

**T.C.**  
**DİCLE ÜNİVERSİTESİ**  
**EĞİTİM BİLİMLERİ ENSTİTÜSÜ**  
**YABANCI DİLLER EĞİTİMİ ANABİLİM DALI**  
**İNGİLİZ DİLİ EĞİTİMİ BİLİM DALI**

**ÖĞRENCİLERİN, İNTERNET TEMELLİ BİR BİLGİSAYAR PROGRAMI**  
**YOLUYLA İNGİLİZCE OKUMA BECERİSİNİ GELİŞTİRMeye YÖNELİK**  
**TUTUMLARI**

**Serkan ÇELİK**

**Tez Danışmanı: Doç. Dr. Nilüfer BEKLEYEN**

**YÜKSEK LİSANS TEZİ**

**DİYARBAKIR / 2014**

**TURKISH REPUBLIC  
DICLE UNIVERSITY  
GRADUATE SCHOOL OF EDUCATIONAL SCIENCES  
DEPARTMENT OF FOREIGN LANGUAGE EDUCATION  
ENGLISH LANGUAGE TEACHING PROGRAMME**

**STUDENTS' ATTITUDES TOWARDS ENHANCING ENGLISH READING  
COMPREHENSION VIA AN INTERNET-BASED COMPUTER PROGRAM**

**Serkan ÇELİK**

**Supervisor: Associate Prof. Nilüfer BEKLEYEN**

**MASTER'S THESIS**

**DİYARBAKIR / 2014**

**Eğitim Bilimleri Enstitüsü onayı**

**Bu çalışma İngiliz Dili Eğitimi Ana Bilim Dalında YÜKSEK LİSANS TEZİ olarak kabul edilmiştir.**

**DANIŞMAN : Doç. Dr. Nilüfer BEKLEYEN**

**ÜYE : Doç. Dr. Bayram AŞILIOĞLU**

**ÜYE : Yrd. Doç. Dr. Süleyman BAŞARAN**

**ONAY**

**Yukarıdaki imzaların, adı geçen öğretim üyelerine ait olduğunu onaylarım.**

**..... / ..... / 2014**

**Enstitü Müdürü**

**Approval of the Graduate School of Educational Sciences**

**This work has been accepted as a thesis for the degree of Master of Arts in English Language Teaching Programme.**

**Supervisor : Associate Prof. Dr. Nilüfer BEKLEYEN**

**Member of Examining Committee : Associate Prof. Dr. Bayram AŞILIOĞLU**

**Member of Examining Committee : Assistant Prof. Dr. Süleyman BAŞARAN**

**Approval**

**This is to certify that the signatures above belong to the members of examining committee whose names are written.**

**Director**

## **BİLDİRİM**

Tezimin içerdığı yenilik ve sonuçları başka bir yerden almadığımı ve bu tezi DÜ Eğitim Bilimleri Enstitüsünden başka bir bilim kuruluşuna akademik gaye ve unvan almak amacıyla vermediğimi; tez içindeki bütün bilgilerin etik davranış ve akademik kurallar çerçevesinde elde edilerek sunulduğunu, ayrıca tez yazım kurallarına uygun olarak hazırlanan bu çalışmada kullanılan her türlü kaynağa eksiksiz atıf yapıldığını, aksinin ortaya çıkması durumunda her türlü yasal sonucu kabul ettiğimi beyan ediyorum.

**(İmza)**

**Adı Soyadı**

... / ... / .....

## ÖZ

# ÖĞRENCİLERİN, İNTERNET TEMELLİ BİR BİLGİSAYAR PROGRAMI YOLUYLA İNGİLİZCE OKUMA BECERİSİNİ GELİŞTİRMeye YÖNELİK TUTUMLARI

Serkan ÇELİK

Yüksek Lisans Tezi, İngiliz Dili Eğitimi Anabilim Dalı

Danışman: Doç. Dr. Nilüfer BEKLEYEN

Kasım 2013, 129 sayfa

Bu çalışmanın amacı öğrencilerin, bilgisayar desteği ile yabancı dilde okuma becerisini geliştirmeye dair tutumlarını incelemektir. Çalışma süresince yabancı dilde okuma becerisini geliştirmeyi amaçlayan bir bilgisayar programı ([www.passagework.com](http://www.passagework.com)) öğrenciler tarafından kullanılmış ve öğrencilerin hem bu programa hem de bilgisayar destekli dil eğitimine dair çalışma öncesi ve sonrası tutumları değerlendirilip karşılaştırılmıştır. Çalışma Dicle Üniversitesi Yabancı Diller Yüksek Okulunda yürütülmekte olan YDS'ye (Yabancı Dil Sınavı) hazırlık kurslarına katılan 60 öğrencinin katılımıyla yapılmıştır. Öğrencilerin hem bilgisayar destekli dil öğretimine hem de çalışma süresince kullandıkları bilgisayar programına dönük tutumları anket ve yüz yüze görüşmeler yoluyla incelenmiştir. Görüşmeler sadece çalışma bitiminde gerçekleştirilirken anketler hem çalışma öncesinde hem de sonrasında uygulanmış ve bu anketlerden elde edilen bilgiler SPSS programı yoluyla analiz edilmiştir. Anketlerden ve görüşmelerden elde edilen veriler, öğrencilerin çalışma öncesinde ve sonrasında bilgisayar destekli dil eğitimine ve kullandıkları bilgisayar programına karşı ne tür tutumlara sahip olduğuna ilişkin bilgi sağlamıştır.

Çalışma sonucunda elde edilen veriler, öğrencilerin çalışma öncesinde ve sonrasında bilgisayar destekli dil eğitimi konusunda kararsız bir tutuma sahip olduklarını ve tutumlarında herhangi bir önemli değişimin göze çarpmadığını göstermiştir. Ayrıca veriler, her ne kadar bilgisayar destekli dil eğitimiyle ilgili tarafsız tutumlara sahip olsalar da, öğrencilerin okuma becerisini geliştirmeyi amaçlayan programa dair tutumlarının hem çalışma öncesinde hem de sonrasında oldukça olumlu olduğunu da göstermiştir. Sonuçlar

genel olarak deęerlendirildięinde, bu alıřmada kullanılan programın ([www.passagework.com](http://www.passagework.com)) okuma becerisini geliřtirmede geleneksel sınıf eęitiminin yerini alamayacaęı ve sadece bir destek olarak kullanılabileceęi sonucu ortaya ıkabilir.

**Anahtar Kelimeler:** Bilgisayar Destekli Dil Öğrenimi, İngilizcede Okuma Eğitimi

**ABSTRACT****STUDENTS' ATTITUDES TOWARDS ENHANCING ENGLISH READING  
COMPREHENSION VIA AN INTERNET-BASED COMPUTER PROGRAM****Serkan ÇELİK****Master's Thesis, English Language Teaching****Supervisor: Associate Prof. Nilüfer BEKLEYEN****April 2013, 129 pages**

The aim of this study is to examine the attitudes of students towards enhancing reading skills in a foreign language with the help of computers. In the course of the study, a computer program ([www.passagework.com](http://www.passagework.com)) aimed at improving the reading comprehension in a foreign language was employed by the students, and students' attitudes (before and after the study) towards both this program and Computer Assisted Language Learning were evaluated and compared. The study was conducted with the participation of 60 students attending YDS (Examination of Foreign Language) preparation course that was run at the School of Foreign Languages at Dicle University. The students' attitudes towards both Computer Assisted Language Learning and the computer program used during the study were examined through questionnaire and interviews. While the interviews were conducted only after the study, the questionnaires were administered both before and after the study, and the results elicited from the questionnaires were analysed through SPSS program. The results obtained from the questionnaires and interviews provided information on what kind of attitudes the students had towards Computer Assisted Language Learning and the program they used before and after the study, and indicated what kind of changes these attitudes underwent.

The results elicited from the study revealed that students had neutral attitudes towards Computer Assisted Language Learning before and after the study, and no significant change stood out in their attitudes. The results also indicated that although the students had neutral attitudes towards CALL, their attitudes towards the program aimed at enhancing reading skill were quite positive both before and after the study. When the results are evaluated holistically, it can be concluded that the program employed in this

study ([www.passagework.com](http://www.passagework.com)) is unable to replace traditional classroom education and can be used only as a support.

**Key Words:** Computer Assisted Language Learning, Teaching Reading in English

## ACKNOWLEDGEMENTS

During the process of writing this thesis, there were some people who were always ready to help me with all challenges I encountered. But for their support, it would be impossible to complete this thesis. Therefore, I think I owe them many thanks.

First I would like to thank my thesis advisor Assoc. Prof. Dr. Nilüfer BEKLEYEN for her invaluable support, guidance and patience. She was always very helpful to me with her practical solutions, and her advices shed light on my study. Without her, this thesis would not have been possible, so it is an honor for me to thank her for all she has done.

I would also like to thank my close friend Nigah BAYSAL for his willingness to help me whenever I needed him and for his unending patience to answer my questions all the time. Without his support, it would have been quite hard for me to complete that study.

I owe my deepest gratitude to the members of my thesis defence committee Assoc. Prof. Dr. Bayram AŞILIOĞLU and Ass. Prof. Dr. Süleyman BAŞARAN for their precious suggestions for my thesis.

Finally, I would like to thank my wife and daughter because it was their support and patience that made it possible for me to accomplish this study.

## TABLE OF CONTENTS

|                          |      |
|--------------------------|------|
| ÖZ.....                  | vi   |
| ABSTRACT.....            | viii |
| ACKNOWLEDGEMENTS .....   | x    |
| TABLE OF CONTENT .....   | xi   |
| LIST OF TABLES.....      | xvii |
| LIST OF APPENDICES ..... | xix  |

## CHAPTER I

### INTRODUCTION

|                                    |    |
|------------------------------------|----|
| 1.1 Presentation.....              | 1  |
| 1.2 Statement of the problem.....  | 1  |
| 1.3 Background of the study.....   | 3  |
| 1.4 Significance of the study..... | 8  |
| 1.5 Research questions.....        | 9  |
| 1.6 Definition of key terms.....   | 9  |
| 1.7 Limitations of the study.....  | 10 |

## CHAPTER II

### REVIEW OF LITERATURE

|                                                         |    |
|---------------------------------------------------------|----|
| 2.1The definition of reading.....                       | 11 |
| 2.2 The importance of reading in language teaching..... | 12 |
| 2.3 Approaches to teaching reading.....                 | 14 |
| 2.3.1 Bottom-up processing.....                         | 14 |

|                                              |    |
|----------------------------------------------|----|
| 2.3.2 Top-down processing.....               | 15 |
| 2.3.3 Schemata theory.....                   | 16 |
| 2.3.3.1 Content schemata.....                | 16 |
| 2.3.3.2 Formal schemata .....                | 16 |
| 2.3.3.3 Linguistic schemata.....             | 16 |
| 2.3.4. Intensive reading.....                | 16 |
| 2.3.5 Extensive reading.....                 | 18 |
| 2.4 sub-skills of reading.....               | 19 |
| 2.4.1 Skimming.....                          | 19 |
| 2.4.2 Scanning.....                          | 20 |
| 2.5 The three phrases of reading.....        | 20 |
| 2.5.1 Pre-reading.....                       | 20 |
| 2.5.2 While reading.....                     | 21 |
| 2.5.3 Post-reading.....                      | 21 |
| 2.6 Technology in language education.....    | 22 |
| 2.7 Computer Assisted Language Learning..... | 23 |
| 2.7.1 A brief history of CALL.....           | 27 |
| 2.7.2 Approaches to CALL.....                | 28 |
| 2.8 Internet and language teaching.....      | 29 |
| 2.9 Use of CALL in reading.....              | 31 |
| 2.10 Related studies.....                    | 33 |

**CHAPTER III**  
**METHODOLOGY**

3.1 Presentation.....36

3.2 Setting.....37

3.3 Participants.....38

    3.3.1 Profiles of Participants.....38

        3.3.1.1 Demographic data.....39

        3.3.1.2 Educational data.....40

        3.3.1.3 Data on students’ foreign language learning and CALL experience.....40

        3.3.1.4 Data on students’ proficiency in English.....41

        3.3.1.5 Data on students’ computer experience.....41

3.4 Instruments.....42

    3.4.1 Questionnaire.....42

    3.4.2 Interviews.....43

    3.4.3 The Internet-based computer program.....44

3.5 Data collection procedures.....45

3.6 Data analysis.....46

## CHAPTER IV

### FINDINGS

|                                                                                                                       |    |
|-----------------------------------------------------------------------------------------------------------------------|----|
| 4.1 Presentation.....                                                                                                 | 47 |
| 4.2 Quantitative data analysis.....                                                                                   | 48 |
| 4.2.1 Quantitative data analysis before the study.....                                                                | 48 |
| 4.2.1.1 Students' attitudes towards CALL before the study.....                                                        | 48 |
| 4.2.1.1.1 Differences according to Genders.....                                                                       | 50 |
| 4.2.1.1.2 Differences according to Age.....                                                                           | 50 |
| 4.2.1.1.3 Differences according to Education Level.....                                                               | 51 |
| 4.2.1.1.4 Differences according to Status of Employment.....                                                          | 52 |
| 4.2.1.1.5 Differences according to Duration of English Learning.....                                                  | 52 |
| 4.2.1.1.6 Differences according to Exam Scores of Students.....                                                       | 53 |
| 4.2.1.1.7 Differences according to Class Level.....                                                                   | 54 |
| 4.2.1.1.8 Differences according to Frequency of Engagement in<br>Computer.....                                        | 54 |
| 4.2.1.1.9 Differences according to Level of Computer Skills.....                                                      | 55 |
| 4.2.1.1.10 Differences according to Students' Previous Experience in<br>CALL.....                                     | 56 |
| 4.2.1.2 Students' attitudes towards the Internet-based computer program after<br>two weeks (short-term results) ..... | 56 |
| 4.2.2 Quantitative data analysis after the study.....                                                                 | 59 |
| 4.2.2.1 Students' attitudes towards CALL after the study.....                                                         | 59 |
| 4.2.2.1.1 Differences according to Genders.....                                                                       | 61 |
| 4.2.2.1.2 Differences according to Age.....                                                                           | 61 |

|                                                                                                                                |    |
|--------------------------------------------------------------------------------------------------------------------------------|----|
| 4.2.2.1.3 Differences according to Education Level.....                                                                        | 62 |
| 4.2.2.1.4 Differences according to Status of Employment.....                                                                   | 63 |
| 4.2.2.1.5 Differences according to Duration of English Learning.....                                                           | 63 |
| 4.2.2.1.6 Differences according to Exam Scores of Students.....                                                                | 64 |
| 4.2.2.1.7 Differences according to Class Level.....                                                                            | 65 |
| 4.2.2.1.8 Differences according to Frequency of Engagement in<br>computer.....                                                 | 65 |
| 4.2.2.1.9 Differences according to Level of Computer Skills.....                                                               | 66 |
| 4.2.2.1.10 Differences according to Students' Previous Experience in<br>CALL.....                                              | 67 |
| 4.2.2.2 Students' attitudes towards the Internet-based computer program after<br>study.....                                    | 68 |
| 4.2.3 The comparison of students' attitudes towards CALL before and after the<br>study.....                                    | 70 |
| 4.2.4 Differences between students' attitudes towards CALL before and after the study<br>.....                                 | 74 |
| 4.2.5 The comparison of students' attitudes towards the Internet-based computer<br>program before and after study.....         | 75 |
| 4.2.6 Differences between attitudes of students towards the Internet-based computer<br>program before and after the study..... | 77 |
| 4.3 Qualitative data analysis.....                                                                                             | 78 |
| 4.3.1 Students' attitudes towards CALL.....                                                                                    | 78 |
| 4.3.2 Students' attitudes towards the Internet-based computer program used in the<br>study.....                                | 82 |

