whereas, in class 101 A only 13.3% of the students were able to get a full score. The graphic and visual that are present in computers might have motivated the students to

pay more attention to the lesson presented on computers. Thus, based on the figure, we can conclude that students achieved better scores in CALL environment than in a Non CALL environment.

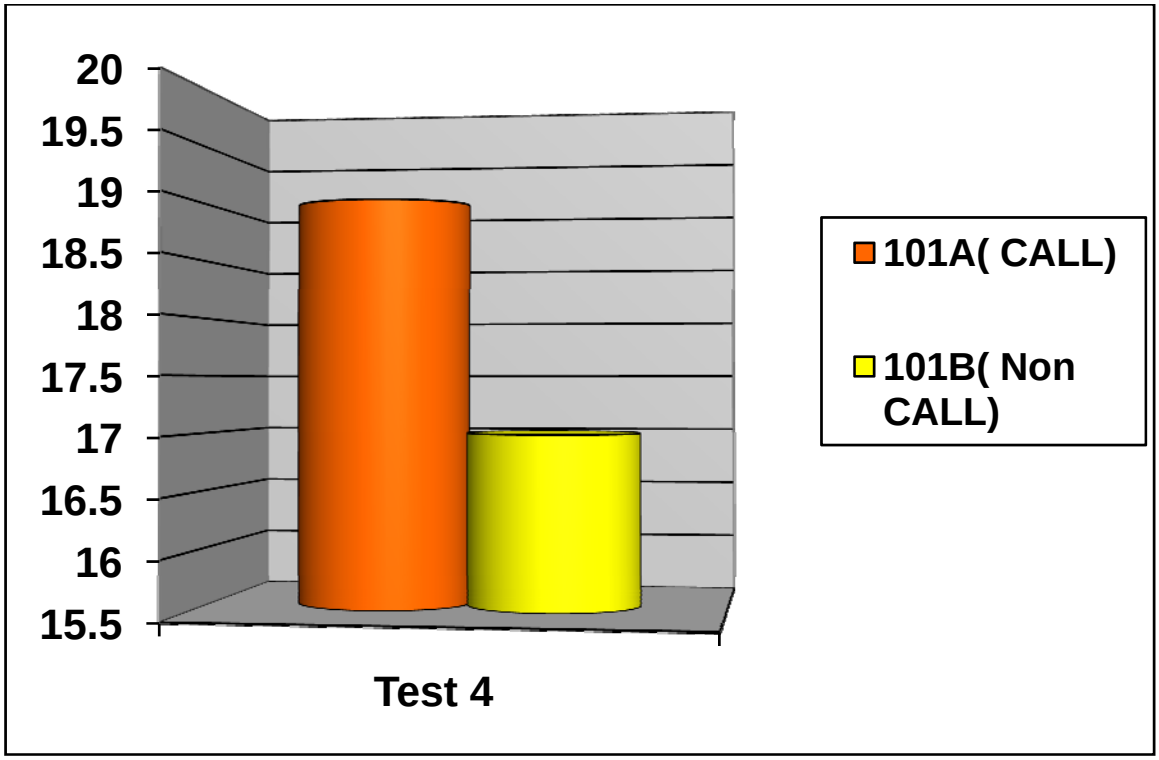


Chart 4.4 : Analysis of Test 4

In test 4, as illustrated above we can see that students of 101 A have performed well by achieving a score of 19 marks. This is in contrast with the scores received by class 101B. Class 101B has scored 2 marks lower than class 101A. Test 4 includes fill-in –the- blanks questions and sentence construction dealing with adjectives. Although the difference in the scores is not that great, it still shows that when students are put on CALL software, they can achieve better scores than when they are working in a non CALL environment. A detailed analysis of scores reveals something interesting. 13 students of class 101 A were able to score full marks in the test given. On the contrary, none of the students in class 101B was able to get a full mark of 20. Although, the

students worked on the exact same thing, only in different medium, the scores tells that CALL enhances students' concentration level and helps students perform in tests given.

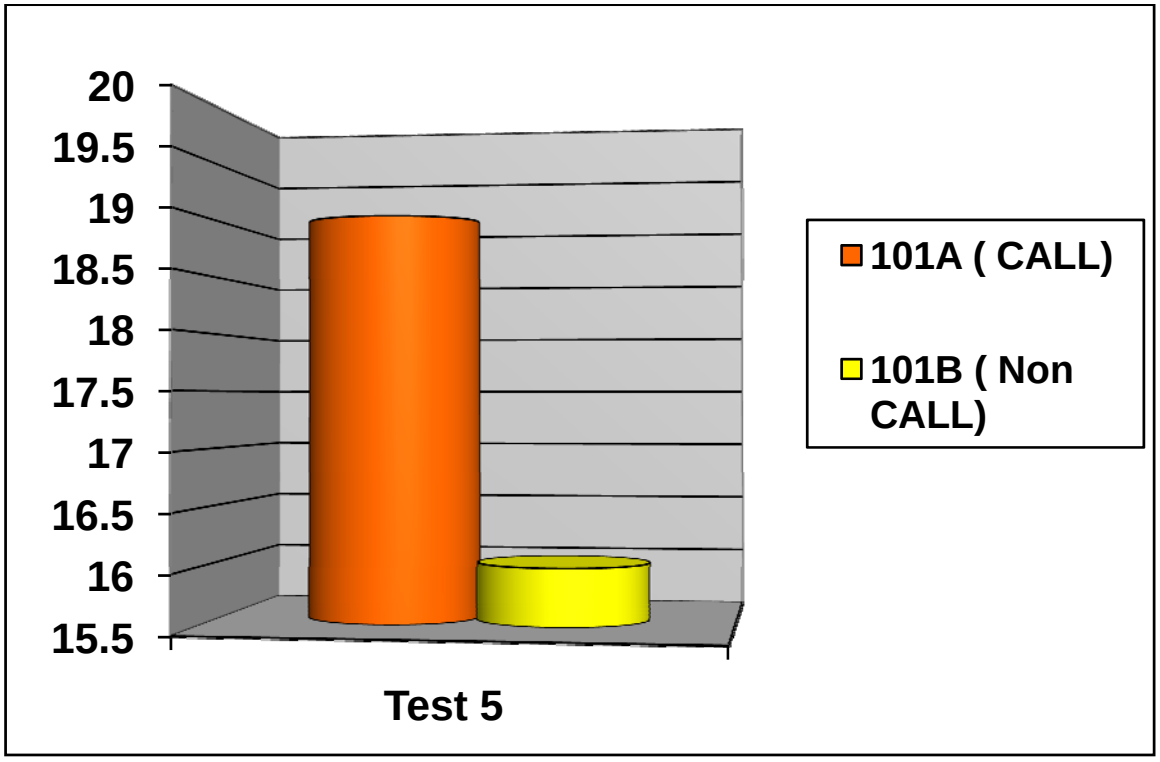


Chart 4.5 : Analysis of Test 5

Based on the graph above, we can say that students of 101A who worked on Lesson 5 which focused on the usage of 'have got/has got' and prepositions, scored better in test given thereafter. They achieved a score of 19 whereas the students in 101B who worked in a non CALL environment managed to only get a score of 16 marks. The computer graphic and visual might have aroused students' interest and thus they performed better than students who worked in a non CALL environment. However, the detailed scores of each students show that most of the students obtained scores above average regardless of the environment they are in. The average score of 101 B seemed to be affected by the scores of three students who scored below average in this particular test. Subjects B19, B24 and B26 have scored badly in this test and thus the average score for class 101B is not as high as their previous scores. 43.3% of the

students in class 101A scored a full mark of 20, while only 1 student of class 101B managed to get a full score of 20. This wide gap tells us that students generally perform better after studying in CALL environment.

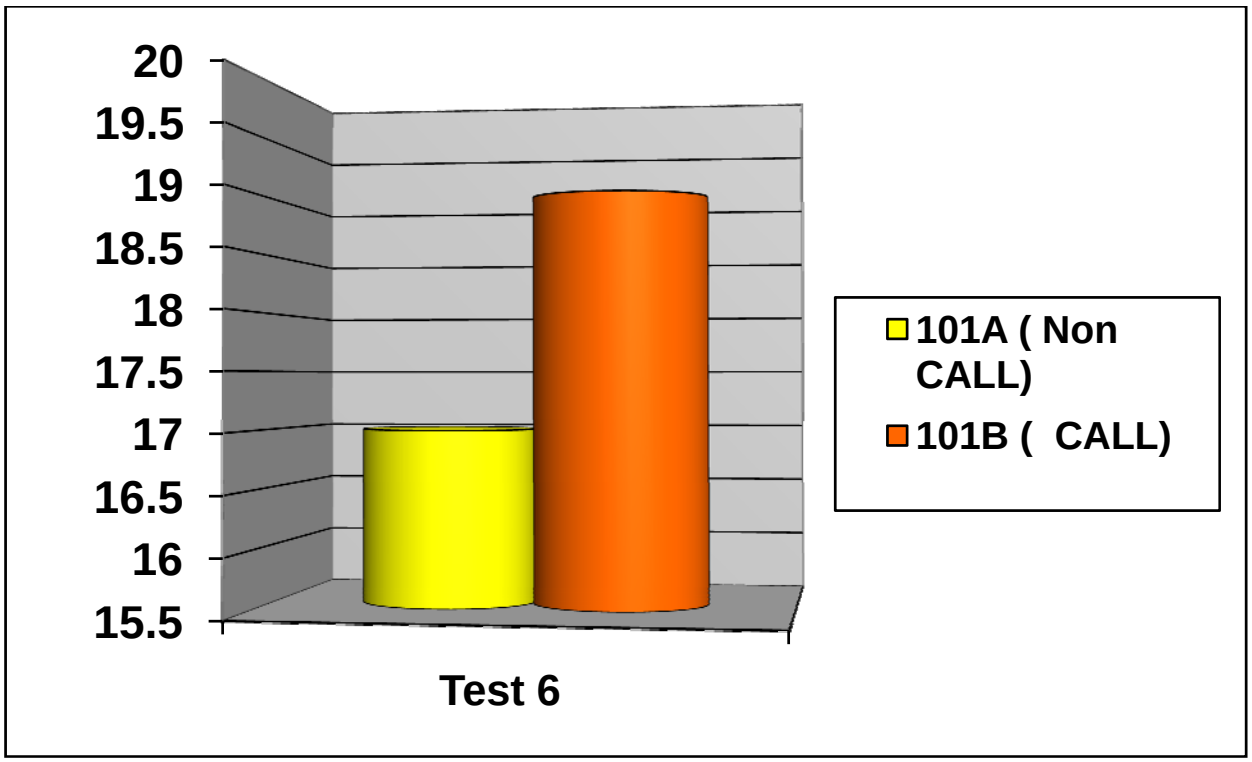


Chart 4.6 : Analysis of Test 6

The graph above shows the scores of Test 6. It is rather apparent that the class that was put in CALL environment scored better than the class working in Non CALL environment. Class 101 A obtained 17 marks while Class 101B achieved a score of 19 marks. Although the difference in scores seemed slight, it somehow reflects students' attitude towards learning with computers. The test given tested the students on the forms and functions of possessives. Students were given a total of 10 questions that carry 2 marks each. The test requires them to fill in the blanks with the correct possessives form after reading a short passage. Many students seemed to be careless with the apostrophe which resulted in them losing marks. When assigned tasks on computer, the students were more careful in putting the apostrophes, and they needed to

find the sign on the keyboard. However, when they were working in a non CALL environment, they were not very careful in marking the apostrophes. Therefore, this habit might have affected the test scores.

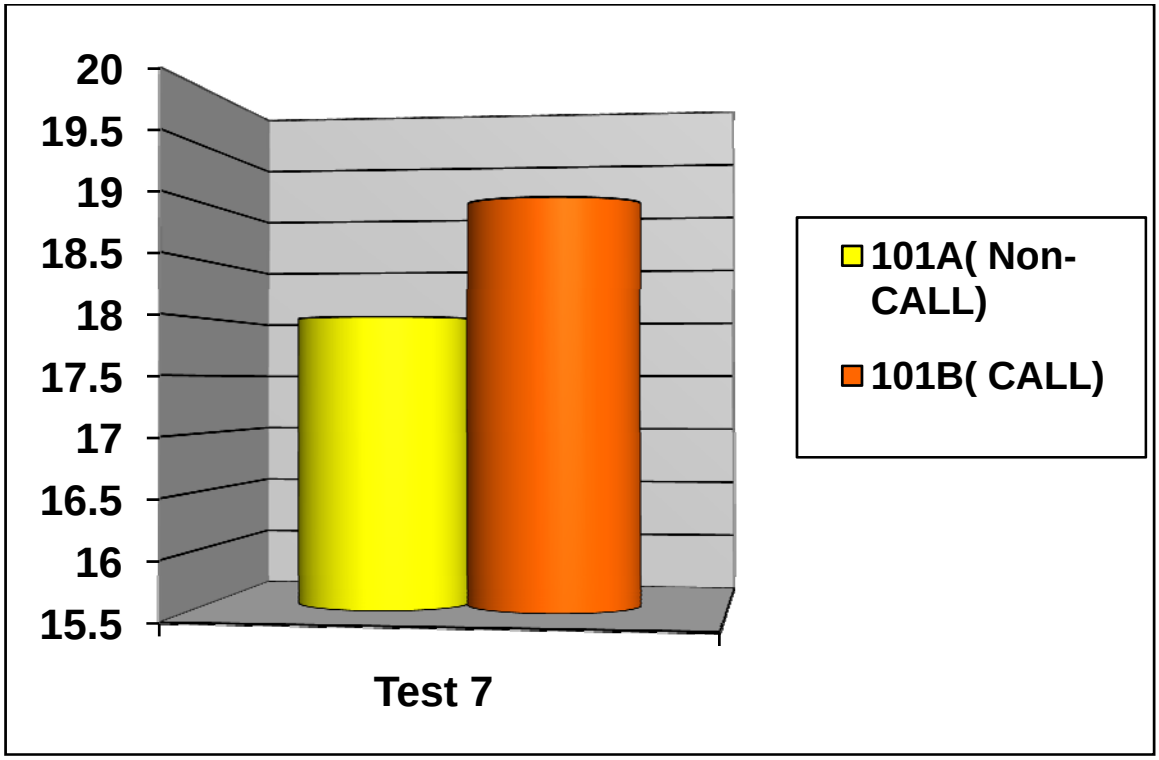


Chart 4.7 : Analysis of Test 7

In test 7, as illustrated above, we can see that students who were put in a CALL environment performed better than the other group of students who worked in a Non CALL environment. The students were given a test on the use of simple present tense where they had to fill in the blanks with suitable verbs of simple present. They were also asked to rewrite sentences in negative. In this test, most students of Class 101 A have scored 19 marks whereas class 101B has scored 18 marks. The difference of scores between the two classes is insignificant. However, there has been a consistency in students performing better in all tests after a CALL session than tests after a Non CALL session.