## CHAPTER V

### DISCUSSION

|                                                                                                                                                                                                                                                                                                      |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 5.1 Presentation.....                                                                                                                                                                                                                                                                                | 88  |
| 5.2 Results of quantitative analysis.....                                                                                                                                                                                                                                                            | 89  |
| 5.2.1 What are the attitudes of students towards CALL before the stud.....                                                                                                                                                                                                                           | 89  |
| 5.2.2 How do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?..... | 91  |
| 5.2.3 What are the attitudes of students towards employing the Internet based computer program to enhance their proficiency in reading before the study?.....                                                                                                                                        | 92  |
| 5.2.4 What are the attitudes of students towards CALL after the study?.....                                                                                                                                                                                                                          | 94  |
| 5.2.5 How do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?..... | 96  |
| 5.2.6 What are the attitudes of students towards employing the Internet based computer program to enhance their proficiency in reading after the study?.....                                                                                                                                         | 96  |
| 5.2.7 Is there a significant difference between the attitudes of students towards CALL before and after the study?.....                                                                                                                                                                              | 97  |
| 5.2.8 Is there a significant difference between the attitudes of students towards employing the Internet-based computer program to enhance their proficiency in reading before and after the study?.....                                                                                             | 100 |
| 5.3 Results of qualitative analysis.....                                                                                                                                                                                                                                                             | 101 |
| 5.3.1 Results of interview on students' attitudes towards CALL.....                                                                                                                                                                                                                                  | 101 |
| 5.3.2 Results of interview on students attitudes towards the Internet-based computer program.....                                                                                                                                                                                                    | 104 |

## CHAPTER VI

### CONCLUSION AND SUGGESTIONS

|                                           |            |
|-------------------------------------------|------------|
| 6.1 Conclusion.....                       | 108        |
| 6.2 Pedagogical implications.....         | 110        |
| 6.3 Limitations of the study.....         | 110        |
| 6.4 Suggestions for further research..... | 111        |
| <b>REFERENCES.....</b>                    | <b>112</b> |

### LIST OF TABLES

|                                                                                                                                 |    |
|---------------------------------------------------------------------------------------------------------------------------------|----|
| <b>Table 1.</b> Demographic data on participants.....                                                                           | 39 |
| <b>Table 2.</b> Educational data of students.....                                                                               | 40 |
| <b>Table 3.</b> Students' foreign language learning and CALL experience.....                                                    | 40 |
| <b>Table 4.</b> Students' proficiency in English.....                                                                           | 41 |
| <b>Table 5.</b> Students' experience with computers.....                                                                        | 41 |
| <b>Table 6.</b> Students' attitudes towards CALL.....                                                                           | 48 |
| <b>Table 7.</b> Results of <i>t</i> -test for the relationship between gender and attitudes towards CALL<br>.....               | 50 |
| <b>Table 8.</b> Results of ANOVA for the relationship between age and attitudes towards CALL<br>.....                           | 51 |
| <b>Table 9.</b> Results of ANOVA for the relationship between education level and attitudes<br>towards CALL.....                | 51 |
| <b>Table 10.</b> Results of <i>t</i> -test for the relationship between status of employment and attitudes<br>towards CALL..... | 52 |
| <b>Table 11.</b> Results of ANOVA for the relationship between duration of English learning<br>and attitudes towards CALL.....  | 52 |
| <b>Table 12.</b> Results of ANOVA for the relationship between exam scores of the students and<br>attitudes towards CALL.....   | 53 |

|                                                                                                                                               |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----|
| <b>Table 13.</b> Results of ANOVA for the relationship between class level and attitudes towards CALL.....                                    | 54 |
| <b>Table 14.</b> Results of ANOVA for the relationship between frequency of engagement in computer and attitudes towards CALL.....            | 55 |
| <b>Table 15.</b> Results of ANOVA for the relationship between level of computer skills and attitudes towards CALL.....                       | 55 |
| <b>Table 16.</b> Results of <i>t</i> -test for the relationship between students' previous experience in CALL and attitudes towards CALL..... | 56 |
| <b>Table 17.</b> Students' attitudes towards the Internet-based reading program after two weeks (Short-term results).....                     | 57 |
| <b>Table 18.</b> Students' attitudes towards CALL.....                                                                                        | 59 |
| <b>Table 19.</b> Results of <i>t</i> -test for the relationship between gender and attitudes towards CALL .....                               | 61 |
| <b>Table 20.</b> Results of ANOVA for the relationship between age and attitudes towards CALL.....                                            | 61 |
| <b>Table 21.</b> Results of ANOVA for the relationship between education level and attitudes towards CALL.....                                | 62 |
| <b>Table 22.</b> Results of <i>t</i> -test for the relationship between status of employment and attitudes towards CALL.....                  | 63 |
| <b>Table 23.</b> Results of ANOVA for the relationship between duration of English learning and attitudes towards CALL.....                   | 63 |
| <b>Table 24.</b> Results of ANOVA for the relationship between exam scores of the students and attitudes towards CALL.....                    | 64 |
| <b>Table 25.</b> Results of ANOVA for the relationship between class level and attitudes towards CALL.....                                    | 65 |
| <b>Table 26.</b> Results of ANOVA for the relationship between frequency of engagement in computer and attitudes towards CALL.....            | 65 |
| <b>Table 27.</b> Results of ANOVA for the relationship between level of computer skills and attitudes towards CALL.....                       | 66 |

|                                                                                                                                               |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----|
| <b>Table 28.</b> Results of <i>t</i> -test for the relationship between students' previous experience in CALL and attitudes towards CALL..... | 67 |
| <b>Table 29.</b> Students' attitudes towards the Internet-based reading program after study.....                                              | 68 |
| <b>Table 30.</b> Students' attitudes towards CALL before and after the study.....                                                             | 70 |
| <b>Table 31.</b> Paired-Samples T test for attitudes of students towards CALL before and after the study.....                                 | 74 |
| <b>Table 32.</b> students' attitudes towards the Internet-based reading program before and after study.....                                   | 75 |
| <b>Table 33.</b> Paired-Samples T-test for attitudes of students towards the Internet-based reading program before and after the study.....   | 77 |
| <b>Table 34.</b> the reasons why students found the CALL useful.....                                                                          | 78 |
| <b>Table 35.</b> Students' negative attitudes towards CALL.....                                                                               | 80 |
| <b>Table 36.</b> Students' positive attitudes towards the Internet-based reading program used in this study.....                              | 82 |
| <b>Table 37.</b> Students' negative attitudes towards the Internet-based reading program used in this study.....                              | 85 |

## LIST OF APPENDICES

|                                                               |     |
|---------------------------------------------------------------|-----|
| <b>Appendix 1.</b> Questionnaire – English Version.....       | 118 |
| <b>Appendix 2.</b> Questionnaire – Turkish Version.....       | 122 |
| <b>Appendix 3.</b> Interview Questions – English Version..... | 126 |
| <b>Appendix 4.</b> Interview Questions – Turkish Version..... | 126 |
| <b>Appendix 5.</b> Main Page of the Program.....              | 127 |
| <b>Appendix 6.</b> Paragraph Exercise .....                   | 127 |
| <b>Appendix 7.</b> Vocabulary Exercise 1.....                 | 128 |
| <b>Appendix 8.</b> Vocabulary Exercise 2.....                 | 128 |
| <b>Appendix 9.</b> Vocabulary Exercise 3.....                 | 129 |
| <b>Appendix 10.</b> Vocabulary Exercise 4.....                | 129 |

|                                                                                                              |     |
|--------------------------------------------------------------------------------------------------------------|-----|
| <b>Appendix 11.</b> English – Turkish Translation Exercise .....                                             | 130 |
| <b>Appendix 12.</b> Grammar Hints Regarding the Paragraph .....                                              | 130 |
| <b>Appendix 13.</b> Questions Regarding the Paragraph .....                                                  | 131 |
| <b>Appendix 14.</b> Statistical Data on Participants’ Studies on the Internet-Based Computer<br>Program..... | 132 |

## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Presentation**

Every facet of our life has gained a new shape with the latest developments in technology. The effects of technology have been so extensive that they have affected a lot of fields ranging from family life to business. Education can be regarded among one of those fields. The developments in information and communication technologies (ICT) let the students and teachers have a quick access to information on a wide range of subjects and exchange information with people from all over the world. Therefore, with the help of improvements in technology, teachers and students have had various opportunities to attain better education.

Recent developments in technology have also affected language teaching, and of course, English Language Teaching (ELT) (Koçak, 2010: 1). Thus, computers and the Internet began to play a significant role in teaching English. In order to improve four skills including reading, writing, listening and speaking various newly-developed programs have been introduced into the field of language teaching and they have been commonly utilized. Especially, since 1960s Second Language Acquisition (SLA) and computer technologies have been inseparable, supporting and empowering each other for creating efficient, interactive software development for CALL (İnsel, 2010: 1). The present study aims to explore what the attitudes of students are towards using an Internet-based computer program designed to help students enhance their proficiency in reading.

#### **1.2 Statement of the Problem**

In Turkey, the use of an L2 and the demand for reading in L2 is notably immense especially in English-medium universities where students are required to read

large amounts of academic materials written in L2 (Mendi, 2009: 2). Particularly in our era, reading in a foreign language has become the most crucial subject that should take precedence at academic level. In the view of the significance given to the reading skills in a foreign language, different techniques or methods have been developed and employed to date.

So far many different techniques have been used by language instructors and students such as skimming, scanning, bottom-up processing, etc., and as Kleinmann (1987: 272) states, for reading skill development, strategies such as skimming, scanning, and context utilization are important, but recently with the advance of technology, computers and some computer programs designed to teach reading in a foreign language have involved into the process of teaching reading and they have been increasingly used by language teachers and learners, and Kılıçkaya (2009: 442) claims that it has become necessary that teachers be trained in terms of technology integration and be equipped with the required tools to meet the current needs of our schools. However, there is a lack of research in the field of foreign language teaching concerning the effectiveness of web-based computer programs in enhancing learners reading skills during the course of second language learning process. On the grounds of that lack, this study aims to shed light on the thoughts of students as for the use of web-based computer programs for the purpose of developing reading proficiency.

In the School of Foreign Languages at Dicle University, students attend an English course aiming at preparing students for YDS (Foreign Language Examination) mostly relying on reading comprehension and held twice a year in Turkey to evaluate the proficiency level of participants in foreign language. The students getting prepared for this exam primarily need a developed reading skill to be able to understand the texts and solve the subsequent questions in the test. Therefore, it is quite significant for them to improve their reading skills. These students have been instructed via the conventional methods and techniques of teaching reading up to date. Nevertheless, a great many web-based computer programs have been designed to help students improve their reading skills. Hence, an investigation into the attitudes of students towards web-based computer programs developed to improve reading proficiency will provide information

on whether that sort of programs can be used as an efficient way of enhancing proficiency in reading.

### **1.3 Background of the Study**

Reading is one of the most important skills in learning English. It stated that many EFL students rarely experience a situation where they have to speak English on a daily basis, but they might need to read in English quite often in order to benefit from various pieces of information, most of which is recorded in English (Eskey, 1996 cited in Kulaç, 2011). With respect to reading component of a foreign language, to be able to read flexibly in a foreign language is a way of using language appropriately (Kaya, 2007: 1). Therefore, reading skill must be emphasized in order to improve learners' reading comprehension. Reading means to apprehend the meaning, to understand what is written more than simply decode symbols (Büyükyazı, 2007: 1). Flynn & Stainthorp (2006: 42) supports this explanation by saying that reading results from an ability to decode the print and to comprehend the language. They also state that we read because we want access to the information that is encoded in the squiggles on the page. In much educational literature the term 'reading comprehension' is often used to depict the understanding of texts (Flynn & Stainthorp, 2006: 51). Reading and reading instruction in EFL classes aim to develop students' decoding skills or their knowledge of syntax or vocabulary for literal comprehension (Fung, Wilkinson & Moore, 2003: 2).

For many teachers, the effective teaching of reading poses many problems, most of which are how to teach rather than test and how to find different ways of teaching reading which will involve and stimulate learners (Little, 1997: 285). In order to teach reading in a foreign language, conventional methods and techniques have been prevalent so far. In a traditional reading class, during the whole course of the lesson, teacher is at the forefront and in all activities including reading the text, explaining the content and unknown words or asking and answering the comprehension questions he/she is dominant, and in these classes, printed materials are generally used.

The recent improvements in technology have affected various fields including education. Not surprisingly, language education has also been affected deeply. Dudeney & Hockly (2007: 7) states although the use of Information and Communication

Technologies (ICT) by language teachers is still not widespread, the use of technology in the classroom is becoming increasingly important. Technology has embedded into language education profoundly. Therefore, technology and foreign language education are no longer stranger to one another (Büyükyazı, 2007: 23). Indeed, technology has been around in language teaching for decades ~ one might argue for centuries, if we classify the black board as a form of technology (Dudeney & Hockly, 2007: 7). Additionally, they put forward that tape recorders, language laboratories and video have been in use since 1960s and 1970s, and are still used in classrooms around the world.

Recently, computers and the Internet have been increasingly used in language teaching. Küçük (2009: 1) explains the reason for this is that, we have come to an age when there can be no teaching and learning process without the assistance of computers and computer has brought significant changes and facilities to almost every aspect of people's lives including language teaching. The activities employed by the teachers to teach four major skills have tended to utilize the amenities that have been brought by computers and use of the Internet. So, computers and the Internet has become one of the most crucial parts of language teaching. With the improvements in technology, the term Computer Assisted Language Learning (CALL) has emerged. CALL is an approach to teaching and learning foreign language where the computer and computer-based resources such as the Internet are used to present, reinforce and assess material to be learned (Al-Mansour & Al-Shorman, 2011: 51). Even though adopting CALL is still controversial issue, many new generation students and teachers believe that computer-based education will improve learning (Büyükyazı, : 23). Hashemi & Aziznezhad (2011:832) supports this idea and they argue that CALL offers modern English language teachers many facilities and novel techniques for teaching and learning. What is more, During the last three decades, CALL has gained a boost from developments in technology, psychology, and education and its literature abounds with the studies that scrutinized the role of computer in language classes as a significant tool for language teaching and learning (Rahimi & Hosseinni K., 2010: 184).

CALL was formed of three main approaches which were *Structural* CALL dating back to 1970s and 1980s, *Communicative* CALL dating back to 1980s and 1990s

and *Integrative CALL* emerged in the 21<sup>st</sup> century. Dudeney & Hockly (2007: 7) state that:

Computer-based materials for language teaching, often referred to as CALL, appeared in the early 1980s and early CALL programs typically require learners to respond to stimuli on the computer screen and to carry out tasks such as filling in gapped texts, matching sentences halves and doing multiple choice activities.

The question of whether it is possible to use computers for language learning and teaching in 1980s changed into the inquiry of why to integrate computers into language classes in 1990s, and now the general issue in this regard is how to implement computers in language education (Rahimi & Hosseinni, 2010: 183). Additionally, Rahimi & Hosseinni (2010: 184) summarizes the development of CALL as follows:

Historical development of CALL reveals that in the first phase of CALL (50s-70s), Behaviorist CALL, the main research focused on system and software design, discussion on the role of computers in language learning, and comparison of traditional and computer-enhanced classes. The second phase or communicative CALL (70s-80s) developed under the influence of cognitive psychology and its research focused both on software design and task development. However, the roles of teachers and students in the environment of CALL attracted researchers' attention. The third phase, namely the integrative CALL, started at the closing decade of the 20th century and is based on multimedia and the Internet. This new approach incorporates many aspects of constructivism that contributed to the extension of research started in the previous phases such as skill acquisition and added some new directions to CALL studies including works on computer as a research tool (corpus analysis) and investigating learners' motivation and needs in CALL environment.

Using CALL in language teaching has some advantages, and Al-mansour & Al-Shorman (2011: 52) describes the advantages of CALL as follows:

Motivation is one such advantage. Motivation can be promoted in students by personalizing information, having animated objects on the screen, and providing practice activities which incorporate challenges, curiosity and providing a context. Adapting to the learning of students is a second advantage of CALL.

This means that the student controls the pace of learning and makes choices in what and how to learn, which in turns makes students feel more competent in their learning. The third advantage of CALL is authenticity, the opportunity to interact in one or more of the four language skills by using or producing texts meant for an audience of the target language, not the classroom evaluation. Students feel less stressed and more confident in this language learning situation, in part because surface errors do not matter so much. The fifth advantage of CALL is development of critical thinking skills. It is found that the use of computer technology in classroom generally improves self-concept, mastery of basic skills and more active processing resulting in higher-order thinking skills and better recall.

On the other hand, Koçak (2010: 2) utters that the most valuable outcome of the modern technology is arguably the Internet. In accordance with this idea, Dudeney & Hockly (2007: 7) claim that as access to information and communication technology (ICT) has become more widespread, so CALL has moved beyond the use of computer programs to embrace the use of the Internet and web-based tools. The Internet is a worldwide network of computers that interact on a standardized set of protocols which act independently of particular computer operating systems (Büyükyazı, 2007: 25). Koçak maintains that the Internet is a complicated store including a vast range of information from different sources.

While the computer is now used in some form or another in most language classrooms, and is considered standard equipment in some institutions, the Internet is also gradually being introduced in the second language classroom as teachers become more familiar with it (Büyükyazı 2007: 25). Moreover, she (2007: 26) put emphasis on that although the Internet has been available to most people, only recently have educators been realizing the potential the Internet can have in second and foreign language classroom. It provides the students with authentic materials that were once barely available. Büyükyazı exemplifies (2007: 28) that students can access current information from countries around the world. They can obtain geographical, historical, social/cultural, economic, and political information from the countries in which the target language is spoken. Furthermore, Dudeney & Hockly (2007: 27) claim that using websites is one of the easiest and least stressful ways of getting started with technology in the classroom.

According to Büyükyazı (2007: 25) the number of Web sites is increasing at a rate of 3,000% per year as hundreds of new sites are added each week. As a result of the abundance of various websites designed to improve language learning and teaching, new computer and the Internet based alternatives have been introduced into four main fields of language teaching including reading, writing, speaking and listening. Büyükyazı (2007: 24) states that at present, there are a variety of computer applications available including vocabulary, grammar, and pronunciation tutors, spell checkers, electronic workbooks, writing and reading programs. Some of them include computer programs and web sites designed to improve foreign language learners' proficiency in reading. Dudeney & Hockly (2007: 29) state they provide valuable opportunities for more controlled language work and are often a great help to learners who need to brush up on certain aspects of language or to prepare for an exam. Furthermore, they (2007: 27) announce that there is a large and constantly expanding collection of resources on the web, at a variety of levels and covering an amazing array of topics. Büyükyazı (2007: 29) argues that the Internet provides supplemental language activities which can provide students with additional practice in specific areas of language learning. These include reading tests and comprehension questions, grammar exercises, and so forth. It is also the case that many learners these days are far more used to working with computer-based text and information than they are to dealing with more traditional, paper-based forms of text (Dudeney & Hockly 2007: 28). So, it can be assumed the Internet and computers have been so much integrated into our lives that the web-based reading materials are widely used.

Reading comprehension has always been an important focus of research within the field of education (Mendi, 2009: 1). Being an important language skill, reading and the process involved in reading have been commonly explored research areas in both L1 and L2 context (Uzunçakmak, 2005: 2). Therefore, in order to find out whether these recently-emerged web sites focusing on reading or improving reading proficiency are effective or not, a large number of researches have been conducted so far. CALL researchers have investigated the advantages of using computers as teaching/learning tools in improving different language skills (Al-mansour & Al-Shorman, 2011: 51). As one of these skills includes reading, researchers have conducted many studies to observe how efficient computers are in teaching reading. However, besides computers and

computer programs, the Internet-based sites (web-sites) designed to improve four main skills of language have been an important aspect of teaching foreign language recently. Although there have been a good number of studies devoted to the role of computers and computer programs in teaching reading, few studies have been conducted on the attitudes of students towards the Internet-based computer programs on improving reading comprehension. By examining their attitude to the Internet-based computer programs on enhancing one's reading proficiency, greater insights into the effectiveness of web-sites in improving reading proficiency can be obtained.

#### **1.4 Significance of the Study**

Although many studies have been conducted on the use of computers and computer programs in learning and teaching of reading in foreign language, there have been few studies concerning the attitudes of students as for the Internet-based computer programs focusing on developing learners' proficiency in reading. Therefore, via getting an insight into the attitudes of students, this study may contribute to the literature by investigating and revealing the benefits and the drawbacks of using the Internet-based computer programs to improve proficiency in reading. So, the study may provide information about whether the Internet-based computer programs prove effective if one wants to improve his/her reading comprehension. Furthermore, the study may be a valuable source of information for the designers who create these programs and may cast light on how to design these programs more efficiently. Moreover, this study may provide documentation for teachers and administrators, for it will provide a better insight into the use of the Internet-based computer programs in terms of improving reading comprehension. According to the results of this study, they may, to some extent, decide on how efficient the Internet-based computer programs in improving students proficiency in reading.

At the local level the study attempts to indicate what the students' thoughts are towards employing an Internet-based computer program to improve their reading skills. Since the Internet-based reading activities are not used in reading classes and mostly traditional paper-based materials are preferred, the students haven't had any chance to attend any kind of an Internet-based teaching activity. Therefore, students have had to improve their reading ability via paper-based materials and activities. Providing the

Internet-based computer programs are integrated into the process of learning and teaching reading in a foreign language, they may prove more efficient compared with the traditional paper-based sources. Therefore, by judging from the attitudes of students, the result of this study may enlighten the question of whether the Internet-based computer programs can be an efficient way of teaching reading. Moreover, by taking the results of this study into consideration, it may be determined whether to employ the Internet-based computer programs in teaching or learning reading.

### **1.5 Research Questions**

The study addresses the following research questions:

1. What are the attitudes of students towards employing an Internet-based computer program to enhance their proficiency in reading before the study and how do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?
2. What are the attitudes of students towards employing an Internet-based computer program to enhance their proficiency in reading after the study and how do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?
3. Is there a significant difference between the attitudes of students towards employing an Internet-based computer program to enhance their proficiency in reading before and after the study?

### **1.6 Definitions of the Key Terms**

**Reading Comprehension:** It is the process of concurrently breaking down and building meaning through interaction with printed language (Snow, 2002 cited in Gilbert, 2008).

Computer Assisted Language Learning: It is the process of language learning and teaching through the use of computer.

The Internet-based Computer Program: It is a program that entails the Internet connection to be operated.

### **1.7 Limitations of the Study**

There are some limitations in this study. To start with, the study is limited to the students attending a course in the School of Foreign Languages at Dicle University. The number of students attending this course is limited to 60 adult students. The study relies on interviews and on the pre and post-questionnaire results of the students participating in the study. Furthermore, only one Internet-based computer program was employed during the course of the study.

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

This chapter presents the definition of reading, and then it reveals the importance of reading in language teaching and summarizes the reading strategies used by readers. The last part of the chapter focuses on Computer Assisted Language Learning along with its use in language learning and teaching reading.

#### **2.1 The Definition of Reading**

In literature, a variety of descriptions have been provided for reading process (Mendi, 2009: 7). Silberstein (1994: 12) states that reading is a complex information processing skill in which the reader interacts with text in order to (re)create meaningful discourse. According to Uzunçakmak (2005: 14) reading is comprehension in that the reader expects to understand the message in the text. Besides, Patel (2008: 113) utters that reading means to understand the meaning of printed words i.e. written symbols. Reading is an active process which consists of recognition and comprehension skills. The word “reading” is properly employed for all manner of activities when we endeavour to make sense of circumstances (Smith, 2004: 2). Moreover, Smith (2004: 3) states that all learning and comprehension is interpretation, understanding an event from its context (or putting the event into a context). It is pointed out that reading depends on the information getting through the eyes to the brain and what the brain tells the eye is much more important than what the eye tells the brain (Smith, 1971 cited in Kaya, 2007: 7).

W.S Gray identifies reading as follows (cited in Patel, 2008: 114):

Reading is form of experience. Reading brings us in contact with the minds of authors, with the written accounts of their experiences. Their recorded lines and the advancement made by them in various fields.

Grabe (1991) proposes 6 components of reading skills (cited in Uzunçakmak, 2005: 14): (1) automatic recognition skills, (2) vocabulary and structural knowledge, (3) formal discourse structure knowledge, (4) content/world background knowledge, (5) synthesis and evaluation skills/strategies, and (6) metacognitive knowledge and skills monitoring.

Patel (2008, 115-116) claims that the process of reading may be broadly classified into three stages as follows:

1. The first stage is 'the recognition stage'. At this stage the learner simply recognizes the graphic counterparts of the phonological items. For instance he recognizes the spoken words in its written form. Difficulty at this stage depends upon the difference between the script of the learner's mother tongue and English and between the spelling conventions of two languages
2. The second stage is the 'structuring stage'. The learner sees the syntactic relationship of the items and understands the structural meaning of the syntactic units
3. The third stage is the 'interpretation stage'. This is the highest level in the process of reading. The learner comprehends the significance of the word, a phrase, or a sentence in the overall context of the discards. For instance, he comprehends the serious and jocular use of words, distinguishes between a statement of fact and a statement of opinion.

## **2.2 The Importance of Reading in Language Teaching**

Reading is one of the most important academic language skills for students learning English as a second (ESL) and foreign language (EFL) (Uzunçakmak, 2005: 1). There is no doubt that the role of reading comprehension in English as a second language (ESL) and English as a foreign language (EFL) settings has gained great importance over the last years (Mendi, 2009: 8). Anderson (2003: 2) states that reading is an essential skill for learners of English. He also remarks that for most of learners it is the most important skill to master in order to ensure success in learning. Mendi (2009: 7) states that reading is an interactive process between the reader and the text in which the reader constructs meaning through top-down and bottom-up analyses of the text, and she also points out that the reader must have large vocabulary knowledge, as well as the

ability to appropriately adjust his/her reading speed, make use of background knowledge, and be able to use reading strategies effectively. Reading is certainly an important activity for expanding knowledge of a language (Patel, 2008:114). He also argues that reading is not only a source of information and a pleasurable activity but also as a means of consolidating and extending one's knowledge of language.

Jalilifar (2009: 96) states that one of the main problems confronting English as a foreign language (EFL) learner is how to improve their reading comprehension achievement. He also notes that reading is necessary when learners further their study and they need good reading skill for acquiring knowledge and new information. Reading is the most useful and important skill for people. This skill is more important than speaking and writing (Patel, 2008: 113). It is the most successful skill to teach because most of the English learners can read while they cannot speak much (Kaya, 2007: 8). If students are to become independent language users, they will need to experience a range of reading tasks corresponding to the kinds of reading they intend in the target language (Silberstein, 1994: 11).

Harmer (1998: 68) states that there are many reasons why getting students to read English texts is an important part of the teacher's job. He also points out that in the first place; many of them want to be able to read texts in English either for their careers, for study purposes or simply for pleasure. Reading assists students in improving their vocabulary knowledge and supplies students with good models for writing and offers opportunities to study language (Koçak, 2010: 13). She also states that reading materials can be used as a source showing how sentences, paragraphs and whole text are formed and organized. Reading is useful for other purposes too: any exposure to English is a good thing for language students (Harmer, 1998: 68). Reading habits not only help the student to get knowledge and wisdom from cultural heritage but are also very helpful in passing for leisure period (Patel, 2008: 114). At the very least, some of the language sticks in their minds as part of the process of language acquisition, and if the reading text is especially interesting and engaging, acquisition is likely to be even more successful (Harmer, 1998: 68). Moreover, Kaya (2007) points out that we can explain why we read and why reading is important in our life in many ways. For instance, to gain necessary information for our daily lives such as bus/plane time tables,

newspapers, magazines, etc. Besides, reading texts also provide opportunities to study language: vocabulary, grammar, punctuation, and the way we construct sentences, paragraphs and texts (Harmer, 1998: 68). Patel (2008: 113) states that reading is an important activity in life with which one can update his/her knowledge. He also states that reading skill is an important tool for academic success. Around the world English is taught in a bewildering variety of situations. In many countries, it first appears in the primary curriculum, but many universities in those and other countries continue to find that their entrants are insufficiently competent in English (Harmer, 2007: 22). Harmer (1998) also claims that reading texts provide opportunities to study language: vocabulary, grammar, punctuation, and the way we construct sentences, paragraphs and texts, and he further states good reading texts can introduce interesting topics, stimulate discussions, excite imaginative responses and be the springboard for well-rounded, fascinating lessons (cited in Kaya, 2007: 9).

Harmer (1998: 70-71) lists the principles behind teaching of reading as follows:

1. Reading is not a passive skill
2. Students need to be engaged with what they are reading
3. Students should be encouraged to respond to the content of a reading text, not just to the language
4. Prediction is a major factor in reading.
5. Match the task to the topic.
6. Good teachers exploit reading texts to the full.

## **2.3 Approaches to Teaching Reading**

### **2.3.1 Bottom-up Processing**

Word-level strategies are referred to as “bottom-up” (Carrel, 1989 cited in Uzunçakmak, 2005: 21). In bottom-up processing “the reader focuses on individual words and phrases, and achieves understanding by stringing these detailed elements together to build up a whole” ,so bottom-up processing requires a good understanding of the details in a reasonable way (Harmer, 2003 cited in Kaya, 2008: 13). The bottom-up model describes reading as a mechanical process in which the reader follows a piece-

by-piece mental translation pattern; in other words, the reader decodes the text letter-by-letter, word-by-word, and sentence-by-sentence (Grabe and Stoller, 2002 cited in Kulaç, 2011: 13), and it is stated that in this model, as the reader reads “by moving his eyes from left to right across page, he or she identifies the letters and then gradually combines these letters into words, phrases, clauses and sentences (Eskey, 1986: cited in Mendi, 2009: 10)

Silberstein (1994: 7) explains bottom up process as follows:

Bottom-up processing (or text-based) occurs when linguistic input from the text is mapped against the reader’s previous knowledge. This process is also termed data driven because it is evoked by the incoming data. Bottom-up reading requires language processing at all levels: word, sentence, and discourse

### **2.3.2 Top-Down Processing**

Goodman (1967: 108) defines the top-down model of reading as follows (cited in Mendi, 2009: 10):

Reading is a selective process. It involves partial use of available minimal language cues selected from perpetual input on the basis of reader’s expectation. As this partial information processed, tentative decisions are made, to be confirmed, rejected, or refined as reading processes. More simply stated, reading is a psycholinguistic guess game. It involves an interaction between thought and language. Efficient reading does not result from precise perceptions and identification of all elements, but from skill in selecting the fewest, most productive cues necessary to produce guesses which are right first time.