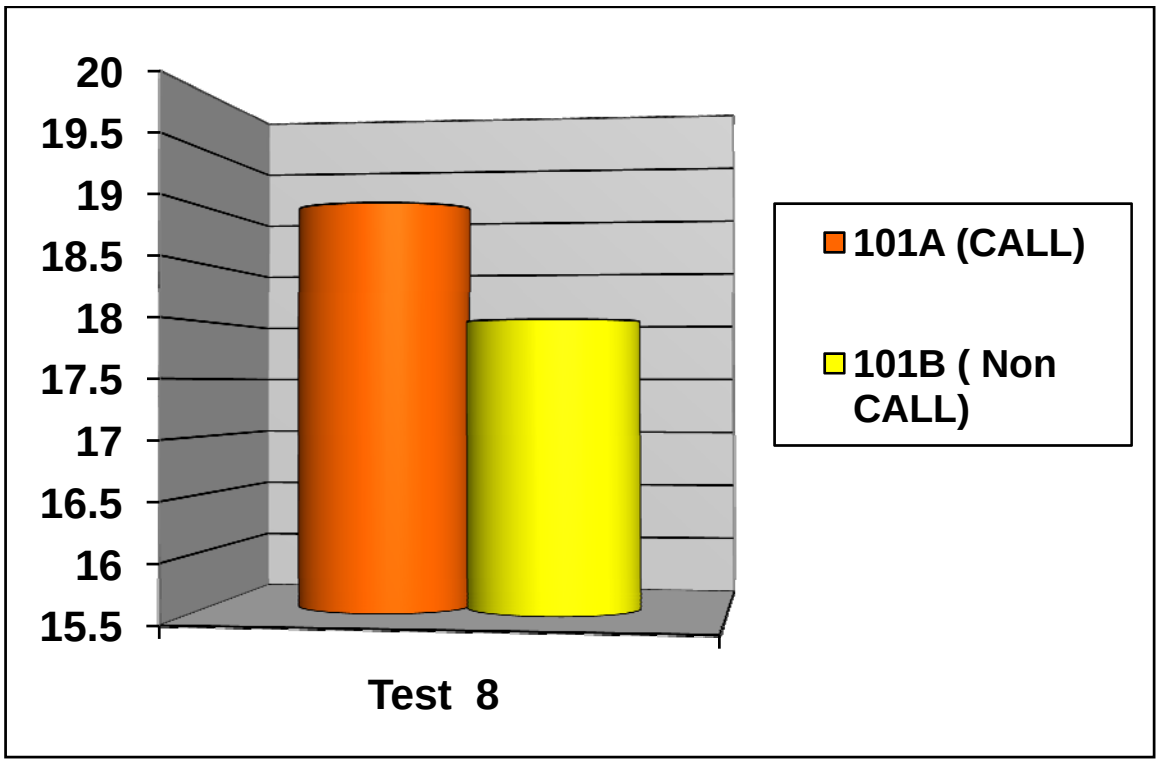


Chart 4.8 : Analysis of Test 8

As illustrated above, students of Class 101A who worked in a CALL environment performed slightly better than the students of Class 101B who were in a Non CALL environment. Test 8 consists of 20 questions which tested students on the usage of quantifiers, some or any. Students were required to fill in the blanks with some or any. Once again, the gap between both classes is not that great. Therefore, it indicates that students who work in a Non CALL environment are still able to perform as well as students who worked in CALL environment. The difference of scores between Class 101 A and 101 B is only one. If we look at detailed scores of each student on Table 4.3, we can see that the score of this class is affected by a student's performance. Student B8 performed poorly by getting only 5 out the 20 questions right. This affected the overall score of the class and thus they were left behind with just one mark difference.

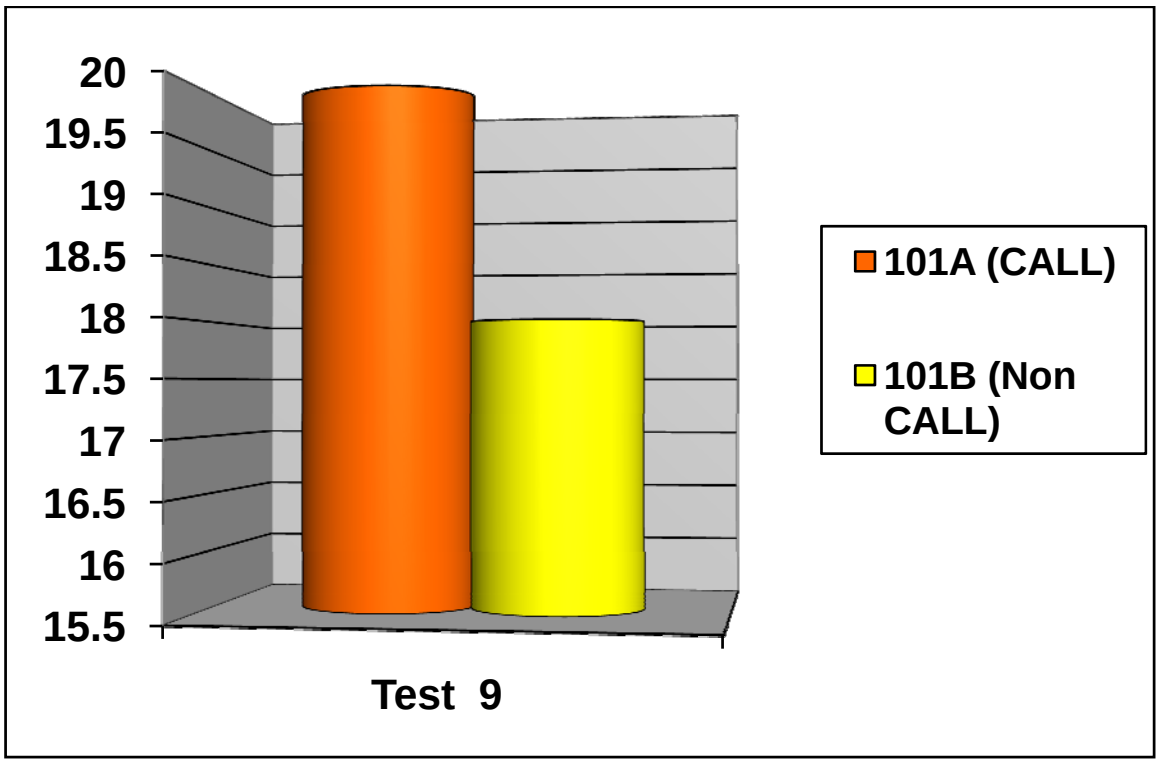


Chart 4.9 : Analysis of Test 9

The graph above reveals the scores of Class 101A and Class 101B after completing Lesson 9 in CALL and Non CALL environment respectively. Class 101A managed to get a full score of 20 marks because more than 50% of the students in this class managed to get full scores in the test given. The test focused on simple present form and students were asked to fill in the blanks with suitable verbs in the simple present form. Not only that, like the previous tests, they were also asked to rearrange words to make suitable questions in simple present form. Class 101 B scored 2 marks lower than Class 101 A. The questions given to both the classes are the same but the difference in scores shows that students may have focused better while working on computer than working on paper.

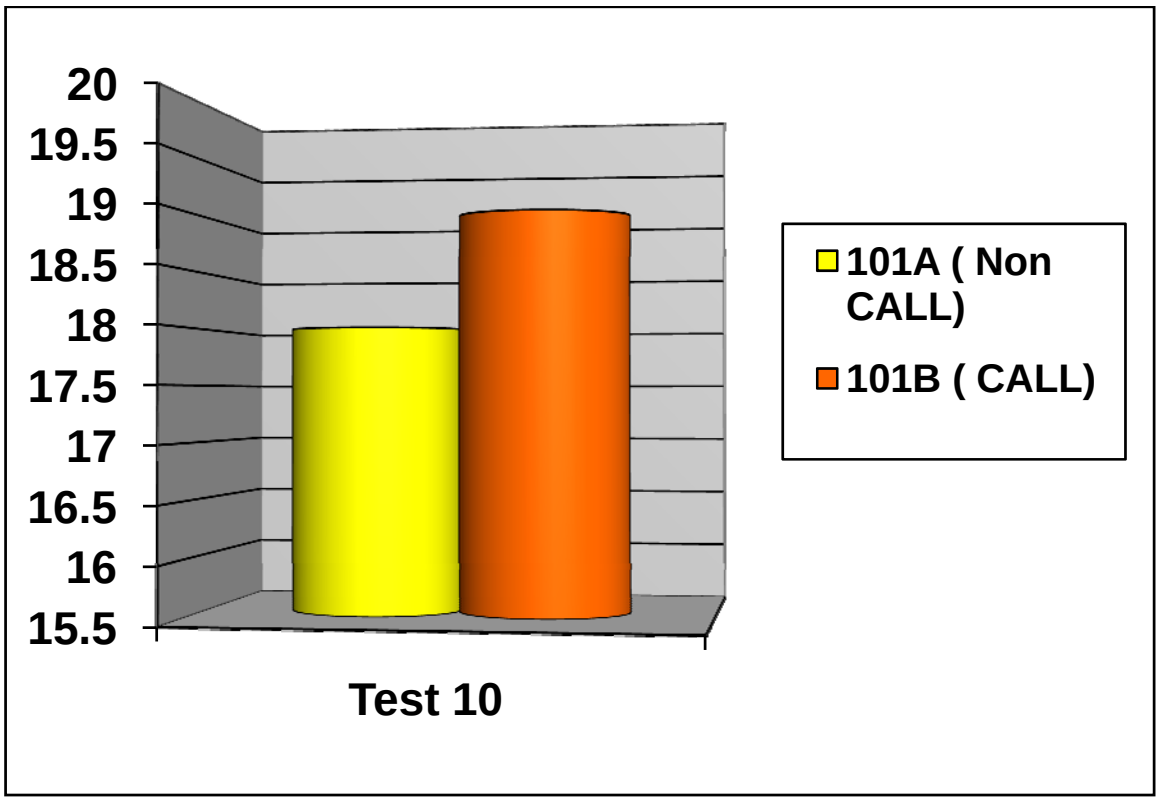


Chart 4.10 : Analysis of Test 10

Test 10 scores show us that students of Class 101B have fared better than students of 101 A in the test given. The test comprises of fill- in- the- blanks questions and matching activity. The questions focused on subject and object pronouns. Students of class 101 A obtained 18 marks whereas class 101B managed to get 19 marks in the same test. The scores clearly show us that although both group of students work in two different environments, CALL and non CALL, they are still able to achieve marks that are almost similar. However, when we look the individual scores of the students, only 5 students of Class 101A managed to get full score of 20. On the other hand, 21 students or 70% of the students of 101B who worked in a CALL environment managed to score full marks. Thus, it is evident that students can concentrate better and have clearer understanding of lesson conducted in CALL environment.

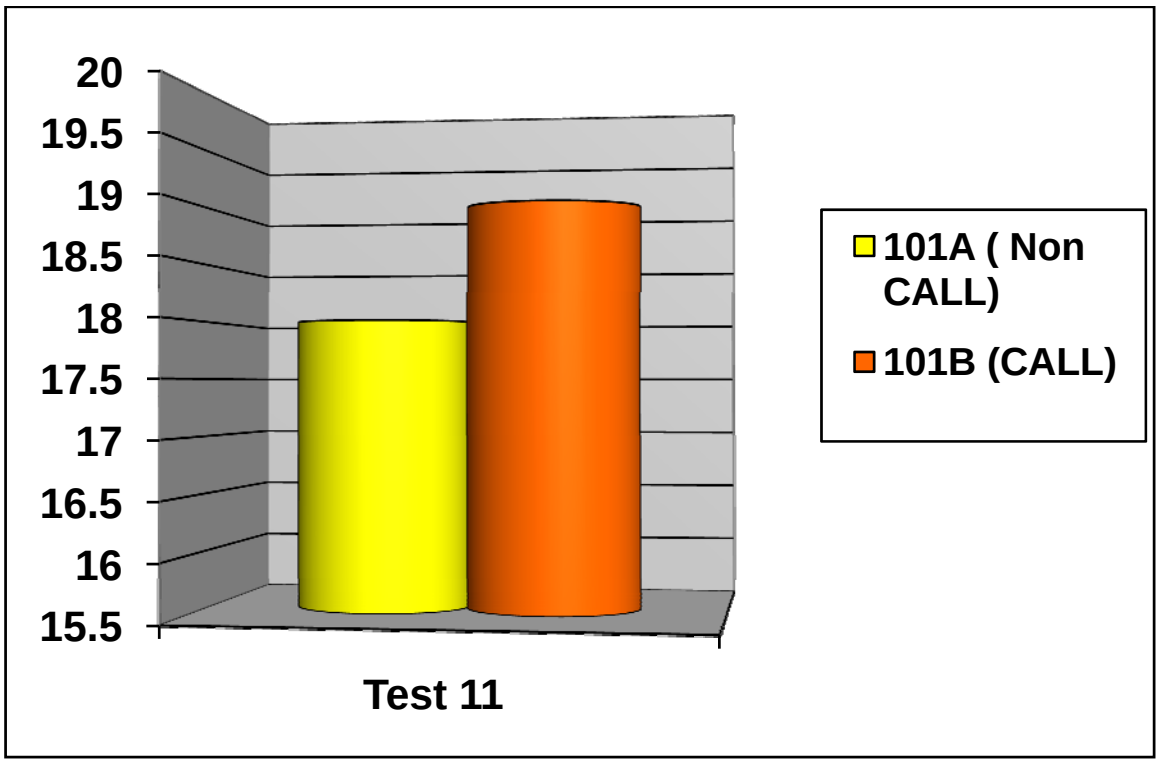


Chart 4.11 : Analysis of Test 11

As illustrated above, students of Class 101A who worked in a non CALL environment once again did not perform as well as the students of Class 101B who worked in a CALL environment. Students of Class 101A obtained a mean score of 18 whereas students of class 101B obtained a mean score of 19. Both the groups were given the same test which tested them on the usage of frequency adverbs. Students were required to rewrite 10 sentences with frequency adverbs given. Students have to know where to place the adverb. In this test, only 16.7% or 5 students of class 101 A scored full marks. On the other hand, 19 students (63.3%) scored full marks of 20 in class 101B. Hence, students who worked in a CALL environment achieved better scores than those who worked in a non CALL environment.

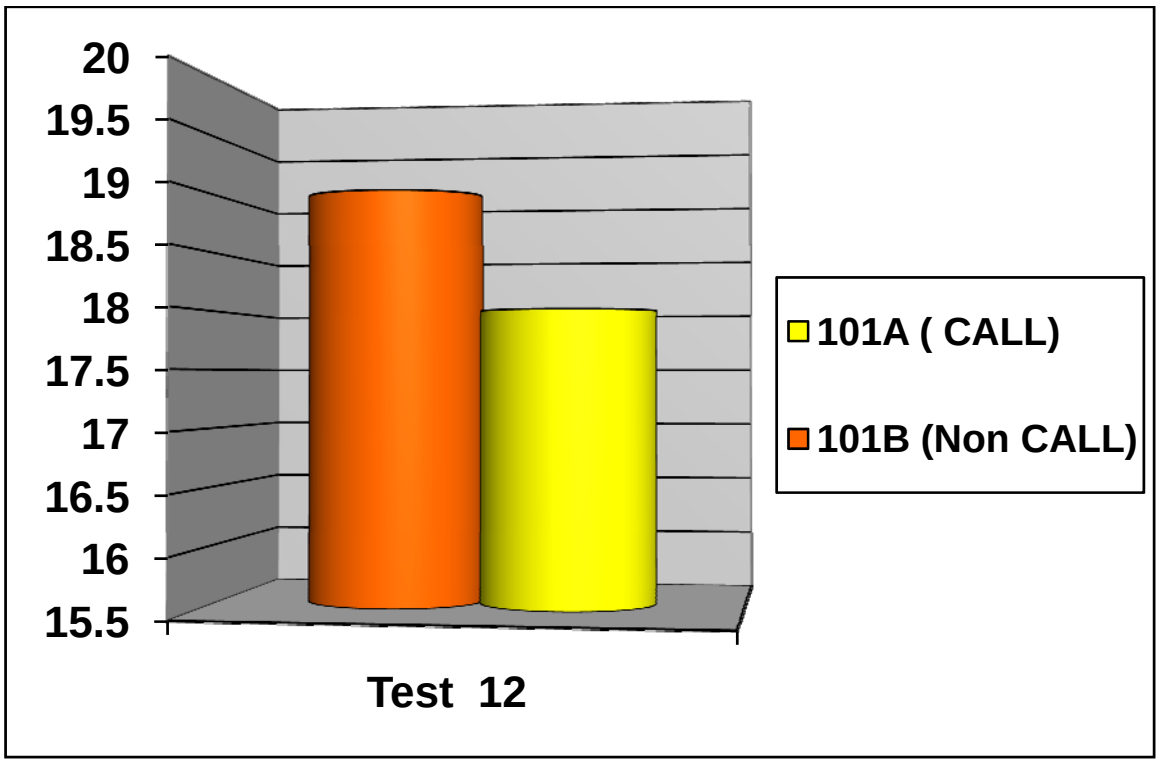


Chart 4.12 : Analysis of Test 12

In test 12, students were given a test on articles where they have to fill in the blanks with suitable articles. Students of 101 A who worked in a CALL environment obtained a mean score of 19 marks. However, the other group of students only managed to get a mean score of 18 marks. The difference between both the scores is trivial because despite working in two different environments, both the classes managed to get marks that are almost equal. However, the individual performance reveals that 16 out of 30 students or 53.3% of students in class 101A scored full marks in the test given. On the other hand, only 9 out of 30, or 30% of students in class 101B were able to score full marks. Although the mean score difference is negligible, analysis of the individual marks reveal that CALL students perform better than Non CALL students, that is, 16 students versus 9 students scoring full marks in the test.

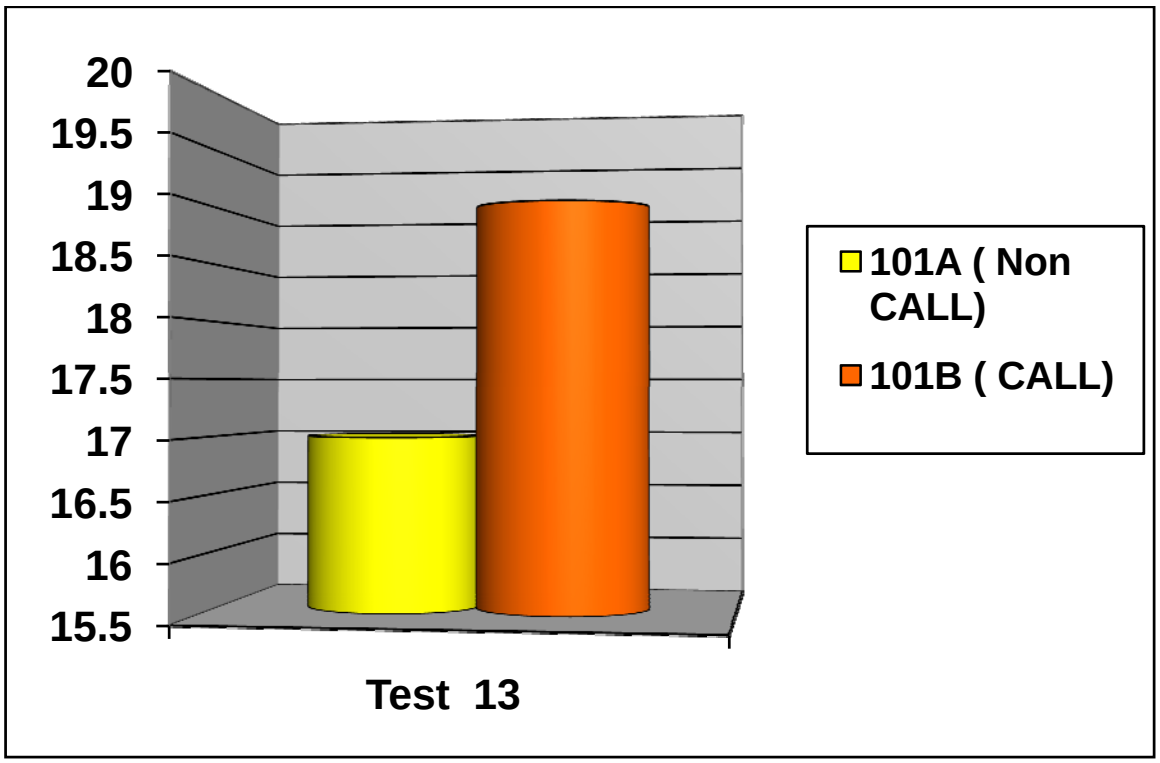


Chart 4.13 : Analysis of Test 13

Test 13 involves modals to show ability which are “can” and “can’t”. In the test, students were asked to make sentences based on the clue given and also question construction. As illustrated above, students of 101 A who worked in a Non CALL environment obtained 17 marks whereas students of 101B managed to score 2 marks higher than class 101A. Class 101B was put in CALL environment prior to the test. Therefore, based on the graph above, in a CALL environment, students were able to perform well in Test 13. Detailed analysis of the scores reveals that only 13.3% of the students in 101A were able to obtain a full score of 20 marks. However, in the same test given, 53.3% of students of 101B managed to get full marks. Like the previous tests, Test 13 also reveals that students generally perform better in a CALL environment than in a Non CALL environment.

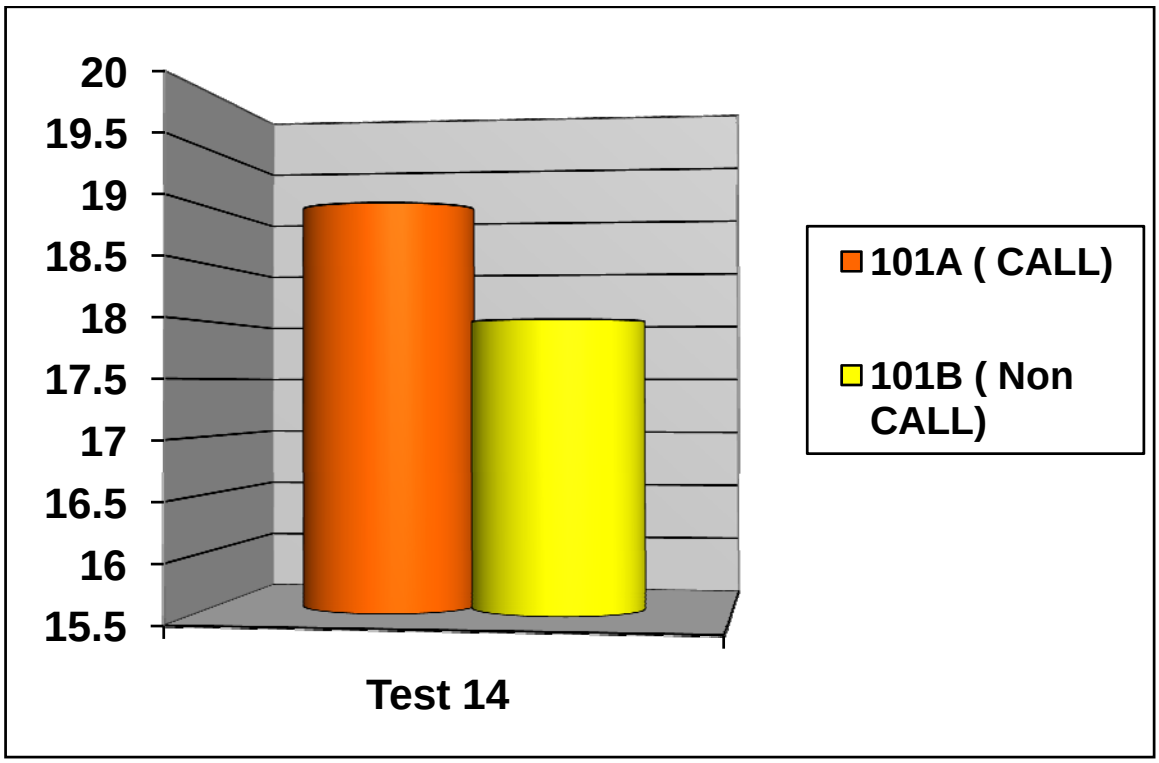
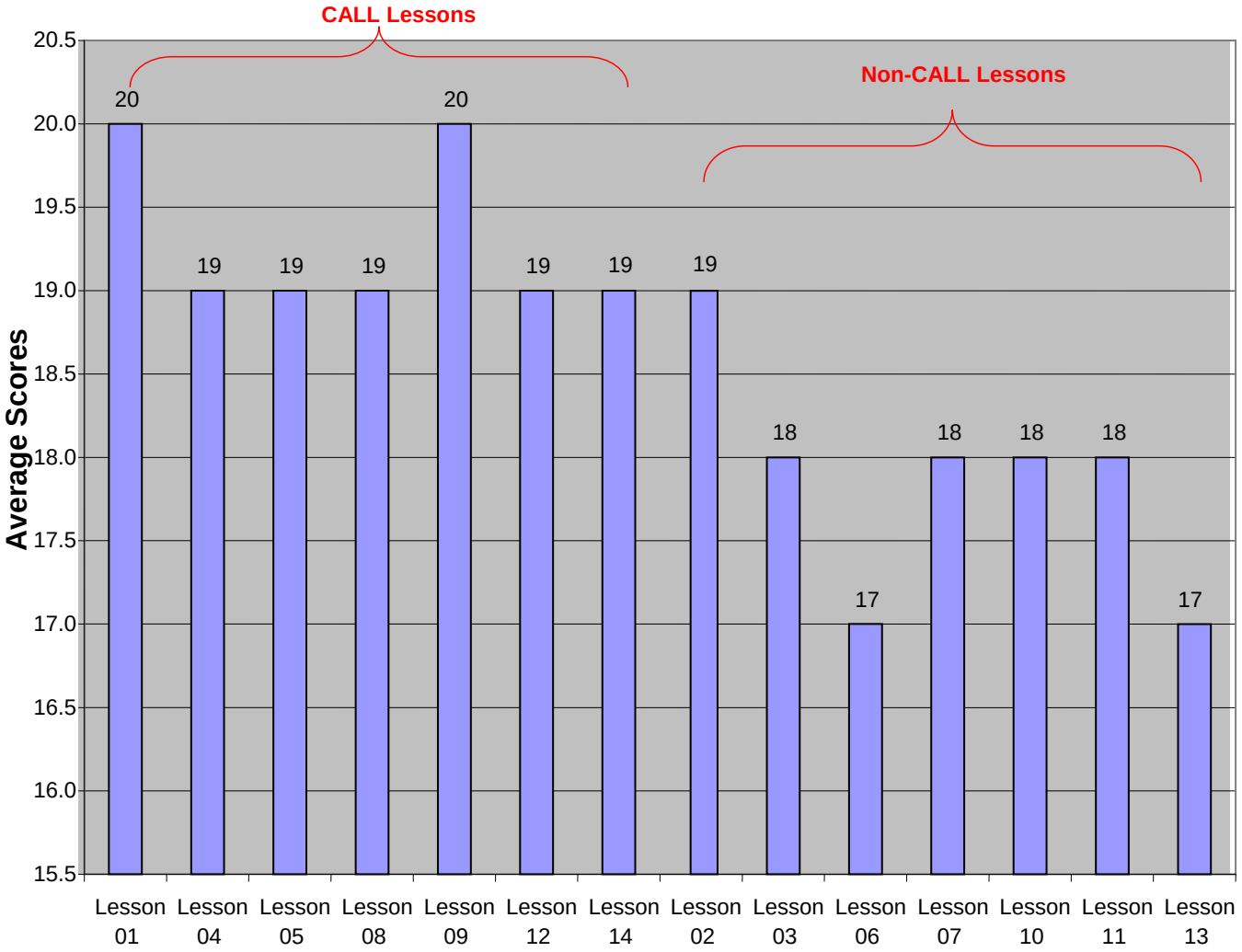