Carrel (1989) states that text-level strategies are referred to as “top-down” (cited in Uzunçakmak, 2005: 21). Furthermore, Eskey and Grabe (1996) point out that reader looks at the text to find the most useful information (cited in Kulaç, 2011: 13), and according to Silberstein (1994: 7) top-down information processing occurs when readers use prior knowledge to make predictions about the data they will find in the text. She further states activities that assist students in gaining or accessing background knowledge facilitate top-down processing. In addition, Uzunçakmak (2005: 2) supports

this idea and points out that top-down models view reading as a process in which the reader's background knowledge plays a critical role.

### **2.3.3 Schemata Theory**

Brown (2001) states that 'reader brings information, knowledge, emotion, experience, and culture- these are schemata' (cited in Kaya, 2007: 14). According to Silberstein (1994: 7) readers' expectations are based on their prior knowledge. She also states that background knowledge that aids in the text comprehension has recently been studied under the rubric of schema theory. So, schemata theory basically relies on the background knowledge of readers.

#### **2.3.3.1 Content Schemata**

Silberstein (1994: 8) remarks that content schemata involve knowledge of the world beyond text, and Kaya (2007: 15) states that content schemata include 'what we know about people, the world, culture, and the universe'.

#### **2.3.3.2 Formal Schemata**

Silberstein (1994: 8) notes that formal schemata involve knowledge of rhetorical structures and conventions, and according to Aebersold and Field (1997) "The knowledge that you bring to a text about structure, vocabulary, grammar, and level of formality (or register) constitutes your formal schema" (cited in Kaya, 2007: 16).

#### **2.3.3.3 Linguistic Schemata**

Aebersold and Field (1997) state linguistic schemata include the decoding features we need to recognize words and see how they fit together in a sentence (cited in Kaya, 2007: 16).

### **2.3.4 Intensive Reading**

Harmer (2007) states that intensive reading refers to the "detailed focus on the construction of reading texts which takes place usually (not always) in classroom" (cited in Koçak, 2010: 13). It is designed to enable students to develop specific

receptive skills such as reading for gist, reading for specific information, reading for detailed comprehension or reading for inference and attitude (Harmer, 2007: 283).

Intensive reading is explained by Kaya (2007: 17) as follows:

Intensive reading is the reading that can be done in the lesson with the aid of the teacher. The learners engaged with the text and they are busy with the words, what they mean, headline, and the comprehension questions in the course of time. They try to predict about what will happen in the text or at the end of the text. From the title they guess what the topic is about.

Patel (2008: 117) states that intensive reading is related to further progress in language learning under teacher's guidance. Intensive study of reading texts can be a means of increasing learner's knowledge of language features and their control of reading strategies (Nation, 2009: 25). The classic procedure for intensive reading is the grammar-translation approach where the teacher works with the learners, using the first language to explain the meaning of a text, sentence by sentence (Nation, 2009: 25)

Intensive reading is text reading or passage reading. In this reading the learner reads the text to get knowledge or analysis. The goal of this reading is to read shorter texts. This reading is done to get specific information (Patel, 2008: 118-119).

Patel (2008: 119) defines the characteristics of intensive reading as follows:

1. This reading helps learners to develop active vocabulary.
2. Teacher plays main role in this reading.
3. Linguistic items are developed.
4. This reading aims at active use of language.
5. Intensive reading is reading aloud
6. In intensive reading, speech habits are emphasized and accents, stress, intonation and rhythm can be corrected.

### 2.3.5 Extensive Reading

Koçak (2010: 13) states that extensive reading includes reading activities students do for pleasure outside the classroom such as reading newspaper, magazines, web pages or novels. She also emphasizes that if students are provided with opportunities to determine the reading materials, they will read and if the teacher encourages them to read, they develop their reading skills. Moreover, Nation (2009: 49) points out that during extensive reading learners should be interested in what they are reading and should be reading with their attention on the meaning of the text rather than on learning the language features of the text. Additionally, Harmer (2007: 283) points out that one of the fundamental conditions of a successful extensive reading program is that students should be reading material which they can understand, and he also mentioned that if they are struggling to understand every word, they can hardly be reading for pleasure - the main goal of this activity. According to Patel (2008: 119) the purpose of extensive reading will be to train the student to read directly and fluently in the target language for enjoyment, without the aid of the teacher. Moreover, Rivers (1981) points out that the purpose of the extensive reading program will be to train the student to read directly and fluently in the target language for enjoyment, without the aid of the teacher (cited in Kaya, 2007: 18). Extensive reading is the reading for pleasure. The reader wants to know about something. The reader does not care about specific or important information after reading (Patel, 2008: 120). Patel (2008: 119) further states that the attention of the reader is directed toward the extraction of information from the text, rather than toward the reading process itself.

Kaya (2007: 18) points out that this kind of reading refers to the outside reading in which there is no guidance of the teacher during reading. She also claims that in this kind of study, the teacher gives assignments and students read the materials such as newspapers, magazines, brochures, etc, and a teacher encourages students to choose for them what they read and to do so for pleasure and general language improvement (Harmer, 2007: 283). According to Kaya (2007: 18) since extensive reading is a solitary activity, the teacher should be more careful in giving assignments. The teacher should help the pupils learn how to read extensively in order to make it an enjoyable activity.

Nation (2009) states that one way an extensive reading program can contribute to proficiency development is through vocabulary growth. On the other hand, Kaya (2007: 18) argues that to encourage the students, the material assigned should not contain too much new vocabulary items and new structures, and the teacher should avoid asking details about what the students have read. She also states that it does not need a high degree of understanding because the aim of extensive reading is to read the greatest possible amount of texts in the shortest time.

Patel (2008: 120) lists the characteristics of extensive reading as follows:

1. It helps learner to develop active vocabulary.
2. Extensive reading is silent reading.
3. In extensive reading, the subject matter is emphasized.
4. In extensive reading, the learners play main role because they have to ask for measures.
5. In extensive reading the ideas can be developed.
6. The aim of extensive reading is to enrich learners' knowledge.
7. Through extensive reading the good reading habit can be developed.

## **2.4 sub-skills of reading**

### **2.4.1 Skimming**

Koçak (2010: 14) states that the term skimming refers to quickly identifying the main ideas of a text. She also emphasizes that students need to be able to skim a text to gain a general idea about its content.

Harmer (2003) defines skimming as follows (Cited in Kaya, 2007: 19):

It means running your eyes over a text to get a quick idea of the gist of a text. By encouraging students to have a quick look at the text before plunging into it for detail, we help them to get a general understanding of what it is all about. This will help them when and if they read for more specific information.

Kaya (2007: 19) states that like other strategies, techniques or methods; skimming is necessary to comprehend a reading text. She also points out that at least the learners know what the text is about and they get a general idea of the text and also learn how to investigate the text. Students need to be able to skim a text- as if they were casting their eyes over the surface – to get a general idea of what it is about (Harmer, 1998: 69).

### **2.4.2 Scanning**

Koçak (2010: 14) states that the term scanning refers to reading a text to get some specific detailed information (for example, searching quickly through a document to find a particular word or a name). In scanning, we look only for specific information. We simply look over the text until we find what we are looking for: maybe a certain name, date, or a certain thing (Kaya, 2007: 20). In accordance with this explanation Harmer (1998: 69) states that students need to be able to scan the text for particular bits of information they are searching for. He also points out that this skill means that they do not have to read every word and line; on the contrary, such an approach would stop them scanning successfully.

## **2.5 The Three Phases of Reading**

### **2.5.1 Pre-Reading**

The purpose of pre-reading phase is stated by Williams (1984) as follows (cited in Kaya, 2007: 22):

1. To introduce and arouse interest in topic.
2. To motivate learners by giving a reason for reading.
3. To provide some language preparation for the text.

Duffy (2009: 20) states that as soon as a reader sees the title of a selection or looks at a picture on a cover or reads a first line, prior knowledge is triggered and, on the basis of that prior knowledge, predictions are formed. Duffy (2009: 20) also remarks that predictions can be based on three kinds of prior knowledge: prior knowledge about the purpose of reading, about the topic and about the type of text. Therefore, before reading the text, the teacher should prepare his/her students to the lesson. Firstly s/he

should motivate the learners and also prepare some extra materials to attract the students' attention (Kaya, 2007: 22). Readers are more motivated, and comprehend more, When they are reading for a purpose that makes sense to them (Duffy, 2009: 20). He also states that by starting any reading experience with clear purpose for reading, we are more likely to develop students who do read.

### **2.5.2 While Reading**

The primary strategy used during reading is a combination of monitoring, questioning, and predicting (Duffy, 2009: 21).

Aebersold and Field (1997) listed some specific reading strategies (cited in Kaya, 2007: 25):

1. Note the key words in the first sentences of the paragraph or text
2. Decide which word announces the main topic of the paragraph or text
3. Decide which words announce the specific aspect of this topic of the paragraph
4. Note if there is a sentence that states a probable main idea
5. Note the most important words from each sentence as you read
6. Ask yourself how this information relates to the information that came before it
7. Look for examples that illustrate the ideas stated before
8. Look for details that provide more specific information on the topic
9. Look for sentence that concludes this particular aspect of this topic
10. Look for words that indicate a change in the kind of information
11. Look for a sentence that provides information about a new aspect of this topic

### **2.5.3 Post Reading**

In the post reading phase, the students can widen their ideas and get more information from the text after perceiving the text completely (Kaya, 2007: 25).

Duffy (2009: 23) describes the post reading strategies as follows:

1. Deciding on the text's important message or main idea

2. Determining the theme
3. Summarizing
4. Drawing conclusions
5. Evaluating
6. synthesizing

According to Aebersold and Field (1997) there are some post-reading activities (cited in Kaya, 2007: 25-26):

1. Identify the topic of the reading
2. Have a general idea of what the text says about its topic
3. Understand the main ideas put forth in the text
4. Discern the relationship among the main ideas
5. Understand the details given in the text support the main ideas
6. Recognize the information the text implies but does not state
7. Recognize the structure of the information in the text
8. Identify the language used to show the organization of the ideas
9. Assess the value of the information presented in the text
10. Recognize language use, such as irony or satire

## **2.6 Technology in Language Education**

American Academy of Paediatrics (2001) states that the average child watches four hours of television a day, while 26% of teenagers spend one to two hours a day on the Internet, and it also states that television and computers, along with cell phones, video games, and portable music devices, have produced a generation of students whose attention spans are best captured by technology (cited in Gilbert, 2008: 2). So, Facilitating teaching with technology has been a rising concern in most of the research fields for more than half a century (Küçük, 2009: 1). Peterson (1997: 30) states that advocates of the use of electronic communication claim that new technology provides the ideal conditions in which language learning may take place, and Bump (1990: 49) states that proponents of the use of computer networks in language teaching claim that

the unique nature of the on-line learning environment redefines conventional teaching and learning paradigms to the benefit of learners (cited in Peterson, 1997: 31).

Marzban (2011: 4) lists the advantages of Information and Communication Technologies as follows:

1. It provides opportunities to access information in different and helpful forms, for example through multimedia, key visuals, or models and simulations.
2. It creates opportunities for learners to refine, define, develop, and store their language output, for example using word processing programs to redraft or using web cams to record their oral presentations.
3. It creates a focus on English and how it is used, for example through text tools or writing frames.
4. It increases opportunities to use first language to support curriculum and English learning, for example through the Internet translation tools.
5. It provides opportunities for learners to become autonomous learners and to practice their skills in particular areas of English, for example through specific software.
6. It increases opportunities and motivation to communicate in English, for example through e-mail exchanges or video conferencing.
7. It stimulates working, thinking and talking collaboratively which supports EFL learners to process and embed language and curriculum learning.

## **2.7 Computer Assisted Language Learning**

Küçük (2009: 1) states that one of the means used with an increasing demand to facilitate teaching with technology is computer. she further states that Computer-assisted language learning, which is defined as “the search for and study of applications on the computer in language teaching and learning” (Levy, 1997, p. 1), has developed very rapidly recently and she also points out that foreign language learning pedagogy has now begun to adopt it in many institutions of various countries including Turkey.

Although the use of ICT by language teachers is still not widespread, the use of technology in the classroom is becoming increasingly important, and it will become a normal part of ELT practice in the coming years (Dudeney and Hockly, 2007: 7), and Dudeney and Hockly (2007: 7-8) list some reasons for this as follows:

1. The Internet access- either in private homes or at the Internet cafés- is becoming increasingly available to learners.
2. Younger learners are growing up with technology, and it is a natural and integrated part of their lives. For these learners the use of technology is a way to bring the outside world into the classroom, and some of these younger learners will in turn become teachers themselves.
3. English, as an international language, is being used in technologically mediated contexts.
4. Technology, especially the Internet, presents us with new opportunities for authentic tasks and materials, as well as access to a wealth of ready-made ELT materials.
5. The Internet offers excellent opportunities for collaboration and communication between learners who are geographically dispersed.
6. Technology is offered with published materials such as course books and resource books for teachers.
7. Learners increasingly expect language schools to integrate technology into teaching.
8. Technology offers new ways for practicing language and assessing performance.
9. Technology is becoming increasingly mobile. It can be used not only in the classroom, lecture hall, computer room or self-access center; it can also be used at home, on the way to school and in the Internet cafés.
10. Using a range of ICT tools can give learners exposure to and practice in all of the four main language skills - speaking, listening, writing and reading

Computer Assisted Language Learning is a new field in both computer and linguistic science, and it offers good promises to teachers, linguists and computer researchers (Marzban, 2011: 6). Moreover, Computer technology allows students to encounter information in more than one way at a time, which helps make what they learn more meaningful and easier to remember (Gilbert, 2008: 11). According to Küçük

(2009: 5), CALL is important in the sense that while it provokes students to be computer literate, it also gives students the chance to build on their own learning.

Mohammadi, Ghorbani and Hamidi use the term 'e-learning' and they (2010: 464) state that the main advantage of e-learning is that it increases the engagement; attendance and motivation of students which are the requisite for learning. Mohammadi, Ghorbani and Hamidi (2010: 465) further list the advantages of e-learning as follows:

1. It is learner centred teaching process and the role of the teacher is guide or facilitator of this process.
2. Convenient for students to access any time, any place.
3. It is a kind of cooperative learning.
4. E- Learning is fast and dynamic and reduces the amount of expenses (like: travel time and travel costs for students).
5. E-learning fosters interaction among students and instructors.
6. Comprehensive learning; i.e. it contains all instructional sources and tools such as virtual classes and simulations.
7. All activities such as: enrolment, supervision, tuition are done by the Internet.
8. Lessons are prepared by different professors from different places.
9. E-learning fosters self-paced learning.
10. Learners can learn more than one major or specialty.
11. E-learning increases motivation.
12. The most notable advantages of most types of e-learning are flexibility, convenience, and the ability to at learners pace.