Chart 4.14 : Analysis of Test 14

The graph above shows the scores obtained in Test 14, the last test given to the subjects. In the test, students were tested on their prepositions of place. They were required to fill in the blanks with appropriate preposition based on the picture given. Prior to that, students were exposed to prepositions through exercises either in CALL or Non CALL environment. As illustrated above, the group that worked in CALL environment performed better than class 101B where they have scored 19 marks. On the contrary, students of 101B who were put in a non CALL environment obtained 18 marks in the same test. An analysis of the breakdown of scores shows that 56.7% or 17 students of 101A scored 20 marks in the test. In contrast, only 1 student managed to get full marks in class 101B. Therefore, regardless of the insignificant difference in the average score, students who worked in CALL performed better in the test given.

Chart : 4.15 : Average Scores of Each Lessons from 30 Candidates of CLASS 101A

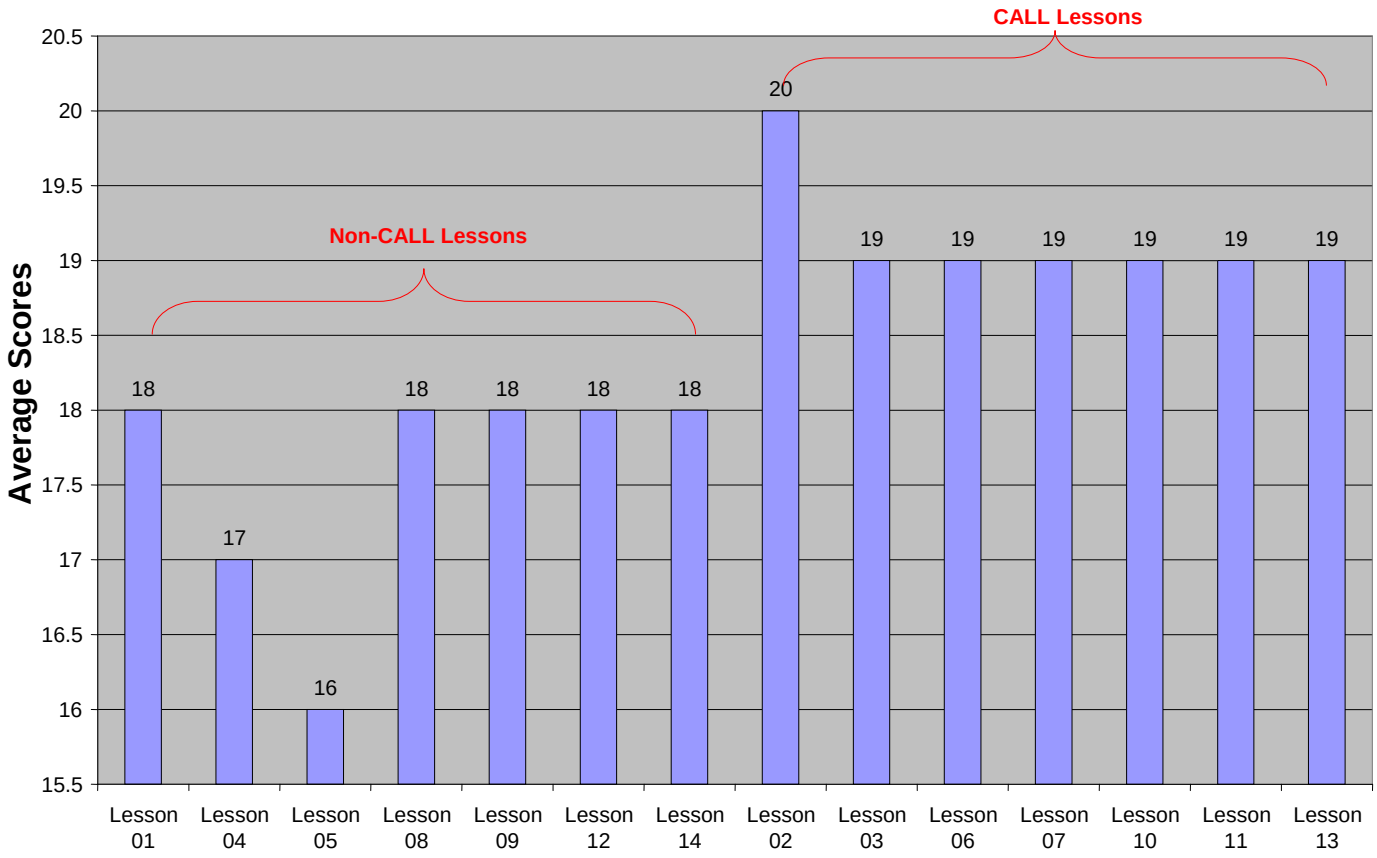


The graph above shows the difference in scores when students of 101A work in a CALL environment and a Non-CALL environment. As we can see, there is an obvious difference in scores where students of class 101A obtained betters scores in tests after CALL lessons compared to tests after Non- CALL lessons. For CALL lessons 1, 4, 5, 8,9,12 and 14, students have achieved an average score of 19 and 20. However, when they worked in a Non- CALL environment for lessons 2,3,6,7,10,11 and 13, not only did the fail to achieve the full marks, they have also scored lower . Better presentations of the lesson on computers explain why the students scored relatively higher in CALL lessons compared to Non- CALL lessons.

There are many speculations on the occurrence of such scenario. In NETPLUS lessons, students were given a reward in form of praise each time they answer questions correctly. This could have motivated students to perform better than in a non –CALL environment. This is very much related to the principles of the Theory of Connectionism where in order for learning to take place, practice and rewards should be present.(See 2.3.1) Not only that, the immediate feedback and reinforcement that were present in NETPLUS also might have helped to enhance learning. Therefore, this allows us to assume that when students are working on their own in a Non CALL environment, they do not possess the same enthusiasm and motivation they have during a CALL session.

Some features of Communicative CALL (See 2.3.3) that had been adopted by NETPLUS also may have been the reason why students generally achieve better scores in a CALL environment. NETPLUS is a non judgmental tool which allows students to be more comfortable working in a CALL environment. Instead of telling students that they are wrong each time they attempt to answer a question, NETPLUS is flexible to a variety of student responses. This may have helped to boost the students' confidence level, thus, they do not give up easily while learning using the software. Not only that , the fact that NETPLUS is more interactive, fun and user friendly may also be one of the factors that contributed to better scores obtained by the students who worked in a CALL environment.

Chart 4.16 : Average Scores of Each Lessons from 30 Candidates of CLASS 101B

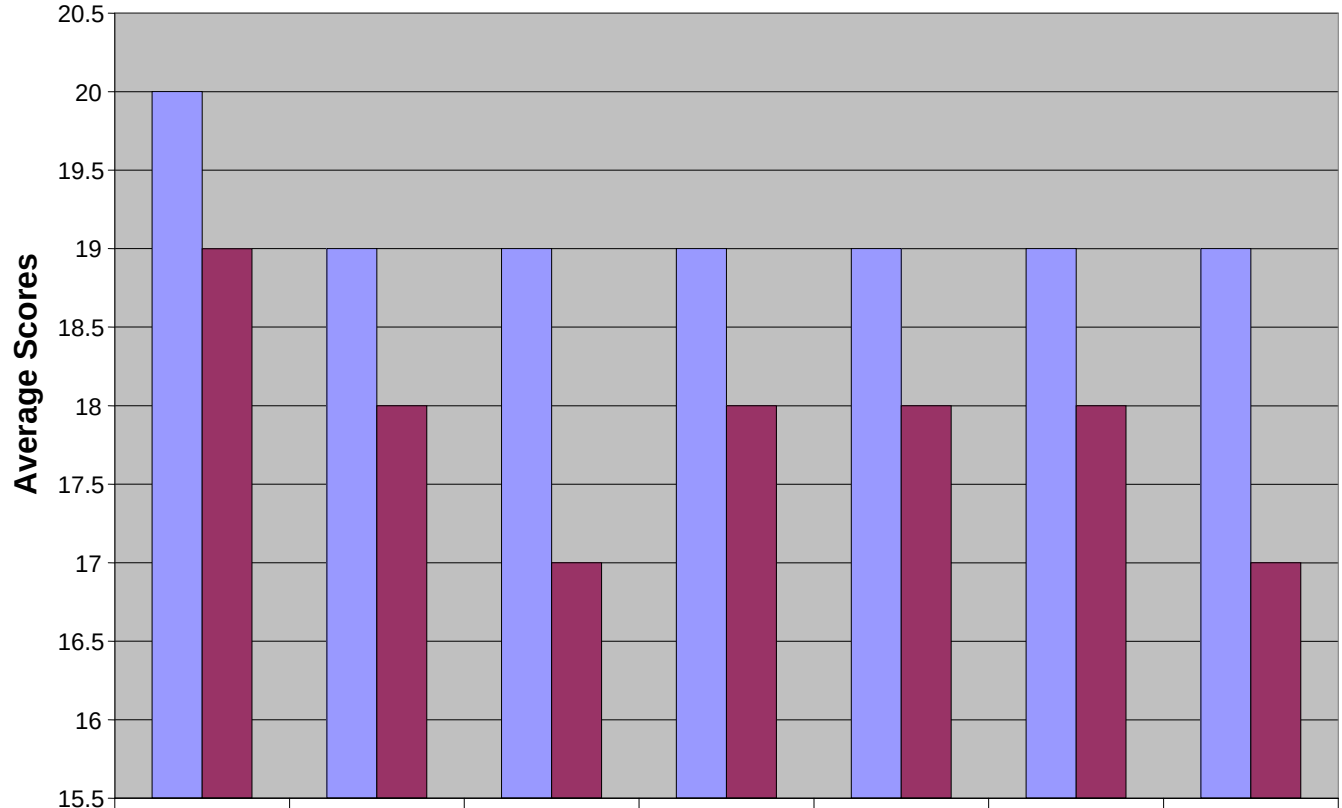


The graph above shows the scores of the tests after both CALL and Non-CALL lessons. As we can see, similar scenario occurred with class 101B where students have performed better in CALL lessons than non- CALL lessons. When students did the tests after lessons 1,4,5,8,9,12 and 14, they managed to score an average of 16 - 18 marks. This is fairly low compared to the average score of 19 – 20 obtained after lesson 2, 3,6,7,10,11, and 13 on CALL. Whenever students work in computer lab, their concentration level seems to have improved and thus affect their scores into obtaining better results. However, it is not the same when they were put in a classroom with the lessons presented on prints. This explains why different scores were obtained when students work in CALL and non- CALL environment.

As cited in Huitt, W., & Hummel, J. (2003), environment plays a vital role in order for learning to take place based on development theory by Piaget. Therefore,

another assumption that we can make is that, due to better learning environment, students of class 101B obtained better scores in tests compared to when they were in the classrooms. Students have better moods when they work with computers in computer lab. On the other hand, classroom environment doesn't really give them the same excitement and aura the computer lab has to offer.