On the other hand, Mohammadi, Ghorbani and Hamidi (2010: 465) list the disadvantages of e-learning as follows:

1. E-learning decreases social relations among learners.

2. Some learners have little knowledge about using the Internet and computer so they are unable to work with them suitably.
3. E-learning reduces the amount of face-to-face meetings and amount of teacher's supervision on learners.
4. Some teachers have less experience and acquaintance with this kind of teaching/learning process.
5. Lingual/cultural differences.
6. Extravagant expenses behalf virtual universities
7. Technical limitations
8. Lack of face-to-face interaction with a teacher.

Higgins and Johns (1984) state that computer can also be seen as an assistant for teachers (cited in Küçük, 2009: 11). Küçük (2009: 6) also points out that computers serve as a teaching tool for the teachers and with the help of computers; teachers can improve their teaching skills and teach in creative ways. Teacher is quite an important factor in CALL. Therefore, effective CALL requires an instructor to locate the optimal balance of approaches, resources and tools to meet the needs of particular learners in a particular learning context (Donaldson and Haggstrom, 2006: 1).

İnsel (2010: 1) states that Computer-Assisted Language Learning (CALL) is a technology driven, and predominantly language-centralized system. Moreover, she notes that especially since 1960s second language acquisition (SLA) and computer technologies have been inseparable, supporting and empowering each other for creating efficient, interactive software development for CALL. Marzban (2011: 5) states that CALL is a relatively new and rapidly evolving academic field that explores the role of information and communication technologies in language learning and teaching. He also notes that it includes a wide range of activities and initiatives in materials development, pedagogical practice, and research. Computer-assisted language learning (CALL) programs provide multimedia with sounds, videos, graphics and texts which allow learners to be exposed to target language and culture (Mohammadi, Ghorbani and

Hamidi, 2010: 466). Additionally, Küçük (2009: 13) states that computer is a stimulus for providing learners with subjects to talk about in discussion, simulation or role-play.

### 2.7.1 A Brief History of CALL

The idea of using computers for language educations was one of the driving forces behind the enormous amount of effort and investment for distance education in 1950s (İnsel, 2010: 7). Dudeney and Hockly (2007: 8) state that Computer Assisted Language Learning (CALL) appeared in the early 1980's. In the first form of CALL programs, learners responded to stimuli on the computer screen and carried out tasks such as doing multiple-choice activities, matching sentences and filling the gaps in texts.

According to Marzban (2011: 6) we can divide the development of CALL into three different phases

1. **Behaviorist CALL:** In the 1960's and 1970's, the first form of computer-assisted Language Learning featured the repetitive language drills, the so-called drill-and-practice method. It was based on the behaviorist learning model and as such computer was viewed as little more than a mechanical tutor that never grew tired. Behaviorist CALL was first designed and implemented in the era of the mainframe and the best-known tutorial system, PLATO, ran on its own special hardware. It was mainly used for extensive drills, explicit grammar instruction, and translation tests.
2. **Communicative CALL:** Communicative CALL emerged in the 1970's and 1980's as a reaction to the behaviorist approach to language learning. Proponents of communicative CALL rejected behaviorist approaches at both the theoretical and pedagogical level. They stressed that CALL should focus more on using forms rather than on the forms themselves. Grammar should be taught implicitly and students should be encouraged to generate original utterances instead of manipulating prefabricated forms. This form of computer-based instruction corresponded to cognitive theories which recognized that learning was a creative process of discovery, expression, and development. The mainframe was replaced by personal computers that allowed greater possibilities for individual work. The communicative CALL programs provide skill practice in a non-drill format through language games,

simulation, reading and text reconstruction, word processors, desk-top publishing, spelling and grammar check programs, as used for instance in process writing.

3. **Integrative CALL:** Communicative CALL was criticized for using the computer in an ad hoc and disconnected fashion and critics charged that this use of the computer made “a greater contribution to marginal rather than central elements” of language learning. Teachers have moved away from a cognitive view of communicative language teaching to a socio-cognitive view that emphasizes real language use in a meaningful, authentic context. Integrative CALL seeks both to integrate the various skills of language learning (listening, speaking, writing, and reading) and to integrate technology more fully into language teaching. To this end the multimedia-networked computer provides a range of informational, communicative, and publishing tools that are potentially available to every student. The current approach is integrative CALL, which is based on multimedia computers and the Internet. These technological developments have brought text, graphics, sound, animation and video to be accessed on a single inexpensive computer. These resources are all linked and called ‘hypermedia’, enabling learners to navigate through CD-ROMS and the Internet at their own pace and path, using a variety of media.

### 2.7.2 Approaches to CALL

İnsel (2010: 48) separates the approaches to CALL into three categories as follows:

1. **Behaviorist approach:** Behaviorism in learning sustains observable behavior, external effects in the environment and defies memory, human mind, beliefs, personality traits, self-actualization, consciousness, societal dynamics and other processes of the human mind that influence the individual to a great extent according to the psycho-social theories and practices that are used in learning and CALL today (İnsel, 2010: 49).
2. **Cognitive approach:** Cognition is a study of brain and cognitive psychology and cognitive learning are concerned with the functions of the brain that makes possible, not the brain itself in the medical sense (İnsel, 2010: 52).

- 3. Integrative approaches:** the term interactive approaches refer to the interaction of many cognitive skills operating simultaneously (Mendi, 2009: 13).

## **2.8 The Internet in Language Teaching**

As access to Information and Communications Technology (ICT) has become more widespread, so CALL has moved beyond the use of computer programs to embrace the use of the Internet and web-based tools (Dudeney and Hockly, 2007: 7). Crystal (2004: 2) states that the Internet is an association of computer networks with common standards which enable messages to be sent from any central computer on one network to any host on another. Crystal (2004: 3) also notes that it developed in the 1960s in the USA as an experimental network which quickly grew to include military, federal, regional, university, business, and personal users. Crystal (2004: 3) further emphasises that it is now the world's largest computer network, with over 100 million hosts connected by the year 2000, providing an increasing range of services and enabling unprecedented numbers of people to be in touch with each other. The notion that the learning environment plays a crucial role in the acquisition process has led to a new perspective regarding the value of the use of networks in language learning (Peterson, 1997: 36). Peterson also claims that growing numbers of language educators are becoming aware of the possibilities offered by network technology. Tanyeli (2009: 564) states that the Internet is a necessity today in the field of education to be used as an important tool both for students and teachers as a guide for learning and teaching. Ever increasing numbers of language learners and educators are utilizing the Internet as a medium for communication and as an educational source (Peterson, 1997: 29). The Internet technology has a global reach and provides extensive international resources (Yang and Chen, 2006: 861). The web includes a large collection of sources ranging from authentic to "ELT-specific (made by, and for teachers)" sites (Dudeney & Hockly, 2007: 27).

Koçak (2010: 11) states that with the arrival of recent technological developments, notably the Internet, there have been changes in education and in English Language Teaching (ELT) instruction. The utilization of the Internet by language learners and educators has become increasingly widespread in recent years (Peterson,

1997: 29). Tanyeli (2009: 564) supports the same point by stating that today, web-assisted teaching and learning is replacing traditional teaching and learning methods. She also notes that web is a new technology which is used as a communication facilitator and an instructional delivery medium. For teachers, one of the easiest and least stressful ways of integrating technology into classroom is using web sites (Koçak, 2010: 18). Anderson (2003: 4) argues that teachers in many parts of the world want to be able to expose learners to authentic language on the topics they are learning about in the language classroom. Therefore, the Internet has become a very useful tool for accomplishing that purpose. Koçak (2010: 11) further points out that teachers have started to use web-based and technology-based materials. In addition, both students and learners have started to use the Internet sources to practice English and improve their language skills. The central contention of those who advocate the use of computer networks in language education is that networks are means of empowering learners (Peterson, 1997: 33). In accordance with this idea, Simsek (2008: 201) states that the Internet is a valuable teaching and learning tool that provides students with new learning experiences and broadens their horizon.

In the field of education, particularly language learning and teaching can easily be assisted by the Internet since there are many highly developed web sites which offer speaking, reading, listening, and writing activities (Tanyeli, 2009: 565). There are many web sites that students can use for learning English. For instance, language practice activities on web sites offer students opportunities to study on their own and to practice what they have learnt (Koçak, 2007: 18).

According to Dudeney and Hockly (2007: 34) the criteria for evaluating the web sites can be determined as follows:

1. Accuracy (Who wrote the page? Is the page content reliable and factually correct?)
2. Currency (Is the content up to date? When was the page last updated?)
3. Content (Is the site interesting and simulating? Is it attractive and easy to navigate?)
4. Functionality (Does the site work well? Are there any broken links?)

Mohammadi, Ghorbani and Hamidi (2010: 466) list some factors that help learners become autonomous by using the Internet:

1. By using the Internet, learners are able to choose their own methods, learning materials and depth of study.
2. Self-monitoring.
3. Cooperation.
4. Websites which provide abundant listening, speaking, reading and writing texts.
5. Online English learning magazines.
6. Chat rooms.

## **2.9 Use of CALL in Reading**

Educators need to find better methods for teaching reading in order to help their students succeed (Gilbert, 2008: 3). On the basis of this notion, the use of the Internet-based reading materials has gained importance for the educators with the effect of recent developments in educational technology (Koçak, 2010: 4). More recently, since the advent of computers, increasing interest has been paid in the use of the computers for developing reading comprehension skills (Myonghee, 2002: 2). Using computers for reading instruction dates back to the mid-1960s when broad scaled projects such as Stanford Project, which were often supported by U.S. federal grants, were carried out to develop a comprehensive computer-based reading curriculum (Myonghee, 2002: 5).

Clyde (1998) explains that the resources available on the Internet to develop reading skills include the following (cited in Koçak, 2010: 29-30):

1. World Wide Web pages for teachers including information for reading promotion and lesson plans/ activities,
2. Newsgroups for teachers where various topics are discussed,
3. World Wide Web pages/sites for children and young people to promote reading, often through games, discussions, activities, listening to stories (through Real Audio) and "reading along" with the pages on the screen,
4. International projects requiring co-operative work via the Internet for students and teachers to develop reading skills,
5. Web sites and other Internet resources that broadcast students' work such as

online magazines created by young people.

On the other hand, Brandl (2002) describes three approaches to integrating the Internet-based reading materials into a foreign language curriculum to provide guidance to teachers and curriculum developers: teacher-determined, teacher-facilitated and student-determined approaches (cited in Koçak, 2010: 34-36):

1. **Teacher-determined approach:** Brandl (2002) states that this approach requires teachers to choose reading materials or cultural readings from the Internet or other sources prepare comprehension activities and place them in their own web sites.
2. **The teacher facilitated approach:** Brandl (2002) states that teacher guides the students to search through various resources and facilitates their reading process by designing a teacher-facilitated task.
3. **Learner-determined approach:** Brandl (2002) states that learner-determined lessons require learners to choose the topics, reading materials and the way through which they explore the readings. In addition, this approach enables learners to be autonomous since they decide on everything concerning lessons: the goals, the process and product, and the Internet sources used.

There are generally several advantages of incorporating computers in reading instruction (Lynch, Fawcet, & Nicolson, 2000; Mathes, Torgesen, & Allor, 2001 cited in Sung, Chang, & Huang, 2007: 1552):

1. Computers can provide immediate individual feedback based on student's learning condition.
2. Learning with computers allows students to control the pace of learning by themselves.
3. Properly arranged courses may be operated independently with computers, thus relieving teachers from some of the burden and giving the students more opportunities to learn independently.
4. Through presentations using different media, students' motivation to read may be strengthened.

## 2.10 Related Studies

Aykaç (2005) conducted a study to explore teacher and students attitudes towards use of computer mediated communication (CMC) in support of teaching speaking skills. Data were collected through questionnaires from 20 students and 60 English instructors at Muğla University, and the findings revealed that both the teacher and the students had positive attitudes towards using that kind of a process to help them improve their speaking skills.

Ateş (2005) carried out a study examining the effectiveness of computer assisted English teaching on the English language preparatory students' attitudes towards computer. The researcher's sample group consisted of 30 students and a scale for attitudes towards English and a scale for attitudes towards computer were given to the students at intervals of two weeks. Moreover, the participants were interviewed to obtain further information. the study lasted for 14 weeks and the results indicated that students agreed that computers help them learn English faster and better than traditional methods do. Furthermore, the computerized English lessons were found attractive and motivating by the participants.

Küçük (2009) aimed at investigating students and teachers' perception of computer-assisted language learning environment. The sample of the study was composed of 308 students and 50 teachers from Zonguldak Karaelmas University Preparatory School. The data were gathered through a questionnaire. ANOVA and paired-samples t-test were employed to define the outcome of the questionnaire. The study indicated that according to students, lab activities were most useful when accompanied by teachers' guidance.

Namlıca (2010) conducted a study aiming at examining the English teachers' perception of Computer Assisted Language Learning in Turkish state schools in Çanakkale. The sample of the study consisted of 65 English language teachers from different types of state schools. To gather information both quantitative and qualitative methods were used. The results displayed that the teachers thought that CALL facilitates learning in the presence of teachers.

Şimşek (2008) investigated students' attitudes towards the use of information technology and communication technologies (ICT) in reading skills course offered at Middle East Technical University, Ankara, Turkey. 30 first year students of the foreign language education (FLE) department were involved in the study. The study was carried out in ICTs integrated environment and it lasted for four weeks. In order to gather data an attitude questionnaire was administered and interviews were conducted. The findings indicate that the students were satisfied with the application of ICT in their reading course and they have developed positive attitude towards it. This finding was similar to Katushemerewe and Nerbonne's (2013: 16) conclusion which suggests that majority of learners reported that they would like to use the software.

Rahimi and Hosseini (2011) made a study on Iranian high school students in order to assess the attitudes of students towards learning English in CALL environment before and after experiencing some computer-based activities. Forty-two Iranian high-school students partake in the study. Prior to the experiment they were administered an attitudes questionnaire. After the questionnaire they attended a lesson in which some sort of computer-based activities were integrated. After the experiment, their attitudes were reassessed. The outcome revealed a significant difference between students' attitudes before and after the study and most of the students had developed a positive attitude towards CALL.

Balkul (2010) carried out a study on the attitudes of the students who were enrolled in an Intensive English Program practicing CALL at Sakarya University. There were 134 participants and the program lasted for five months. Before and after the study they were administered questionnaires aimed at getting an insight into the attitudes of students towards Computer Assisted Language Learning. The results of the study revealed that positive changes had occurred in students' attitudes after a five-month exposure to that sort of an education.

Koçak (2010) examined students' and the teachers' attitudes towards the benefits and challenges of using the Internet resources to develop students' English reading skills. The data were collected through questionnaires and interviews conducted in the Preparatory School at Cumhuriyet University. After the study including the usage of

computers in learning environment was carried out, the findings were analysed qualitatively and quantitatively. The results indicated that both the students and the teachers had developed positive attitude towards using the Internet sources to improve reading skills.