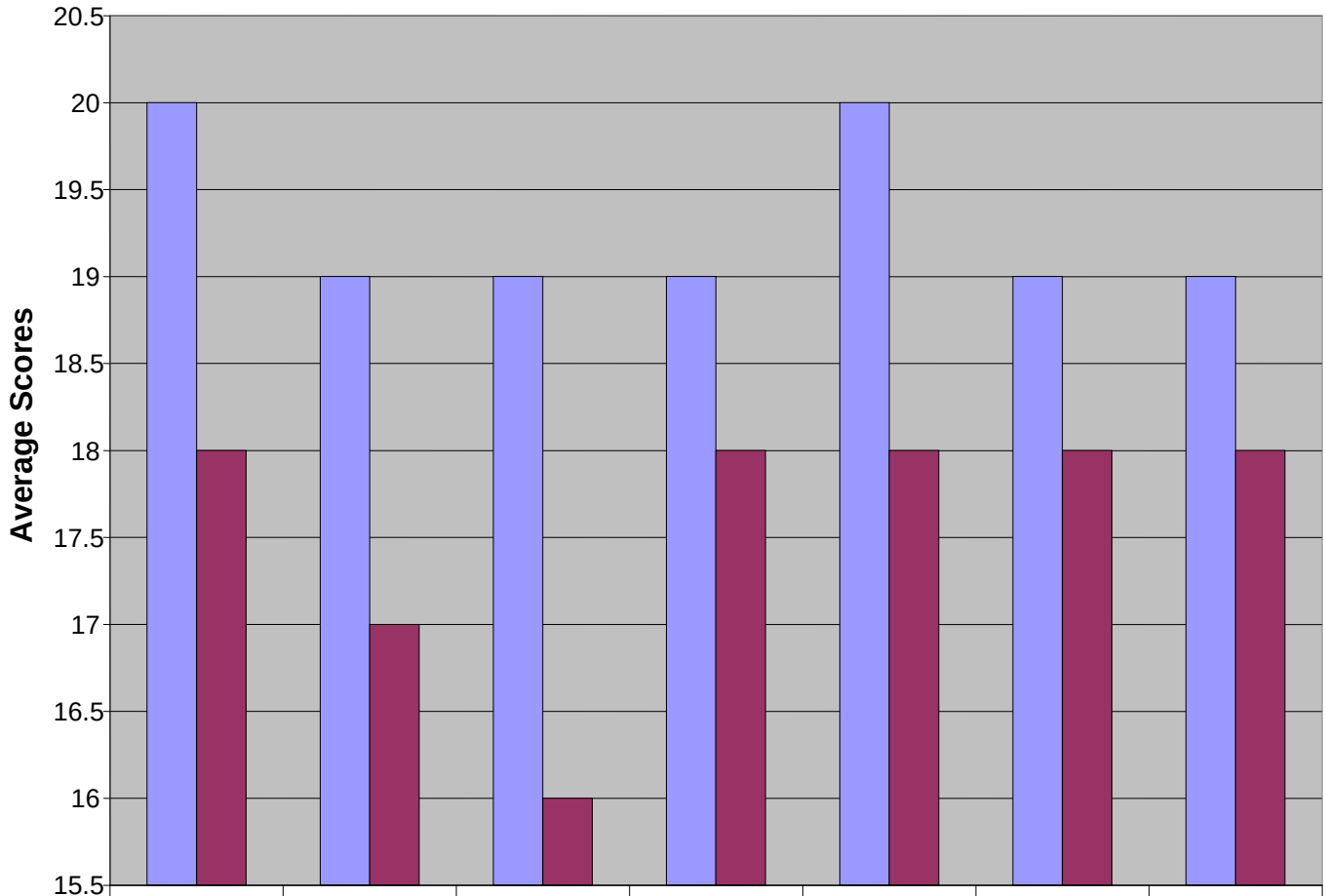
Chart 4.17 : Performance of Class 101A (Non-CALL)and Class 101B (CALL)on the same lessons



	Lesson 02	Lesson 03	Lesson 06	Lesson 07	Lesson 10	Lesson 11	Lesson 13
CALL	20	19	19	19	19	19	19
Non-CALL	19	18	17	18	18	18	17

The graph above demonstrates the scores of students from both the classes doing the exact same lesson .However, when class 101B is assigned a lesson on CALL, the other class, 101A, was assigned the same task only in different environment and method, the Non-CALL method. As illustrated, class 101B seemed to have achieved better scores compared to Class 101A.The highest score obtained during CALL lesson is a full mark of 20 whilst the highest score obtained in a Non- CALL environment is 18.

Chart 4.18 : Performance of Class 101A(CALL) and Class 101B(Non-CALL) on the same lessons



	Lesson 01	Lesson 04	Lesson 05	Lesson 08	Lesson 09	Lesson 12	Lesson 14
CALL	20	19	19	19	20	19	19
Non-CALL	18	17	16	18	18	18	18

This is a graph on the same lessons done by the subjects in different environment. As we can see, class 101A that worked in MML using CALL method performed better than the students who were put in a Non CALL environment. The highest score achieved while working on CALL is 20 by class 101A. On the contrary, in a Non CALL environment, the subjects have only managed to obtain 18 marks as the highest score and no full marks of 20 were achieved. Although the difference between 20 and 18 is relatively small, this however does still prove to us that students have the chances of achieving better scores while doing CALL lessons than Non CALL lessons.

Based on the test scores, the researcher has reached a conclusion that students perform better in a CALL environment. Their scores further prove that the CALL

software used in this study was successful in teaching them some aspects of English. Although the differences in scores between CALL and Non CALL are not that great, we can still conclude that students have better understanding when doing lessons on CALL. CALL has successfully stimulated the students and therefore the students have responded well to the program. This is an example of Thorndike's theory of connectionism where it says that learning takes place when there is a good connection between the stimuli and the response. (See 2.3.1)

In a nutshell, the CALL software used in this study has proven its effectiveness on the students through the tests scores and thus answering the research question on the effectiveness of this CALL software on the subjects of this study.

4.3 Results of Questionnaires

In this study, two questionnaires were given to the subjects. Questionnaire One which attempts to seek information on students' background and students' computer literacy was given at the initial stage of the study. Questions 1-4 of Questionnaire 1 seek information about the students' background. The tables below show the data collected from Questions 1-4;

4.3.1 Questionnaire One (Questions 1-4)

Student	Nationality	Country	Sex	Age
A1	Iraqi	Iraq	Male	15 - 20
A2	Iranian	Iran	Male	21 - 25
A3	Libyan	Libya	Male	21 - 25
A4	Thai	Thailand	Female	15 - 20
A5	Sudanese	Sudan	Male	21 - 25
A6	Korean	Korea	Female	31 - 35
A7	Saudi	Saudi Arabia	Male	21 - 25
A8	Yemeni	Yemen	Male	15 - 20
A9	Libyan	Libya	Male	26 - 30
A10	Korean	Korea	Female	36 above
A11	Libyan	Libya	Male	26 - 30
A12	Malaysian	Malaysia	Male	15 - 20
A13	Korean	Korea	Male	15 - 20
A14	Korean	Korea	Female	15 - 20
A15	Korean	Korea	Female	15 - 20
A16	Iranian	Iran	Male	21 - 25
A17	Korean	Korea	Male	21 - 25
A18	Saudi	Saudi Arabia	Male	15 - 20
A19	Korean	Korea	Female	15 - 20
A20	Korean	Korea	Female	21 - 25
A21	Korean	Korea	Male	15 - 20
A22	Korean	Korea	Male	15 - 20
A23	Korean	Korea	Male	15 - 20
A24	Korean	Korea	Male	15 - 20
A25	Korean	Korea	Male	31 - 35
A26	Yemeni	Yemen	Male	21 - 25
A27	Libyan	Libya	Male	15 - 20
A28	Saudi	Saudi Arabia	Male	26 - 30
A29	Saudi	Saudi Arabia	Male	15 - 20
A30	Chinese	China	Male	15 - 20

Table 4.5 : Particulars of Student in Class 101A

Student	Nationality	Country	Age	Sex
B1	Korean	Korea	Male	15 - 20
B2	Korean	Korea	Male	21 - 25
B3	Korean	Korea	Female	above 36
B4	Korean	Korea	Female	21 -25
B5	Korean	Korea	Female	15 - 20
B6	Korean	Korea	Female	21 -25
B7	Korean	Korea	Female	21 -25
B8	Yemeni	Yemen	Male	15 - 20
B9	Yemeni	Yemen	Male	21 - 25
B10	Yemeni	Yemen	Male	15 - 20
B11	Korean	Korea	Female	15 - 20
B12	Saudi	Saudi Arabia	Male	21 -25
B13	Saudi	Saudi Arabia	Male	15 - 20
B14	Yemeni	Yemen	Male	15 - 20
B15	Korean	Korea	Male	15 - 20
B16	Malaysian	Malaysia	Male	15 - 20
B17	Korean	Korea	Male	15 - 20
B18	Saudi	Saudi Arabia	Male	15 - 20
B19	Korean	Korea	Female	21 - 25
B20	Korean	Korea	Female	21 - 25
B21	Palestinian	Palestine	Male	15 - 20
B22	Iranian	Iran	Male	21 - 25
B23	Iranian	Iran	Male	21 - 25
B24	Iranian	Iran	Male	15 - 20
B25	Iranian	Iran	Male	26 - 30
B26	Uzbek	Uzbekistan	Female	21 - 25
B27	Saudi	Saudi Arabia	Male	21 - 25
B28	Russian	Russia	Male	15 - 20
B29	Omani	Oman	Male	15 - 20
B30	Yemeni	Yemen	Male	15 - 20

Table4.6 : Particulars of students in class 101B

Out of the ten questions asked in Questionnaire 1, six questions (questions 5-10) focus on computer literacy and students' prior experience with computer and CALL. Below are the results of the questionnaires which are presented in pie charts to enhance further understanding of the study.

4.3.2 Questionnaire One (Questions 5-10)

Question 5 : Do you know how to use a computer?

Yes: 56/ 60, No: 4/60

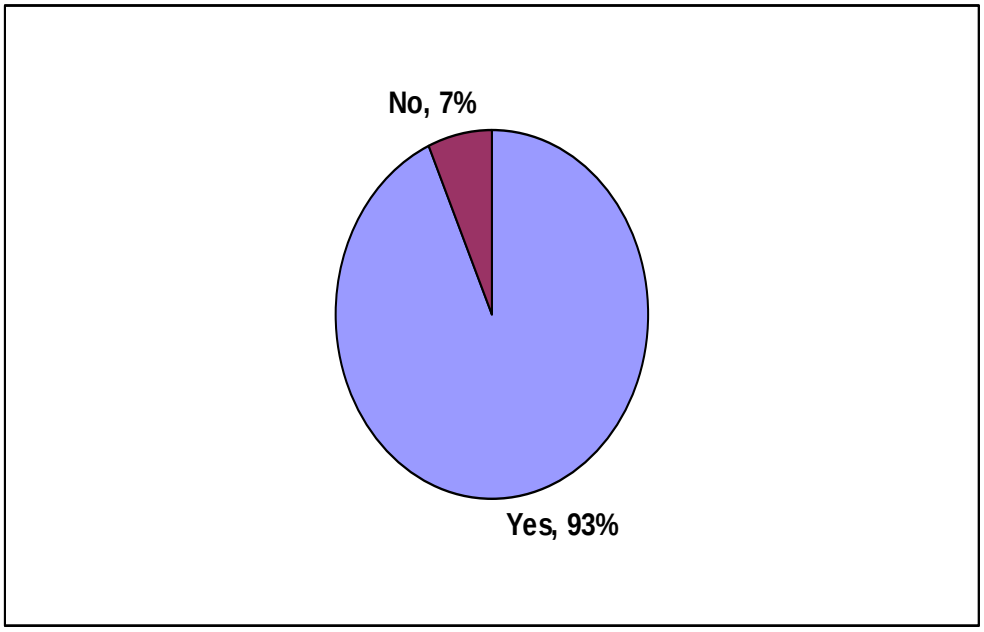


Chart 4.19 : Analysis of Question 5

The pie chart above illustrates the percentage of computer literacy among the subjects in this research. As shown, 93 % of the subjects know how to use a computer. Therefore, they did not have any major difficulties when they worked in computer lab. However, the chart shows 7% of computer illiteracy where 4 out of the 60 subjects involved in this study do not know how to use a computer. As such, these students were given an hour lesson on how to use the program on computers before they could continue learning through the software. Students did not face any problems while using the computer software because all they had to do was just to click on the icon and the page of lesson will appear. They will then select the lesson according to the schedule. Thus, even the students who hadn't had any experience with computers, had a smooth learning experience in the computer lab. The rationale behind this question is to see if the students 'computer knowledge has affected the study in any way. It is quite obvious

that despite not knowing how to use a computer, a handful of the students still managed to continue learning English effectively through CALL.

Question 6: Is this your first time learning English?

Yes : 47/60, No: 13/60

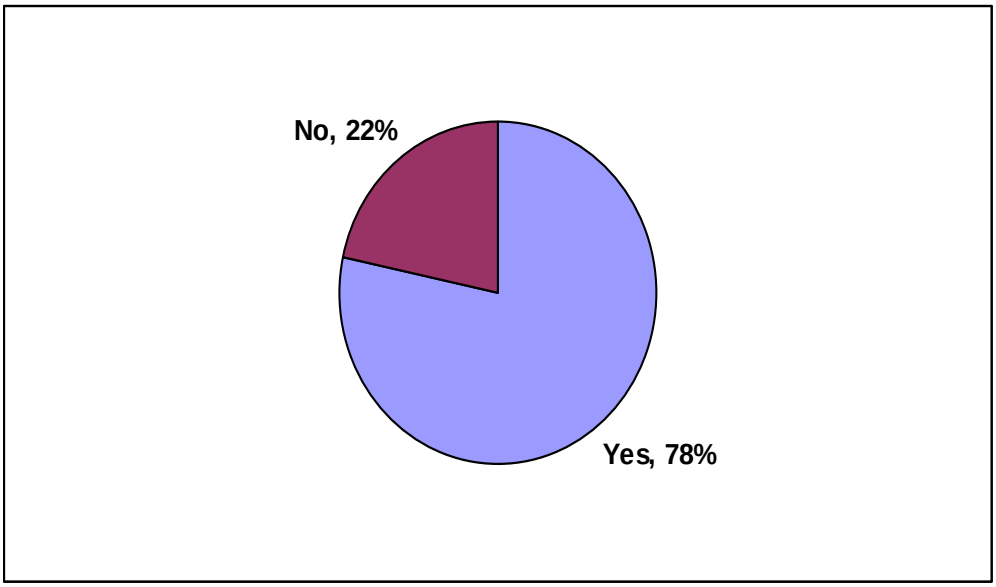


Chart 4.20 : Analysis of Question 6

The chart above shows the percentage of students who had prior knowledge learning English before they started the English program. 78% of the students state that that was their first time learning English. 13 out of the 60 students involved in this study claimed that they had prior English language learning experience. Nevertheless, results from a placement test carried out on the students showed that all 60 students are in the low English language proficiency level. Furthermore, students who have learned English prior to coming to the language centre also revealed that they did not learn it for a long period of time. Moreover, for some of them, it was through informal learning. Thus, the 13 students who had learned English before can also be considered as beginners as they have low proficiency level of English despite their prior experience.