It is obvious that various studies have been conducted so far to assess the attitudes of students towards CALL on improving language skills and most of them revealed that the teacher and students developed positive attitudes after having an experience with Computer Assisted Language Learning.

## **CHAPTER III: METHODOLOGY**

### **3.1 Presentation**

This study investigates the attitudes of adult English learners towards an Internet-based computer program aiming at enhancing the reading comprehension of students, and the study has been employed in a preparation course held in the School of Foreign Languages at Dicle University towards Foreign Language Examination (in Turkey known as YDS).

The objective of this study is to explore the following research questions:

1. What are the attitudes of students towards employing an Internet-based computer program to enhance their proficiency in reading before the study and how do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?
2. What are the attitudes of students towards employing an Internet-based computer program to enhance their proficiency in reading after the study and how do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?
3. Is there a significant difference between the attitudes of students towards employing an Internet-based computer program to enhance their proficiency in reading before and after the study?

This chapter aims to give information about the setting where the study was carried out and participants attending it. Then the procedures for data collection and the instruments employed to collect data are presented. Finally, data analysis procedures are discussed.

### 3.2 Setting

The study was conducted in a preparatory class for Foreign Language Examination (YDS) in the School of Foreign Languages at Dicle University in Diyarbakır, Turkey. The preparatory class for YDS aimed to prepare the students for an examination held twice a year in Turkey to measure the proficiency levels of the participants. YDS consists of 80 multiple-choice questions, particularly measuring the reading proficiency level of participants via different types of multiple-choice question items: “Cloze tests, Finding the irrelevant sentence, paragraph completion, Turkish-English/English-Turkish translation and etc.” The examination scores are evaluated according to the number of the correct answers of participants, and are classified as (90-100) A, (80-89) B, (70-79) C, (60-69) D, (50-59) E, (0-49) not graded. The YDS is an examination deciphered to measure the proficiency levels of participants in a foreign language, and if the participants are able to get sufficient grades, they are entitled to get some opportunities like a promotion or getting a pay-rise. Desiring to get the required scores, people from diverse fields, professions, ages etc. attend the courses organized by the School of Foreign Languages of Dicle University. For the YDS held in April 2013, 60 students, mostly state employees and university students, participated in these courses instructed by the teacher/researcher.

The course lasted nearly for four months and the time allocated for instruction consisted of 100 hours. It started at the beginning of December, 2012 and continued till the examination which was to be held at the beginning of April, 2013. The students had six hours of instruction per week. The students were provided with a grammar test book, including questions on grammar subjects and another test book, including 5 previously administered tests. Both of the sources provided involve multiple –choice questions. During the course, the students had grammar classes and they answered questions, following the introduction of each grammar topic, with the assistance of their teacher. The

course also provided classes on reading comprehension and vocabulary studies, administered and controlled by the teacher.

### **3.3 Participants**

The participants in this study consisted of 60 students in the School of Foreign Languages at Dicle University. Students were composed mostly of state employees, and few of them were students at Dicle University. All of the students in this study were adults who enrolled in the course to obtain a sufficient grade in YDS. The participant were selected by cluster sampling.

These students were chosen as participants of this study since they all had some sorts of motives that rendered them quite enthusiastic about learning that language to get a remarkable result and finally attain their goals. Therefore, their motivation levels were at the highest point. That made them fairly resolved and eager to learn. Another reason for choosing them was that they had not used any kind of the Internet-based computer program as a part of their preparations for such an examination till the study. That is, they would use such a program for the first time.

There were three groups of students and each group was composed according to their proficiency levels in English based on their previous exam scores. The students not having taken the exam as yet formed the low-level preparation group. The students having attained a score between 40 and 60 in the preceding YDS examinations formed the mid-level preparation group, and students who had a score over 60 formed the high-level preparation group. In each group there were 30 students. For this study, 20 students from each group were selected and a study group including 60 students was formed. The students were asked for their consent for the study.

#### **3.3.1 Profiles of the Participants**

The first part of the questionnaire was prepared in order to elicit necessary data from the students on their profiles. These data can be examined in five categories: (I) demographic data including gender, age and employment, (II) educational data comprising information about educational background, (III) data on the participants' foreign language learning and CALL experience, (IV) data on the participants'

proficiency in English, and (V) data on their proficiency in computer. The data on these points were gathered through multiple-choice questions and partly through YES/NO questions.

### 3.3.1.1 Demographic Data

The demographic data elicited from the items in the questionnaire revealed some information about the gender, age and employment status of the participants. In total, there were 60 students attending this study. 38 (63.3 %) of these students were male and 22 (36.7) were female. That is, the male participants had an outstanding preponderance over the female ones.

**Table 1.** Demographic data on participants

| Variable          | Category    | f  | %    |
|-------------------|-------------|----|------|
| Gender            | male        | 38 | 63,3 |
|                   | female      | 22 | 36,7 |
| Age               | 20-30       | 39 | 65,0 |
|                   | 31-40       | 15 | 25,0 |
|                   | 41 and over | 6  | 10,0 |
| Employment status | Unemployed  | 16 | 26,7 |
|                   | Employed    | 44 | 73,3 |

As for the age of the students, there were 39 (65%) participants ranging from 20 to 40 years of age, 15 (25%) participants ranging from 31 to 40 and 6 (10%) participants at the age of 41 and over. As a result, the young participants formed the majority in this study. When the participants were rated in terms of their employment status, the employed participants (73,3%) turned out to be overwhelmingly predominant over the unemployed ones (26,7%).

### 3.3.1.2 Educational data

**Table 2.** Educational data of the students

| Variable          | Category        | f  | %    |
|-------------------|-----------------|----|------|
| Educational level | Bachelor degree | 38 | 63,3 |
|                   | Master degree   | 14 | 23,3 |
|                   | PhD             | 8  | 13,3 |

The aim of this part was to get a better insight into the educational background of participants. The results elicited from the questionnaire revealed that the majority of students (63,3%) partaking in this study had bachelor degrees. Students with master degree (23,3%) and the ones with PhD successively followed them. That is, the participants with bachelor degree had an evident preponderance over the other two categories.

### 3.3.1.3 Data on students' foreign language learning and CALL experience

The participants that took part in this study consist of a group of 60 people. As for their experience in foreign language learning, it is quite noticeable that the students with 1 to 5 years of English learning experience ranked much higher (78,3%) compared with the other two categories, so it could be stated the majority of students had not spared much time for foreign language learning till that time.

**Table 3.** Students' foreign language learning and CALL experience

| Variable                     | Category          | f  | %    |
|------------------------------|-------------------|----|------|
| Duration of English learning | 1 to 5 years      | 47 | 78,3 |
|                              | 6 to 10 years     | 6  | 10   |
|                              | 11 years and over | 7  | 11,7 |
| Engaged in CALL before?      | Yes               | 10 | 16,7 |
|                              | No                | 50 | 83,3 |

The students were asked whether they had ever been engaged in CALL before, and the responses elicited from them showed that most of them (83,3%) had never had

such an experience. Therefore, it could be stated that the majority of students involved in the study did not have much experience regarding CALL. As they did not have much experience, the changes in their attitudes after the study could be clearly monitored.

#### 3.3.1.4 Data on students' proficiency in English

**Table 4.** Students' proficiency in English

| Variable        | Category    | f  | %    |
|-----------------|-------------|----|------|
| Last exam score | 0-44        | 39 | 65   |
|                 | 45-54       | 10 | 16,7 |
|                 | 55-64       | 8  | 13,3 |
|                 | 65 and over | 3  | 5    |

In order to determine the proficiency levels of students, the students' final scores in the examination which is held in Turkey to rate the foreign language proficiencies of participants were enquired about and the results indicated that the majority of students (65%) had a score between 0 and 44. That meant most of the students in this study had low proficiency level in English. The students who got a score between 45 and 54 ranked second (16,7%) in the table, and the students with a score between 55 and 64 ranked third (13,3%). As can be seen in the table above, there were only three students (5%) with a score over 65. So it could be stated only a very small proportion of the students could be regarded as proficient in English.

#### 3.3.1.5 Data on students' computer experience

**Table 5.** Students' experience with computers

| Variable                      | Category  | f  | %    |
|-------------------------------|-----------|----|------|
| Proficiency in computer usage | low       | 2  | 3,3  |
|                               | mid       | 34 | 56,7 |
|                               | high      | 24 | 40   |
| Frequency of computer usage   | rarely    | 0  | 0    |
|                               | sometimes | 19 | 31,7 |
|                               | often     | 41 | 68,3 |

The students were asked to make self-assessment in terms of their proficiency in computer usage and the results indicated that a great majority of the students rated their proficiency mid (56,7%) or high level (40,0%). Therefore, it can be stated that most of the students were considered proficient enough to use a computer. That meant although most of the students did not have any experience in CALL, they were quite familiar with the computer.

As for the frequency of students' computer usage, it is obvious that a large number of the students (68,3%) frequently used the computer and the rest of the students (31,7%) sometimes spent time with it. When these rates are taken into account, it can be stated that students are generally familiar with the computer.

### **3.4 Instruments**

In this study an Internet-based computer program designed to improve students' proficiency in reading was employed to get a better understanding of the attitudes of students towards such programs. In addition, the data for this study were collected through a questionnaire consisting of three parts and interviews with students.

#### **3.4.1 Questionnaire**

A questionnaire was developed by the researcher in order to determine the attitudes of students towards both Computer-Assisted Language Learning and the computer program employed during the study. The questionnaire consisted of three parts. (See Appendix 1 for the English version and Appendix 2 for the Turkish version). The first part aimed to gather data about the participants' backgrounds. The second part was prepared to determine the participants' attitudes towards using CALL to develop proficiency in reading, and the participants were expected to answer 18 items. The third part consisted of 13 items which aimed to determine the participants' attitudes towards the Internet-based computer program used to improve their reading skills. In total, the questionnaire included 31 items which were presented on a five-point Likert scale ranging from "Strongly Agree" (1) to "Strongly Disagree" (5). The midpoint was "Neutral" (3).

In the process of developing the questionnaire, the literature on CALL was reviewed to select appropriate items (Küçük, 2009; Koçak, 2010; Namlıca, 2010; Buran, 2008; Simsek, 2008; Dudeney & Hockly, 2007; Chapelle, 2003). The items were adopted, and afterwards the questionnaire were given to three academicians in the School of Foreign Languages at Dicle university in order to determine whether the statements were clear and sufficient enough to identify the attitudes of students towards CALL and the computer program employed. With the help of the academicians' views, the items were reviewed and determined. Finally, all the items were determined. Then, the questionnaire was translated into Turkish as the students were not proficient enough in English to understand the items. Then, the Turkish version of the questionnaire was translated back into English by some non-native English instructors, quite proficient in their fields. Each of them translated a few items. Later the original version and the translated version of the questionnaire were compared by the English instructors to make sure that there were no discrepancies in terms of meaning between the two versions. In the light of that evaluation the necessary changes were made to the Turkish version of the questionnaire.

Later, this questionnaire was piloted on 48 students attending a similar course in order to ensure reliability. The students were asked to fill out the questionnaire and make comments about the items in terms of clarity. After piloting, the questionnaire was evaluated in terms of its reliability by using SPSS program. The reliability coefficient (Cronbach alpha) of the questionnaire was calculated as 0,875. The result was higher than 0,700, which is the lowest limit for reliability in social sciences (Hair, Anderson, Tatham & Black, 1998 cited in Küçük, 2009).

### **3.4.2 Interviews**

Interviews were used in the study for the purpose of supporting the quantitative data obtained from the questionnaire. The interviews sought to get more insight into the thoughts of students as for using the Internet-based program to develop proficiency in reading. The interviews were conducted after the study because that was their first experience with such an Internet-based computer program. Only after the study, the students had enough experience to express their opinions. During the interview, the students were asked some questions that were aimed to elicit further information on the

ideas presented in the questionnaire. The interviews were conducted in Turkish as the students were thought that they could express themselves better in their native language.

### **3.4.3 The Internet-based computer program**

The Internet based computer program used in this study was called as “Passage work”, and has been prepared by consulting the Department of English Teaching at Middle East Technical University. Moreover, it had been approved by the Scientific and Technological Research Council of Turkey (TUBİTAK). The program aimed to help the students who had difficulties in reading comprehension. It was a system which included more than 500 passages that had been employed in the examinations having been held before. The system provided the students with a wide range of alternatives: they could study each paragraph in detail. While studying a passage, the students could translate it or the system could provide the translated version of every sentence. Moreover students could find the answers of each question, following the paragraph with detailed explanations. If students had any problem with the vocabulary or grammar points, they could just click on it, and they could have an easy access to extensive information on them. After studying the passage, the students could practice the newly learnt information by using the exercises prepared for each paragraph. These included different kinds of vocabulary exercises. Furthermore, students could listen to the audios of these passages. The system also provided the students and their teachers with statistical data on their studies and their improvement rates (as shown at appendix 14). To sum up, this computer program had been designed to help the students to improve their reading comprehension mainly by means of vocabulary, translation and grammar studies without attending a traditional classroom environment.

In order to use this program, the user should subscribe the web site. After subscribing, the user can have access to the program via his/her respective computer with his/her password. To run the program the user has to sign in the program through web site. That means, the user is supposed to have an Internet connection to be able to use the program.

### **3.5 Data collection procedures**

On January 25, 2013, permission was received from Dicle University, School of foreign Languages to conduct this study. Before the inception of the study, consent forms were presented to all the participants, and they signed them.

Before the study, the first and second parts of the questionnaire that had been prepared by the researcher to determine the students' attitudes towards improving reading skills via CALL were administered to the students. By applying this questionnaire, the researcher aimed at gaining an insight into the attitudes of students before they used the program; since most of them had never experienced a program like that before.

After the questionnaire was applied, the results were gathered and analysed by the researcher via SPSS program and the evaluation was conducted and transcribed according to some variables. Following the application of the questionnaire, the students were introduced to the program and they were instructed about how to use it. Later all the students were given their password and the study commenced. After the students used the program for fifteen days, the third part of the questionnaire aimed at obtaining information on the Internet-based computer program was administered and later analysed.

The study lasted for four months and during this period the students were entitled to use all the facilities the program could offer. While they were studying on this program, the statistics were recorded by the researcher. Therefore, it was possible to check how much time they spent on studying English by using the program. After the study finished, the students were applied the same questionnaire in order to obtain information on what their attitudes were towards enhancing reading through an Internet based computer program after getting engaged in that sort of a program. Later, the data obtained were analysed via SPSS and evaluated according to some variables. Moreover, to support the data obtained from the questionnaire, interviews aiming at eliciting some supporting information on the ideas included in the questionnaire were conducted by the researcher. Afterwards, all their responses to the questions were finely recorded and transcribed.

Lastly, a subsequent comparison of the results of pre and the post questionnaires was made by employing SPSS in order to see whether there were any discrepancies between the attitudes of students before and after the study. Afterwards, all the results were minutely transcribed.

### **3.6 Data analysis**

The data for this study consisted of quantitative and qualitative data. In the quantitative sense, following the administration of pre-questionnaire and post-questionnaire, the results of both were analysed by using SPSS 17.0. The frequencies, percentages, standard deviations and mean scores of two questionnaires were calculated. In order to investigate the discrepancies between the attitudes of students before and after the study, *t*-test was employed. Moreover, independent-samples *t*-test and one-way ANOVA were utilized while analysing results in terms of variables.

The qualitative data were handled by content analysis. After each interview, the recorded data were painstakingly transcribed. Later, all the recorded data were initially translated into English by the researcher and subsequently by some colleagues proficient in English. In order to analyse the data, the responses elicited from the interviewees were gathered into groups depending on their similarities, and these groups were categorized and the items included in each group were listed, so all the data obtained through interviews from various respondents were presented in an ordered and practical way.

This chapter provides general information about the setting, participants, instruments, data collection procedures, and data analysis. In the following chapter, the data analysis will be discussed in detail.

## **CHAPTER IV**

### **FINDINGS**

#### **4.1 Presentation**

This study aimed to get an insight into the attitudes of the students in the school of foreign languages at Dicle University towards enhancing their proficiency in reading via Internet based computer program. The study was conducted on the basis of following research questions:

1. What are the attitudes of students towards employing an Internet-based computer program to enhance their proficiency in reading before the study and how do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?
2. What are the attitudes of students towards employing an Internet-based computer program to enhance their proficiency in reading after the study and how do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?
3. Is there a significant difference between the attitudes of students towards employing an Internet-based computer program to enhance their proficiency in reading before and after the study?

## 4.2 Quantitative data analysis

### 4.2.1 Quantitative data analysis before the study

In this chapter all the data obtained from the questionnaires and interviews are presented in details.

#### 4.2.1.1 Students' attitudes towards CALL before the study

**Table 6.** Students' attitudes towards CALL.

| Items        | Strongly disagree |     | Disagree |      | Neutral |      | Agree |      | Strongly agree |      | M           | SD           |
|--------------|-------------------|-----|----------|------|---------|------|-------|------|----------------|------|-------------|--------------|
|              | f                 | %   | F        | %    | f       | %    | f     | %    | f              | %    |             |              |
| Item 1       | 1                 | 1,7 | 5        | 8,3  | 27      | 45   | 19    | 31,7 | 8              | 13,3 | 3,46        | 0,891        |
| Item 2       | 1                 | 1,7 | 9        | 15   | 22      | 36,7 | 23    | 38,3 | 5              | 8,3  | 3,36        | 0,901        |
| Item 3       | 1                 | 1,7 | 13       | 21,7 | 12      | 20   | 24    | 40   | 10             | 16,7 | 3,48        | 1,065        |
| Item 4       | 3                 | 5   | 13       | 21,7 | 19      | 31,7 | 15    | 25   | 10             | 16,7 | 3,26        | 1,132        |
| Item 5       | 1                 | 1,7 | 8        | 13,3 | 18      | 30   | 22    | 36,7 | 11             | 18,3 | 3,56        | 0,997        |
| Item 6       | 1                 | 1,7 | 6        | 10   | 11      | 18,3 | 28    | 46,7 | 14             | 23,3 | 3,80        | 0,970        |
| Item 7       | 3                 | 5   | 3        | 5    | 15      | 25   | 27    | 45   | 12             | 20   | 3,70        | 1,013        |
| Item 8       | 2                 | 3,3 | 10       | 16,7 | 17      | 28,3 | 23    | 38,3 | 8              | 13,3 | 3,41        | 1,029        |
| Item 9       | 1                 | 1,7 | 5        | 8,3  | 25      | 41,7 | 21    | 35   | 8              | 13,3 | 3,50        | 0,892        |
| Item10       | 2                 | 3,3 | 12       | 20   | 19      | 31,7 | 24    | 40   | 3              | 5    | 3,23        | 0,945        |
| Item11       | 2                 | 3,3 | 10       | 16,7 | 25      | 41,7 | 16    | 26,7 | 7              | 11,7 | 3,26        | 0,989        |
| Item12       | 4                 | 6,7 | 18       | 30   | 30      | 50   | 4     | 6,7  | 4              | 6,7  | 2,76        | 0,927        |
| Item13       | 3                 | 5   | 21       | 35   | 24      | 40   | 9     | 15   | 2              | 5    | 2,80        | 0,935        |
| Item14       | 2                 | 3,3 | 23       | 38,3 | 24      | 40   | 7     | 11,7 | 4              | 6,7  | 2,80        | 0,935        |
| Item15       | 2                 | 3,3 | 27       | 45   | 23      | 38,3 | 5     | 8,3  | 3              | 5    | 2,66        | 0,876        |
| Item16       | 2                 | 3,3 | 19       | 31,7 | 24      | 40   | 11    | 18,3 | 4              | 6,7  | 2,93        | 0,954        |
| Item17       | 6                 | 10  | 21       | 35   | 22      | 36,7 | 9     | 15   | 2              | 3,3  | 2,66        | 0,968        |
| Item18       | 3                 | 5   | 26       | 43,3 | 20      | 33,3 | 5     | 8,3  | 6              | 10   | 2,75        | 1,035        |
| <b>Total</b> |                   |     |          |      |         |      |       |      |                |      | <b>3,19</b> | <b>0,550</b> |

Note: f: Frequency M: Mean %: percentage  
1 (Strongly disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly agree)

Item 1- I feel more comfortable and relaxed while learning a foreign language with computer.

Item 2- The time passes quickly while learning a foreign language with computer.

Item 3- It is hard to learn a foreign language with computer.

Item 4- My confidence increases while learning a foreign language with computer.

Item 5- It is quite enjoyable to learn a foreign language with computers.

Item 6- Computers give me the opportunity to learn a foreign language at my own pace.

Item 7- Computers provide me with the flexibility in terms of time to study a foreign language.

Item 8- I can study a foreign language in a planned way with computer.

Item 9- Computers facilitate my foreign language learning.

- Item 10- I concentrate better while learning a foreign language with computers
- Item 11- I have positive attitude towards using computers to learn a foreign language.
- Item 12- Computer-based foreign language learning is more motivating than traditional classroom education.
- Item 13- Computer based foreign language learning is more enjoyable than traditional classroom education.
- Item 14- I learn a foreign language better with computer-based education than I do with traditional classroom education.
- Item 15- Computer-based foreign language learning is more efficient than traditional classroom education.
- Item 16- After some time, learning a foreign language with computers may turn out to be boring.
- Item 17- Studying a foreign language with computers leads to an unsocial setting of learning.
- Item 18- Computer-based language learning is not as satisfying as conventional classroom education.

In order to find out what the participants thought about CALL, a questionnaire was prepared. The responses to the questionnaire were elicited according to 5-point Likert scales ranging from “Strongly disagree: 1” to “Strongly agree: 5”, and it is also necessary to point out that 3<sup>rd</sup>, 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> items were evaluated after they had been recoded because unlike other items, they bore negative statements on computer-based language learning.

The results revealed that item 6 (M: 3,80), stating that computers gave the learner the opportunity to learn on his/her own pace, had the highest mean. That meant 70% of the students (46,7% agreed, 23,3% strongly agreed) stated that computers had the ability to adapt to each individual's respective pace of learning a foreign language. Item 7 (M: 3,70) pointing out that computers are flexible in terms of times to study a foreign language had the second highest score. As a result, it could be told that the majority of students were of the opinion that computers could give a foreign language learner a great chance to get involved in the process of language learning by allowing him/her to study whenever he/she wanted. Moreover, item 5 (M: 3,56) emphasizing that it is enjoyable to learn a foreign language through computer had the third highest mean. So it could be stated that a great number of students agreed that they enjoyed studying a foreign language via computers (agree=36,7%, strongly agree=18,3%).

When we consider item 15 (M: 2,66), it can be seen that 48,3% of students disagreed with the idea that computer based foreign language was more efficient than traditional classroom education (disagree=45%, strongly disagree=3,3%). That is to say, by their evaluations, traditional classroom education was more efficient than computer based one. Moreover, item 17 (M=2,66) stands out with a low score, so it can be said that a great majority of students were undecided about whether computer-based foreign language learning leads to an unsocial setting of learning. However, when we take the

frequencies of that item, it can be seen that 45% of the students did not think that it led to a social learning atmosphere (disagree=35%, strongly disagree=10%). Besides, item 18 ( $M=2,75$ ) was among the items with the lowest mean scores. Judging from its mean value, we can conclude that students had neutral attitudes towards CALL. However, when we considered the frequencies of item 18 it could be understood that 48,3% of the students disagreed that computer-based classroom education was as satisfying as the conventional one (disagree=43,3%, strongly disagree=5%).

All in all, the table indicated that although some items had higher means and some had lower means, the overall mean of the questionnaire turned out to be 3,19. Judging from this mean value, it can be stated that the participants had a neutral attitude towards CALL before the study.

#### 4.2.1.1.1 Differences according to Genders

*t*-test was utilized in order to see whether there were any differences between the attitudes of students towards CALL as for their gender differences.

**Table 7.** Results of *t*-test for the relationship between gender and attitudes towards CALL

| Gender | N  | M    | SD    | t     | Df | Sig.  |
|--------|----|------|-------|-------|----|-------|
| Male   | 38 | 3,20 | 0,604 | 0,292 | 58 | 0,771 |
| Female | 22 | 3,16 | 0,456 |       |    |       |

$P > 0,05$

The results revealed that there were no outstanding discrepancies with regard to gender ( $p=0,771$ ). Judging from the means submitted in the table, it could be stated that male students ( $M=3,20$ ) had slightly more positive attitudes towards CALL than the female ones ( $M=3,16$ ). However, that minute divergence between the two genders did not stand out, so both of them could be rated as having neutral attitudes. That is, it could be put forward that both were indecisive before the study.

#### 4.2.1.1.2 Differences according to Age

ANOVA was employed for the purpose of seeing whether age was a factor affecting the thoughts of students about CALL.

**Table 8.** Results of ANOVA for the relationship between age and attitudes towards CALL

| Age               | N  | M    | SD    | f     | Sig.  |
|-------------------|----|------|-------|-------|-------|
| Between 20 and 30 | 39 | 3,24 | 0,483 | 1,048 | 0,357 |
| Between 31 and 40 | 15 | 3,01 | 0,734 |       |       |
| 41 and over       | 6  | 3,28 | 0,401 |       |       |
| Total             | 60 | 3,19 | 0,550 |       |       |

P>0,05

The data from the table above indicated that the age of the students did not play any significant role on students' thoughts as to CALL ( $p=0,357$ ). The students between 20 and 30 ( $n=39$ ) constituted the largest group in the study. That is, the participants were mostly composed of young people. As for their attitudes towards CALL, the students between 20 and 30 ( $M=3,24$ ), and the students between 41 and over ( $M=3,28$ ) bore resemblance. However, the ones at 31 and 40 ( $M=3,01$ ) differed from them. Although there were differences between the attitudes of diverse age groups, they all turned out to have neutral attitudes, and it was proved that age did not have much bearing on their thoughts about CALL.

#### 4.2.1.1.3 Differences according to Education Level

ANOVA was run to find out whether the level of education had any influence on the attitudes of students toward the use of CALL.

**Table 9.** Results of ANOVA for the relationship between educational level and attitudes towards CALL

| Degree   | N  | M    | SD    | f     | Sig.  |
|----------|----|------|-------|-------|-------|
| Bachelor | 38 | 3,20 | 0,528 | 0,180 | 0,836 |
| Master   | 14 | 3,22 | 0,709 |       |       |
| PhD      | 8  | 3,08 | 0,358 |       |       |
| Total    | 60 | 3,19 | 0,550 |       |       |

P>0,05

As indicated in the table, there was not any significant difference ( $p=0,836$ ) between the views of students on CALL given their education level. It can be observed that the students with bachelor degrees constituted the biggest proportion in the study

and had the highest mean score ( $M=3,20$ ), and they were followed by the ones with master degrees ( $M=3,22$ ) and those with PhD ( $M=3,08$ ).

#### 4.2.1.1.4 Differences according to Status of Employment

To determine whether there was any connection between the students' status of employment and their attitudes towards CALL  $t$ -test was applied to the data gathered through the questionnaire.

**Table 10.** Results of  $t$ -test for the relationship between status of employment and attitudes towards CALL

| Status of Employment | n  | M    | SD    | t     | df | Sig.  |
|----------------------|----|------|-------|-------|----|-------|
| Student/unemployed   | 16 | 3,32 | 0,562 | 1,176 | 58 | 0,244 |
| Employed             | 44 | 3,14 | 0,544 |       |    |       |

$P>0,05$

It turned out that students' attitudes did not differ too much as for their status of employment ( $P=0,244$ ); that is, there was not a significant difference between two groups in terms of their being employed or not. Even though the participants composed of university students or unemployed graduates had a higher rate ( $M=3,32$ ) than the ones ( $M=3,14$ ) with an employment, both groups could be stated to be in the same interval.

#### 4.2.1.1.5 Differences according to Duration of English Learning

Whether the duration of involvement of the students in any English learning atmosphere had any bearings on their attitudes towards CALL was tried to be evaluated by the administration of ANOVA.

**Table 11.** Results of ANOVA for the relationship between duration of English learning and attitudes towards CALL

| Duration of English Learning | N  | M    | SD    | f     | Sig.  |
|------------------------------|----|------|-------|-------|-------|
| 1 to 5 years                 | 47 | 3,21 | 0,568 | 1,576 | 0,216 |
| 6 to 10 years                | 6  | 3,35 | 0,528 |       |       |
| 11 years and over            | 7  | 2,86 | 0,340 |       |       |
| Total                        | 60 | 3,19 | 0,550 |       |       |

$P>0,05$

Statistically, no salient difference was displayed among groups ( $p=0,216$ ). However, when the mean values of the groups were evaluated, it was observed that the mean value of students taking part in English learning from 1 to 5 years ( $M=3,21$ ) was quite near to the ones studying English from 6 to 10 years ( $M=3,35$ ), but the students having involved in English language learning for more than 11 years had a lower mean value ( $M=2,86$ ) compared with the other two groups. Though means of the three groups bore differences, it was clear that all of them were rated undecided before the study in terms of their attitudes towards CALL.

#### 4.2.1.1.6 Differences according to Exam Scores of Students

ANOVA was run in order to see whether the exam scores of the students had any salient influences on students' thoughts about the usage of computers in a foreign language learning environment.

**Table 12.** Results of ANOVA for the relationship between exam scores of the students and attitudes towards CALL

| Exam Scores of Students | N  | M    | SD    | f     | Sig.  |
|-------------------------|----|------|-------|-------|-------|
| 0-44                    | 39 | 3,33 | 0,548 | 2,661 | 0,057 |
| 45-54                   | 10 | 3,00 | 0,626 |       |       |
| 55-64                   | 8  | 2,88 | 0,310 |       |       |
| 65 and over             | 3  | 2,85 | 0,084 |       |       |
| Total                   | 60 | 3,19 | 0,550 |       |       |

$P>0,05$

The results proved that there was no significant difference in students' attitudes in terms of their exam score ( $p=0,57$ ). However, it could be seen that the majority of the students were at 0-44 interval, and they had a much higher mean value ( $M=3,33$ ) compared to the other groups, so they were quite near to be considered as having positive attitudes. Although there were some differences as for the mean values of each group, their overall attitudes could be rated as "neutral", meaning they were undecided before the study.

#### 4.2.1.1.7 Differences according to Class Level

Participants in the study were divided into three groups according to their exam scores. The ones just having started preparing for the exam formed the group called “Basic-level”. The other two groups were formed by taking students’ exam scores into consideration. The participants with a score between 45 and 54 constituted the “Mid-level” class and the ones holding 55 and over composed the “High-level” class. ANOVA was used in order to see whether students’ attitudes differ from one another in terms of their class levels, partly denoting their proficiency in English.