Question 7: Why do you want to learn English?

Studies: 43/ 60 , Extra language: 8/ 60 , Overseas: 5/60 , Job: 1/60 , Children : 1/60, Holiday : 2/60

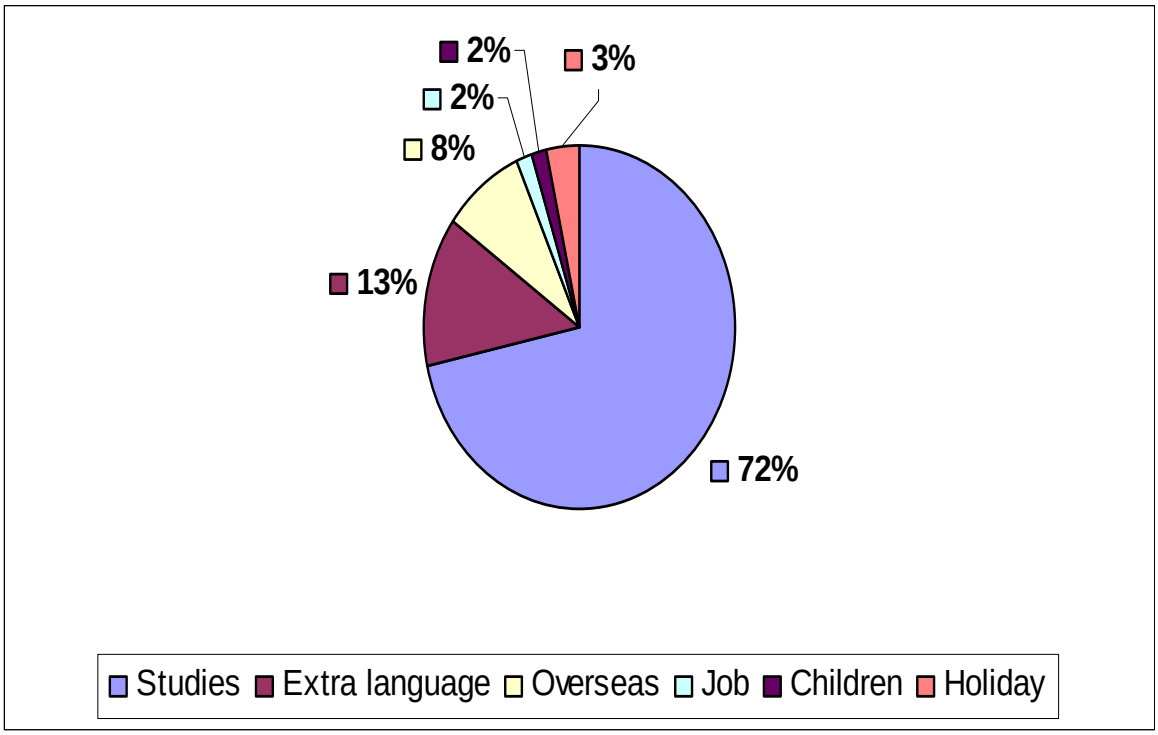


Chart 4.21 : Analysis of Question 7

From the chart above, we can see the many reasons why the subjects of this study want to learn English. 72% of the subjects state that the reason they are learning English is to further their studies. Most of the students are here to do their degree programs in one of the colleges or universities in Malaysia. Before they can do that, they need to meet the English language requirements. Therefore, they are here to study the language before venturing into their field of interests. 13 % of the subjects want to learn English as an additional language. Since being a multilingual is an advantage these days, many people do not want to waste the opportunity of learning a new language. 8% or 5 out of the 60 subjects of this study claimed that they are learning English to go abroad. The term abroad here means specifically to English speaking

nations such as the United States of America, Australia and the United Kingdom. Students see a better prospect in these countries in terms of studies and career. Therefore, in order to survive in these countries, they must overcome the language barrier. From the pie chart, we can see that only 2% of subjects are learning English for the job requirement. 1 out of the 60 subjects claims that the reason she/he is here to learn English is to help his/her children who are learning English in the International schools here which use English as the medium of communication. The remaining 2 subjects of this study indicate that they are learning English as a way to spend their holiday in Malaysia wisely.

Question 8: Have you learnt English using a computer before?

Yes : 19/ 60, No: 41/60

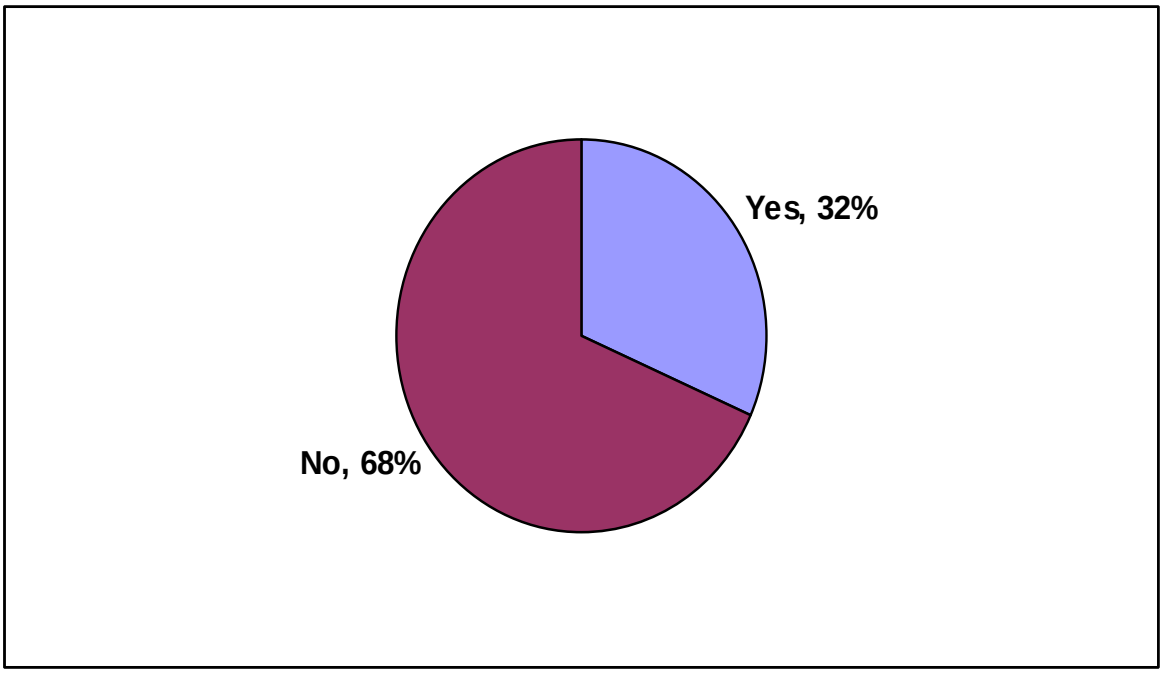


Chart 4.22 : Analysis of Question 8

The chart above attempts to answer the question on the subjects' English language learning experience with computers. This question is necessary to see if they students have any prior experience with computers which might affect the validity of the research. If students have experienced learning with computers, and if they didn't have any good experience with such learning, they might not have a positive attitude towards this software. Thus, it is important to know whether the students have had any experience learning English with computers. As illustrated above, 68% of the subjects state that they have not experienced learning English with computers. 32 % of the students have experienced learning with computers at least once in their lifetime. Thus, most of the students/ subjects of this study have not had prior learning experience with computers or exposure to CALL.

Question 9: What do you think of learning English using computers?

Good idea: 40/60 Don't know: 5/ 60 Fun: 11/ 60

Don't like computers: 3/60 Bad idea: 1/60

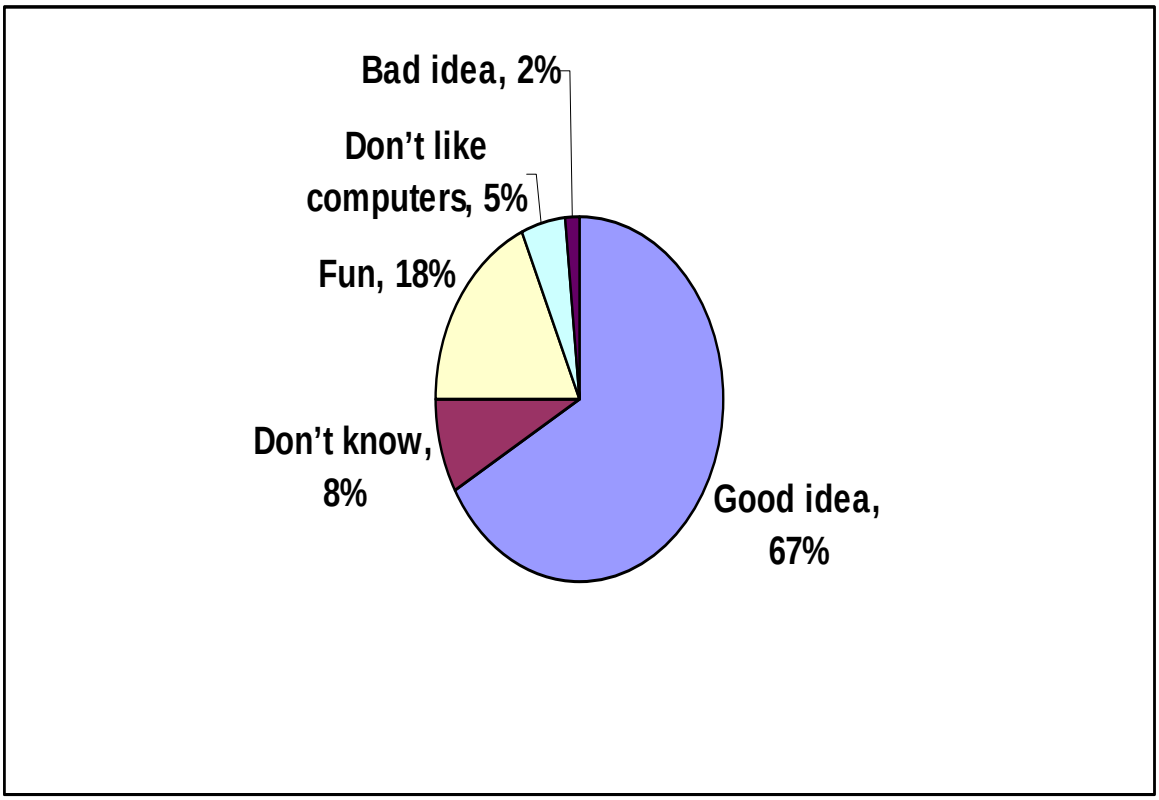


Chart 4.23 : Analysis of Question 9

A majority of the subjects agree that learning English through computers is indeed a good idea. This is in contrast with the 2 % of the subjects who claim that learning English through computers is a bad idea. Overall, we can see that 75% of the subjects have good opinion on learning where they claim that it is not only a good idea but it is also fun. On the other hand, 7% of the subjects do not think learning with computers is a good idea and do not like working with computers. This could be due to previous bad experiences with the technology which cause a fear, hatred or phobia towards this machine. The remaining 5 out of the 60 subjects, however, do not know whether it is a good idea or a bad idea. This is probably because they have never learnt a language with computers or heard of computer assisted learning.

Question 10: Do you think learning English using computers can help you improve?

Yes: 45/60, No: 5/60, Don't know: 10/60

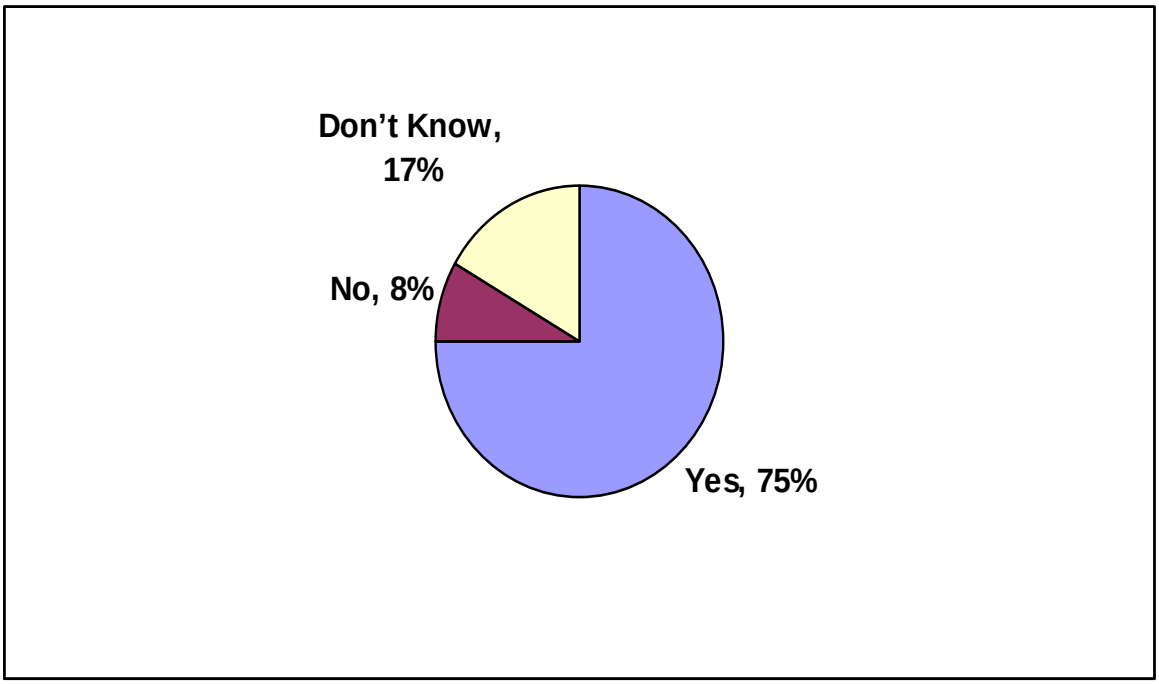


Chart 4.24 : Analysis of Question 10

As illustrated above, majority of the students feel that learning English through computers is a way to improve their language proficiency. Even before they started with the program, they have instilled positive feelings on learning a language through computers. This is in contrast with 8% of the subjects who feel that computers cannot play the role of teacher, thus, will not help them improve their language proficiency. The remaining 10 out of the 60 subjects in this study are skeptical about the role of computer as teachers and they do not know whether computers can help them improve their English.

4.3.3 Questionnaire Two

Questionnaire two was given at the end of the session where students have already had experienced learning through CALL program. The significance of the questionnaire is to answer the research question on the emotions of the learners when put under the CALL software. Questionnaire 2 was divided into two parts where the first part attempts to seek answers on learners' attitude while working on CALL. Students are given 10 statements on CALL where they have to state whether they agree or disagree with the statements. The statements on learners' attitude labeled S1- S10 are as following:

S1 I feel bored when I work on CALL.

S2 When I work on computers, I feel interested in learning English.

S3 Learning English is fun on CALL.

S4 Computers motivate me to learn English.

S5 When I learn English with computers, I am more serious.

S6 I want to continue learning English with computers.

S7 I prefer learning English with computers than with textbooks.

S8 I think learning computers is a waste of time.

S9 I like learning with computers.

S10 I want to spend more time learning English with computers.

Below are the results tabulated based on the response of each subject on learners' attitude.

Questions	Total Subjects	Agree	%	Disagree	%
S1	60	22	**36.7%**	38	**63.3%**
S2	60	37	**61.7%**	23	**38.3%**
S3	60	36	**60.0%**	24	**40.0%**
S4	60	36	**60.0%**	24	**40.0%**
S5	60	35	**58.3%**	25	**41.7%**
S6	60	34	**56.7%**	26	**43.3%**
S7	60	34	**56.7%**	26	**43.3%**
S8	60	21	**35.0%**	39	**65.0%**
S9	60	36	**60.0%**	24	**40.0%**
S10	60	32	**53.3%**	28	**46.7%**

Table 4.7 : Results of Questionnaire Two (S1-S10)

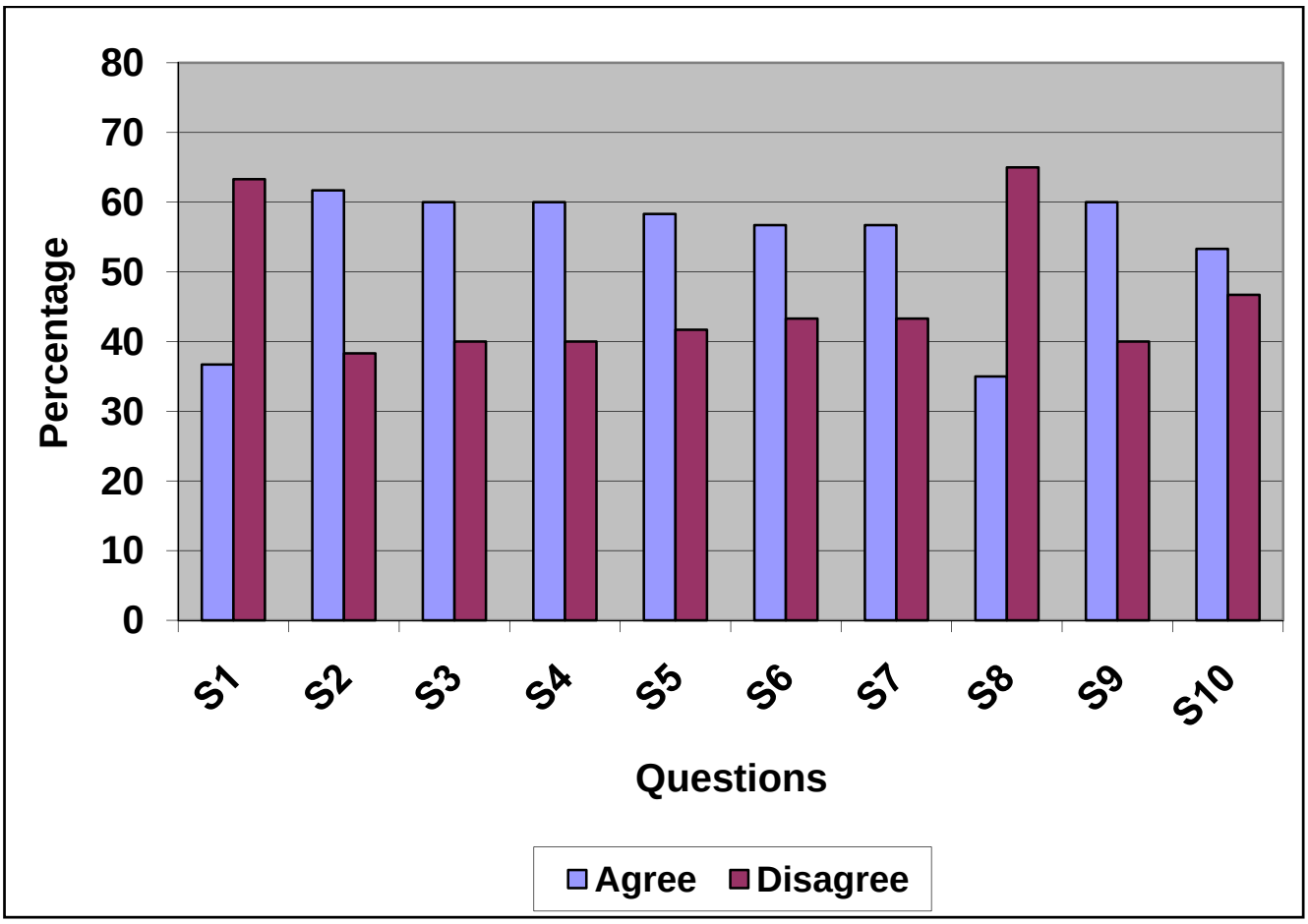


Chart 4.25 : Analysis of Questionnaire Two (S1-S10)

From the diagram above, we can say that almost all the students have positive learning attitude. These are the conclusions that can be drawn from the results of Questionnaire 2.

- 63.3% of the students are not bored learning with computers and they are very much into learning English on CALL.
- Most of the students also claim that learning English on CALL is fun and CALL motivates learning.
- More than 50% of the students feel that they are more committed when they are learning through computers and thus they would like to continue learning English through computers.
- Only minority of the students feel that it CALL is a waste of time.

- More than half of the students claim that they prefer learning English with computers to text books.

Therefore, based on the conclusions above, it is confirmed that the subjects of this study or the learners have positive learning attitude while working on CALL. In other words, CALL has played a role as motivator in helping the learners to learn a new language. When students are put under CALL software, they have positive emotions. Students are interested, motivated, enthusiastic, serious and committed to learn English. This is similar to the findings of Kulik and his associates (1980, 1983 and 1984). Although decades have passed, the motivation CALL gives the learners to learn a language is only becoming more and more evident.

While the first part of questionnaire two deals with learners' attitude towards learning with CALL, the second part of this questionnaire attempts to answer questions on effectiveness of CALL on the learners of English as second language. There are 10 statements altogether and numbered as S11 – S20. The questions asked in this part are as following:

S 11. I can learn grammar easily through NETPLUS.

S12. I think computers can teach me grammar.

S13. I don't understand the things I read on NETPLUS.

S14. I have to go back to the grammar pages many times to understand the grammar.

S15. Reading is fun with NETPLUS.

S16. I like working at my own pace with computers because I can learn more.

S17. I can do the tests easily after the lessons on computer.

S18. Lessons on computer help me learn English effectively.

S19. I can learn English thru NETPLUS.

S20. Learning through computers is a good way to learn English.

The table below shows the results of the second part of the questionnaire. To further enhance understanding, the results of the questionnaire are presented on a graph bar shown below the table.

Questions	Total Subjects	Agree	%	Disagree	%
S 11	60	36	**60.0%**	24	**40.0%**
S 12	60	34	**56.7%**	26	**43.3%**
S 13	60	20	**33.3%**	40	**66.7%**
S 14	60	26	**43.3%**	34	**56.7%**
S 15	60	22	**36.7%**	38	**63.3%**
S 16	60	30	**50.0%**	30	**50.0%**
S 17	60	37	**61.7%**	23	**38.3%**
S 18	60	36	**60.0%**	24	**40.0%**
S 19	60	40	**66.7%**	20	**33.3%**
S 20	60	38	**63.3%**	22	**36.7%**

Table 4.8 : Results of Questionnaire Two (S11-S20)

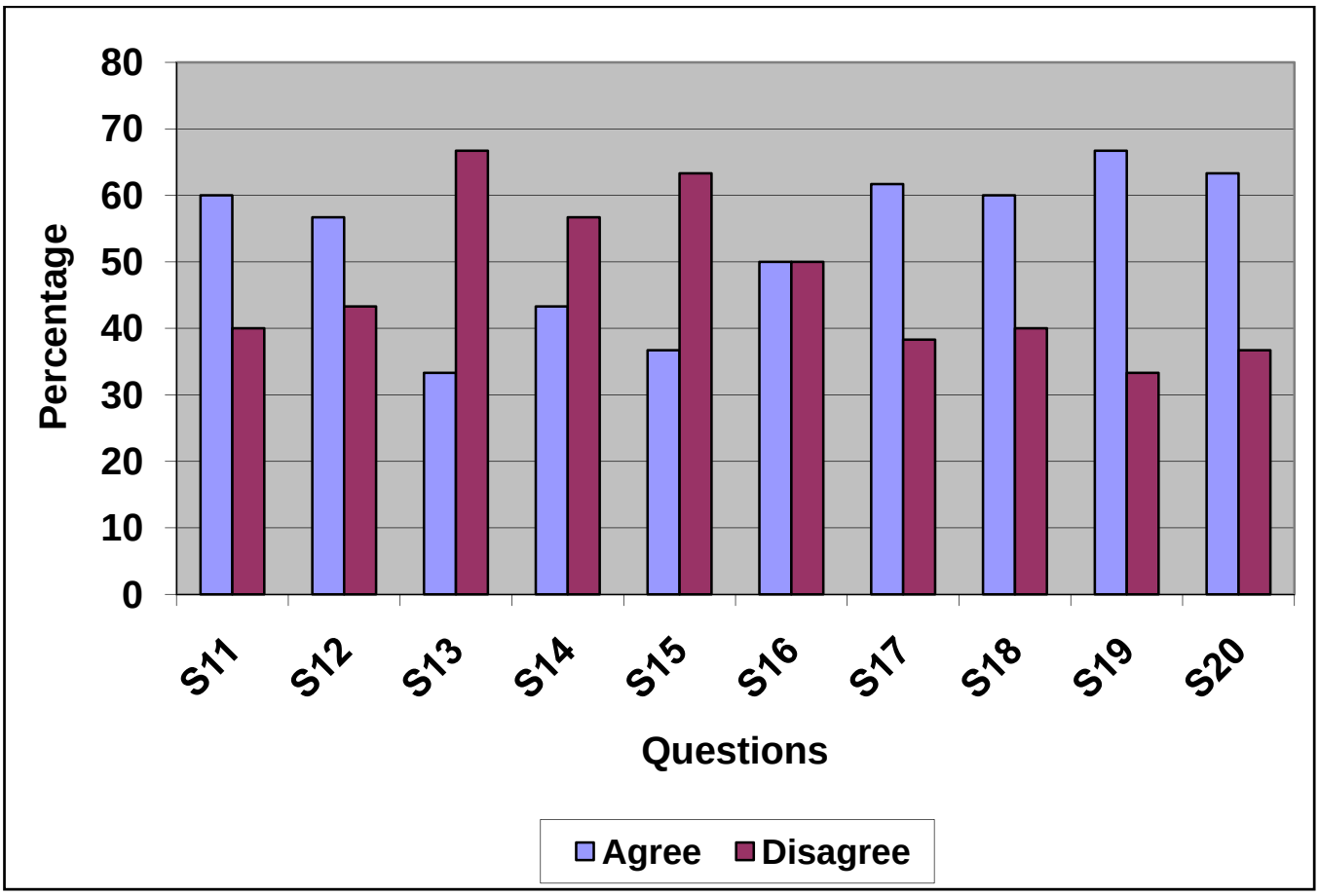


Chart 4.26 : Analysis of Questionnaire Two (S11-S20)

From the diagram above, several conclusions can be drawn on the effectiveness of the CALL software used in this study called NETPLUS. Below are the conclusions reached after analyzing the results of Questionnaire 2;

- 60% of the students agree that grammar can be learned easily through the CALL software and they also claim that computers can be a good grammar teacher.
- Although minority of the students claim that they do not understand some of the things presented on CALL software, most of them disagree with that statement.
- Most of the students claim that they can learn more at their own pace while working on CALL, thus, they can do the tests easily thereafter.

- More than half of the students feel that English can be learnt effectively through computers and it is a good way of learning English.

Based on the conclusions above, it can be inferred that CALL software used in this study which is NETPLUS has been successful in helping learners learn a second/foreign language. They have confirmed that the software taught them grammar well. This could be due to the drill and practice approach where it is said that the more one practices a skill, the more automatic it becomes (Anderson 1980; Gagne 1982). Not only that, students have also claimed that they were able to learn more at their own pace because the time given. If a student fails to understand anything, he /she can 'ask' the computer to repeat the presentation of the lesson because a computer can never be tired. This is however absent in classroom or during self studying where the teacher or the students may not perform the task as good as computers.

The researcher therefore has reached a conclusion based on the results of the questionnaire that students are motivated to learn a language through CALL and show positive emotions while working on the software. With this the research questions on motivation and types of emotions are answered with sufficient evidence.

4. 4 Analysis of Interview

In order to validate the data obtained from the language tests, interviews with two teachers whose main duties are to assist students in Multimedia Lab and to attend to students' needs in computer lab (MML) were conducted. Though they do not teach in classrooms like other teachers, part of their jobs requires them to help students in Multimedia Lab while they are working on computers. Although students are expected to learn on their own with the help of the software, they do experience some problems with the vocabulary and instructions given sometimes. This is when these two teachers

are needed to help the students so that they can proceed learning with the software. Sometimes, these teachers also have to deal with some technical problems with computers such as problems with server, computer hang ups and login problems.

Since these teachers spend most of their time in Multimedia Lab, monitoring students on computers, the researcher reckons that they would be the most suitable people to be interviewed regarding CALL. They were asked 15 questions on their background, experience on CALL, and experiences with students working on CALL and their personal views on CALL. The transcripts of the interviews are attached in appendix 5.

4.4.1 Teacher Interview

Question 1: How long have you been teaching here?

Teacher A has been teaching in ELS for 3 years meanwhile teacher B has been teaching for 5 years. Therefore, the researcher feels that their opinions are valuable for this research since they have been working in Multimedia Lab throughout the years.

Question 2: Can you tell me some aspects of your job?

Teacher A has to deal with class scheduling, monitoring students' progress, preparing grammar worksheet and also troubleshooting. She also helps them while they are working on CALL should they need any help.

Teacher B, however, has slightly different duties in MML. Teacher B gives out books to both teachers and students and she is the person in charge of the library. She also gives out the password and login name which enable students to use the NETPLUS

software on the computers in MML. Similar to Teacher A, she also helps students when they are working on CALL if they do not understand anything.

Thus, Teacher A would know better if students prefer CALL or if they show any improvement since she is the person who monitors their progress. Teacher A is more involved with the students and therefore, more exposed to the software too. Although Teacher B do not deal with the students as much as teacher A, she has been there long enough to know how students respond to CALL. Therefore, these two people are interviewed for their valuable opinion for this study.

Question 3: What is your opinion on Computer Assisted Language Learning?

Both the teachers have similar views on CALL. Firstly, they both believe that CALL is a good idea and it enhances learning. Teacher A feels that CALL helps to enhance proficiency in English.

Teacher B also stated that using CALL to teach is a good idea and she has seen students improve in their listening and pronunciation after using CALL.

Question 4: In your opinion, how does the software help the students to learn English?

According to teacher A, “they (CALL soft wares) encourage the students to do self learning and improve on their own. In other words, they encourage the students to do independent learning.”

Teacher B has similar opinion on CALL but she added that students not only improve their grammar, they also improve their pronunciation and reading skills.

Question 5: How do the students normally react when they are working on the software?

Based on the teachers' experience, they feel that most students always feel good working on the software. They are normally very eager and excited to learn. Students also find it very useful especially serious/committed students. According to the teachers, only a handful of them would complain that they are bored. However, they also added that these students who come up with complaints are usually the not very serious or enthusiastic learners and therefore they tend to get bored easily. Overall, the teachers convinced the researcher that the students normally react positively towards CALL and the software in MML.

Question 6: What are the problems that you face when you are conducting the lessons or facilitating in MML?

The teachers said that they do not normally have any problems with students while conducting the lessons in MML. However, they do get some disruptive students in particular classes who would give them problems in terms of their attendance and attitude.

The teachers also face some technical problems occasionally where the students can't save their completed work while using the software due to server problems.

Question 7: How do you deal with the problems?

For the student related problems, the teachers would normally use the classroom management skills to control them. They always warn the students that their marks will be deducted if they do not perform the task given or disturb other students or if they commit any unwanted actions in MML.

As for the technical problems, the teachers would normally try to do some troubleshooting and if they fail to solve the problem, the representative from the IT department will help them fix the problem.

Question 8: How do students like the idea of CALL?

According to the teachers, the students normally are receptive of the idea of CALL and they have never rejected learning via computers. Their initial response is usually very positive and most of the students are able to maintain the good attitude until the end of their learning session.

Question 9: Do they have positive or negative attitude when they are working on the program?

The teachers unanimously agree that the students usually have positive attitude on CALL. However, they also mentioned that students who are into learning will show positive response and good attitude while learning through the software.

Another common response from both the teachers is that the students who are not keen in learning English and those who are here because they are forced by parents will not show positive attitude and tend to get bored easily.

Question 10: Can you tell me some positive remarks that they have said after completing the program?

According to the teachers, the students claim that they improve their pronunciation by listening to the speakers while working on the software. They also added that many students have commented that the software helps them in acquiring the grammar and also vocabulary especially students from Middle East countries.

Question 11: What about the negative remarks?

The teachers claim that the only negative remark they have got from the students is that they are bored when they work on CALL everyday. Having said this, the teachers also mentioned that the students who normally complain are the students with very low motivation in learning.

Question 12: Personally, do you think CALL helps students master English language?

Both the teachers have good opinion on CALL and they feel that CALL can help students learn English provided that they do it with good, positive attitude and right mindset.

Question 13: Do you have any suggestions on how to teach English to students using CALL more effectively?

Teacher A suggests that teachers should conduct and facilitate classes in MML once or twice a month to show students how to maximize learning through computers. Teacher B, however, didn't have any comments.

4.4.2 Student Interview

In order to get a more credible data for this research, 10 students were interviewed. They were asked several questions on CALL and NETPLUS. These students were chosen from the previous 101A and 101B class who participated in the study. They have been using NETPLUS for five months when the interview took place, so they were able to pass judgments and comments on the usage of computers in

language learning. Below are the questions posed to the students and the insights gleaned from the interview-

Question 1: What do you think of learning a language through computers?

All of the students feel that learning language through computers is a good way and they like it very much. They all have positive attitude towards NETPLUS and they agree that NETPLUS helps to enhance learning. Computer apparently has been very helpful in helping them learn English in an interesting way. They feel that in this era of technology, it is essential to incorporate computers in classrooms to enhance learning.

Question 2 : How has NETPLUS benefited you ?

According to the students, NETPLUS has benefited them in many ways. One of them claimed that the quick response given by a computer helped him to correct the mistakes and learn from the mistakes. Three other students mentioned that computer repeated things and through the drilling, they were able to comprehend a lot of things. Not only that, some others claimed that NETPLUS gave them the flexibility to choose what they wanted to work on. So, that aroused their interest more because in classroom they were not allowed to do so. In addition, video lessons are available in NETPLUS also helped to make the lessons more exciting.

Question 3: Which aspect of language can you learn better through CALL-NETPLUS?

Out of the ten students interviewed, eight of them claimed that NETPLUS really helped them improve their grammar and listening. When asked more on this, students told the interviewer that teachers in the classroom teach them a particular structure. However, to practice the grammar taught, they find NETPLUS to be more interesting

than books. They also added that because NETPLUS was motivating, they are keener to practice the grammar taught in the classroom and do extra exercises using NETPLUS.

The students also pointed out that NETPLUS helped them to be better listeners in English. In a non CALL environment, a radio player is used in a listening lesson. As for ELS, all the recordings for listening are in cassette form and not CD. In a classroom of 20, it is very easy to be distracted by other factors and noises around. However, in a CALL environment, each student is equipped with a headphone connected to their own PC. Thus, they are able to play the recording as many times as they want and because it is directly played from the computer, the sound quality is undeniably much better than ordinary cassettes. This was the explanation given by the students when asked on how NETPLUS helped them in enhancing their listening skills.

Two of the ten students interviewed said that NETPLUS helped them improve their pronunciation in English. They supported their point by saying that the software allowed them to listen to the correct pronunciation and after that they could record their own voices. The program then would mark their accuracy in pronouncing the words and students try and try until they get it right. Hence, by doing this, students get to learn how to pronounce certain words in English correctly. As for ELS, majority of the teachers are non native speakers. Thus, students get very limited chance to acquire the correct accent and pronunciation in the classroom. However, this is made possible by the software where the students can actually listen to native speakers and practice speaking like them.

The students also added that their vocabulary has improved through NETPLUS. Based on their experience, not all the words are taught in a classroom or a non CALL environment. So, when they worked in a CALL environment, they were exposed to new words and that helped them in expanding their vocabulary. The students also added that NETLUS also helped them improve their spelling because they were very careful while

typing the words. Unlike in CALL environment, students tend to be lax in spelling when they are writing on paper. Thus, through NETPLUS they learn not only new words but they also the spellings of the words.

Although the students claimed that they have learnt grammar, pronunciation, writing, reading and listening in CALL environment, they seemed to favor reading the least compared to others. Most of the students could not explain why they did not like reading in CALL environment, but three of the students gave an explanation to this question. According to one student, reading passages are lengthy and therefore it is better presented on books than monitors. He added that he was lazy to scroll the page up and down to read something so that decreased his interest in reading using CALL. The other two students had similar views. They mentioned that it was easier to read on books than to read on computer screen, especially long passages.

Question 4: In what ways are CALL environment better than classroom environment?

Most of the students believed that both CALL and classroom education is equally important. However, some of them felt that in classroom, students are given the traditional way of practice, which is pencil and paper method, and this they found very dry and boring. However, while using computers, they mentioned that they were excited and motivated because computer is definitely a more interesting medium than paper and pencil. According to the students, in this era it is very important to incorporate technology in classroom. Therefore, they think that CALL environment is a better environment for language learning.

Question 5: What are the advantages of CALL - NETPLUS?

All the students agree that using a computer in education is an advantage because it improves language learning. CALL motivates them to learn a language because the lesson is presented in an interesting way. The usage of visuals and flash make it more appealing to students. Not only that, computer graphics such as movable cartoon characters and such also is another feature of NETPLUS that makes students interested in learning. Besides that, there are also video and audio features in NETPLUS which enable students to watch something live or listen to authentic material. This, according to them, is the biggest advantage that a paper is not able to present.

Apart from that, students feel that they are able to learn vocabulary better in NETPLUS because of the mechanism of a computer. A keyboard allows the students to pay extra attention in typing the letters of a word. Unlike a CALL environment, in pencil and paper method, students tend to be careless in writing the spelling of the word. Thus, students learn spelling of a word, which is a confusing aspect in language learning, easily through CALL.

Another advantage of CALL is the effectiveness of the mechanical tutor in giving quick response to the answers given by student. The students said that the computer could immediately correct their mistakes and thus the learning takes place effectively. Not only that, some CALL softwares also have a dictionary function which enables students to check the meaning of a word fast and this helps them to continue with the task given. However, in a classroom, looking up a meaning can be a tedious task as it takes up a lot of time compared to CALL environment. This is said as one of the advantages of CALL.

Question 6: What are the disadvantages of CALL – NETPLUS ?

Although the students really enjoy learning by NETPLUS, they did mention some disadvantages of CALL based on their experience with NETPLUS. One of the students claimed that lack of human interaction in CALL can be discouraging at times. According to him, language learners need to practice speaking the language. Hence, in classrooms, students can interact with each other using the targeted language. This is absent in CALL environment. On the contrary, he also mentioned that sometimes, in classroom students tend to speak with their native tongue to the peers and this will hinder learning. He suggested that students should be allowed to have discussion while working on computers.

The other students feel that NETPLUS will be a good program to enhance learning. By this, they meant that NETPLUS can be used to do practices on what has been taught in a classroom as a supplement to classroom teaching. Nevertheless, they believe that CALL on its own, cannot replace a teacher. They need a teacher to answer their questions and give more explanation while teaching a component especially grammar. According to the students, question-answer sessions are very important and therefore NETPLUS has a disadvantage when it comes to teacher-student interaction.

Most of the students also mentioned that another disadvantage of NETPLUS is when it involves emotion. In a classroom, a teacher can understand a student's body language and facial expression which are necessary sometimes because it allows a teacher to know the situation in the classroom. In CALL environment, a computer cannot read the students' expressions and this would be a problem if a student really needs help.

Question 7: Do you have any suggestions to further improve CALL-NETPLUS?

All of the students want more time to work in computer lab. At present, they are given an hour everyday to use CALL software in computer lab. However, they said that if they were given more time, they could improve more and have better understanding of the lesson.

Not only that, the students also want the lesson in classroom to be synchronized with the lesson in the computer lab. By doing so, the students can practice the grammar component taught in the classroom and this will make the students improve their ability to use the language. Some even suggested that after presentation by a teacher in a classroom, they would like to do exercises on computers instead of on papers. They prefer a CALL environment to do the exercises because it is very interesting.

Six of the students interviewed said that they needed both computers and teachers in classroom to further enhance learning. They added that a teacher's role in the classroom was to explain the structure and present the lesson whilst the computer's role was to give ample interactive practice with the help of audio and video features.

4.5 Conclusion

To summarize, in this chapter the researcher has used tables, charts and graphs to present the data of the research. The data was then analysed further to have the research questions answered.

The data collected from the first questionnaire that was administered in the first week of the course was tabulated and presented in charts to show readers the background of the subjects used in this research. (See Tables 4.5 – 4.6, charts 3.1-3.6) Some of the questions in the questionnaire given attempt to seek answers on the

subjects' computer literacy level, experience in learning English and experience in CALL. The data was presented in the form of pie charts. (See Charts 4.19-4.24).

As this is a study to examine the effectiveness of a CALL software (NETPLUS), language tests were conducted for 14 days to monitor the students' progress in both CALL and Non CALL environment. The scores were recorded and average scores of the tests were tabulated to enhance understanding of the readers. (See Tables 4.1 – 4.4). For every test given in this research, an analysis was done and presented in pie charts. (See Charts 4.1-4.14)

Interviews with teachers and students were also used to gather data in this research. The opinions and ideas given by both teachers and students provided insights into the effectiveness of NETPLUS in helping the students to acquire a new language. (See 4.4)

Finally, another set of questionnaires was given to the subjects at the end of the study to examine the students' motivation level and attitude while using the software. The responses of the students were tabulated and analysed to answer the research questions in this study. (See Tables 4.7 - 4.8, Charts 4.25 - 4.26).

In the next chapter, the conclusions made and recommendations to further enhance learning thru CALL will be presented.