**Table 13.** Results of ANOVA for the relationship between class level and attitudes towards CALL

| Class Level | N  | M    | SD    | F     | Sig.  |
|-------------|----|------|-------|-------|-------|
| Basic-level | 21 | 3,32 | 0,461 | 3,329 | 0,043 |
| Mid-level   | 20 | 3,29 | 0,713 |       |       |
| High-level  | 19 | 2,93 | 0,341 |       |       |
| Total       | 60 | 3,19 | 0,550 |       |       |

p<0.05

The analysis showed that class level had important effect on participants’ attitudes ( $p=0,43$ ). The students taking part in high-level class had lower mean value ( $M=2,93$ ), while those of participants in the basic level ( $M=3,32$ ) and mid-level ( $M=3,29$ ) did not differ much from each other. For the purpose of finding the reason for that difference displayed in the table, Dunnett C Post Hoc Test was employed, and the results revealed that there was a significant difference between the basic level and high level students. The mean score of the basic level students ( $M=3,32$ ) showed that they almost had a positive attitude towards CALL, however the mean score of the students in the high level class ( $M=2,93$ ) was not that much positive.

#### 4.2.1.1.8 Differences according to Frequency of Engagement in Computer

ANOVA was employed to see whether the frequency of the participants’ engagement in computer plays any important role on their attitudes towards CALL, and it should be noted that the information on students’ frequency of engagement in computer were totally obtained from their self-evaluations. It should also be emphasized

that some items were combined because of the lack of sufficient numbers of answers to some options.

**Table 14.** Results of ANOVA for the relationship between frequency of engagement in computer and attitudes towards CALL

| Frequency of Engagement in Computer | N  | M    | SD    | f     | Sig.  |
|-------------------------------------|----|------|-------|-------|-------|
| Never/Rarely                        | 0  | 0    | 0     | 2,659 | 0,108 |
| Sometimes                           | 19 | 3,35 | 0,503 |       |       |
| Often/Always                        | 41 | 3,11 | 0,559 |       |       |
| Total                               | 60 | 3,19 | 0,550 |       |       |

P>0,05

As seen in the table above, the frequency of computer engagement turned out to have no significant effect on students' thoughts on CALL ( $p=0,108$ ). It is quite clear from the table that the option "never/rarely" was not chosen by any participant, indicating that every participant somewhat spent time on computers, and the great majority of students ( $n=41$ ) stated that they always or often used computers, which meant that most of the students were quite familiar with computers. However, when we compared their mean values, sometimes ( $M=3,35$ ) and often/always ( $M=3,11$ ), no salient difference was observed between two groups.

#### 4.2.1.1.9 Differences according to Level of Computer Skills

According to the results of the data analysis, the level of computer literacy was considered to have influence on students' attitudes; therefore an analysis was performed via ANOVA to find out whether the difference was significant or not.

**Table 15.** Results of ANOVA for the relationship between students' perceived levels of computer skills and attitudes towards CALL

| Level of Computer Skills | N  | M    | SD    | F    | Sig.  |
|--------------------------|----|------|-------|------|-------|
| Low                      | 2  | 2,69 | 1,453 | ,856 | 0,430 |
| Mid                      | 34 | 3,19 | 0,519 |      |       |
| High                     | 24 | 3,22 | 0,525 |      |       |
| Total                    | 60 | 3,19 | 0,550 |      |       |

P>0,05

The students were asked to rate their own proficiency levels in computer, and the responses elicited from them were totally their self-evaluation. The results derived from their self-evaluations were analysed and indicated in the table. As can be seen in the table, the mean values of mid-level students ( $M=3,19$ ) and high-level ones ( $M=3,22$ ) were quite close to each other; on the other hand, the students rated themselves as having low proficiency in computer usage were proven to almost have negative attitudes towards CALL ( $M=2,69$ ). However, according to these results, it can be stated that given their level of computer skills, no significant difference was observed among students in terms of their attitudes towards CALL ( $p=0,430$ ).

#### 4.2.1.1.10 Differences according to Students' Previous Experience in CALL

To see whether there was any significant influence of students' previous CALL experience on their attitudes, the results were analysed through *t*-test.

**Table 16.** Results of *t*-test for the relationship between students' previous experience in CALL and attitudes towards CALL

| Students' Previous Experience in CALL | N  | M    | SD    | t     | df | Sig.  |
|---------------------------------------|----|------|-------|-------|----|-------|
| Yes                                   | 10 | 3,47 | 0,595 | 1,798 | 58 | 0,077 |
| No                                    | 50 | 3,13 | 0,530 |       |    |       |

$P>0,05$

It was revealed that no significant correlation was observed between the students with CALL experience and the ones without experience ( $p=0,077$ ). It was also indicated that most of the students ( $n=50$ ) had not had any experience in CALL. As a result, it could be said that the participants used computers in daily life, but most of them had not used it for the purpose of learning a language. Moreover, it could be observed that the students with CALL experience had a mean value ( $M=3,47$ ) which was slightly higher than that of the participants without experience ( $M=3,13$ ), but both groups were proven to have neutral attitude towards CALL.

#### 4.2.1.2 Students' attitudes towards the Internet-based computer program after two weeks (Short-term results)

The third part of the questionnaire was utilized for the purpose of evaluating what the attitudes of students' towards the program after being introduced to it. That

part of the questionnaire was administered to the students after the outset of the study since the students had had no particular idea about it at the very moment the study was initiated. Therefore, the students were allowed some time to get accustomed to the program and to form some ideas about it. Then the students attitudes towards the study were evaluated through 5-point Likert scales ranging from “Strongly disagree: 1” to “Strongly agree: 5”.

**Table 17.** Students’ attitudes towards the Internet-based reading program after two weeks (Short-term results)

| Items        | Strongly disagree |     | Disagree |      | Neutral |      | Agree |      | Strongly agree |      | M           | SD           |
|--------------|-------------------|-----|----------|------|---------|------|-------|------|----------------|------|-------------|--------------|
|              | f                 | %   | F        | %    | f       | %    | f     | %    | f              | %    |             |              |
| Item1        | 3                 | 5   | 5        | 8,3  | 9       | 15   | 36    | 60   | 7              | 11,7 | 3,65        | 0,971        |
| Item2        | 5                 | 8,3 | 6        | 10   | 11      | 18,3 | 25    | 41,7 | 13             | 21,7 | 3,58        | 1,183        |
| Item3        | 3                 | 5   | 6        | 10   | 7       | 11,7 | 29    | 48,3 | 15             | 25   | 3,78        | 1,090        |
| Item4        | 3                 | 5   | 3        | 5    | 12      | 20   | 29    | 48,3 | 13             | 21,7 | 3,76        | 1,014        |
| Item5        | 4                 | 6,7 | 17       | 28,3 | 6       | 10   | 18    | 30   | 15             | 25   | 3,38        | 1,316        |
| Item6        | 3                 | 5   | 14       | 23,3 | 7       | 11,7 | 19    | 31,7 | 17             | 28,3 | 3,55        | 1,267        |
| Item7        | 2                 | 3,3 | 5        | 8,3  | 9       | 15   | 21    | 35   | 23             | 38,3 | 3,96        | 1,088        |
| Item8        | 3                 | 5   | 5        | 8,3  | 12      | 20   | 18    | 30   | 22             | 36,7 | 3,85        | 1,161        |
| Item9        | 4                 | 6,7 | 7        | 11,7 | 11      | 18,3 | 31    | 51,7 | 7              | 11,7 | 3,5         | 1,065        |
| Item10       | 6                 | 10  | 7        | 11,7 | 18      | 30   | 19    | 31,7 | 10             | 16,7 | 3,33        | 1,188        |
| Item11       | 4                 | 6,7 | 7        | 11,7 | 6       | 10   | 29    | 48,3 | 14             | 23,3 | 3,7         | 1,154        |
| Item12       | 3                 | 5   | 3        | 5    | 11      | 18,3 | 32    | 53,3 | 11             | 18,3 | 3,75        | 0,985        |
| Item13       | 4                 | 6,7 | 1        | 1,7  | 10      | 16,7 | 24    | 40   | 21             | 35   | 3,95        | 1,095        |
| <b>Total</b> |                   |     |          |      |         |      |       |      |                |      | <b>3,67</b> | <b>0,666</b> |

Note: f: Frequency M: Mean %: percentage  
1 (Strongly disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly agree)

Item 1-This program increases my interest and motivation in reading.

Item 2-It helps me learn better.

Item 3-It enables me to improve my reading skills through various activities designed.

Item 4-It helps me comprehend reading texts easily.

Item 5-It helps me solve all the problems I encounter while reading a text.

Item 6-It provides me with satisfying explanations on grammar points I have difficulty while reading.

Item 7- It helps me learn vocabulary easily.

Item 8- It provides useful games to improve the vocabulary capacity.

Item 9- It provides adequate translation if I have trouble while reading.

Item 10- It provides useful explanations on how to answer the question related to the text.

Item 11- It provides me with satisfactory statistical data to follow the improvements in my reading comprehension.

Item 12-The design of the program is very successful.

Item 13-I can use the program easily.

The results revealed that the item 7 (M: 3,96) addressing the effectiveness of the program in terms of vocabulary teaching bore the highest mean value. Therefore, it can be stated that at the outset of the study participants were quite complacent about the vocabulary teaching provided, and the answers elicited for Item 13 (M: 3,95) ranking second in terms of mean value indicated that the majority of the participants thought that the program could be easily used. Moreover, item 8 (M: 3,85) with the third highest mean value was also related to the vocabulary teaching aspect of the program, so it can be seen that students were mostly satisfied with the program as for vocabulary teaching. All in all, it can be pointed out that most of the participants had positive attitudes towards the program in terms of usability.

When it comes to the items with lower values, it can be viewed that item 10 (M: 3,33) pointing out that the program provided useful explanations on how to answer the question related to the text had the lowest mean value, indicating that at first students were undecided about whether it provided adequate explanations on how to solve the questions, and item 5 (M: 3,38) stating that the program helps the learners solve all the problems they encounter while reading a text had the second lowest mean value compared to the others, and given the mean value of that item it can be stated that although students were satisfied enough with some particular aspects of the program, they pointed out that when the program was evaluated holistically, it could not meet all their needs during the reading process.

The results obtained from students' answers to the items listed in the third part of the questionnaire, enquiring into the attitudes of students towards that particular program revealed that students had developed a positive attitude towards that program after getting engaged in it. So it can be stated that at the outset of the study, the participants had a notion favouring that program, which we can derive from the overall mean value of the third part of the questionnaire (M: 3,67).

## 4.2.2 Quantitative data analysis after the study

### 4.2.2.1 Students' attitudes towards CALL after the study

**Table 18.** Students' attitudes towards CALL.

| Items        | Strongly disagree |      | Disagree |      | Neutral |      | Agree |      | Strongly agree |      | M    | SD    |
|--------------|-------------------|------|----------|------|---------|------|-------|------|----------------|------|------|-------|
|              | f                 | %    | f        | %    | f       | %    | f     | %    | f              | %    |      |       |
| Item 1       | 1                 | 1,7  | 12       | 20   | 9       | 15   | 29    | 48,3 | 9              | 15   | 3,55 | 1,032 |
| Item 2       | 2                 | 3,3  | 16       | 26,7 | 11      | 18,3 | 20    | 33,3 | 11             | 18,3 | 3,36 | 1,163 |
| Item 3       | 0                 | 0    | 10       | 16,7 | 8       | 13,3 | 31    | 51,7 | 11             | 18,3 | 3,71 | 0,958 |
| Item 4       | 1                 | 1,7  | 10       | 16,7 | 16      | 26,7 | 28    | 46,7 | 5              | 8,3  | 3,43 | 0,927 |
| Item 5       | 2                 | 3,3  | 7        | 11,7 | 8       | 13,3 | 27    | 45   | 16             | 26,7 | 3,80 | 1,070 |
| Item 6       | 3                 | 5    | 3        | 5    | 7       | 11,7 | 28    | 46,7 | 19             | 31,7 | 3,95 | 1,048 |
| Item 7       | 2                 | 3,3  | 4        | 6,7  | 8       | 13,3 | 28    | 46,7 | 18             | 30   | 3,93 | 1,006 |
| Item 8       | 2                 | 3,3  | 10       | 16,7 | 15      | 25,0 | 22    | 36,7 | 11             | 18,3 | 3,50 | 1,081 |
| Item 9       | 3                 | 5    | 4        | 6,7  | 11      | 18,3 | 24    | 40   | 18             | 30   | 3,83 | 1,091 |
| Item10       | 2                 | 3,3  | 13       | 21,7 | 14      | 23,3 | 22    | 36,7 | 9              | 15   | 3,38 | 1,090 |
| Item11       | 3                 | 5    | 14       | 23,3 | 16      | 26,7 | 19    | 31,7 | 8              | 13,3 | 3,25 | 1,114 |
| Item12       | 6                 | 10   | 27       | 45   | 14      | 23,3 | 7     | 11,7 | 6              | 10   | 2,66 | 1,129 |
| Item13       | 8                 | 13,3 | 24       | 40   | 15      | 25   | 9     | 15   | 4              | 6,7  | 2,61 | 1,106 |
| Item14       | 5                 | 8,3  | 29       | 48,3 | 15      | 25   | 9     | 15   | 2              | 3,3  | 2,56 | 0,963 |
| Item15       | 6                 | 10   | 31       | 51,7 | 13      | 21,7 | 8     | 13,3 | 2              | 3,3  | 2,48 | 0,965 |
| Item16       | 7                 | 11,7 | 21       | 35   | 12      | 20   | 18    | 30   | 2              | 3,3  | 2,78 | 1,106 |
| Item17       | 14                | 23,3 | 21       | 35   | 13      | 21,7 | 11    | 18,3 | 1              | 1,7  | 2,40 | 1,092 |
| Item18       | 13                | 21,7 | 23       | 38,3 | 9       | 15   | 15    | 25   | 0              | 0    | 2,43 | 1,094 |
| <b>Total</b> |                   |      |          |      |         |      |       |      |                |      | 3,20 | 0,689 |

Note: f: Frequency M: Mean %: percentage  
1 (Strongly disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly agree)

Item 1- I feel more comfortable and relaxed while learning a foreign language with computer.

Item 2- The time passes quickly while learning a foreign language with computer.

Item 3- It is hard to learn a foreign language with computer.

Item 4- My confidence increases while learning a foreign language with computer.

Item 5- It is quite enjoyable to learn a foreign language with computers.

Item 6- Computers give me the opportunity to learn a foreign language at my own pace.

Item 7- Computers provide me with the flexibility in terms of time to study a foreign language.

Item 8- I can study a foreign language in a planned way with computer.

Item 9- Computers facilitate my foreign language learning.

Item 10- I concentrate better while learning a foreign language with computers

Item 11- I have positive attitude towards using computers to learn a foreign language.

Item 12- Computer-based foreign language learning is more motivating than traditional classroom education.

Item 13- Computer based foreign language learning is more enjoyable than traditional classroom education.

Item 14- I learn a foreign language better with computer-based education than I do with traditional classroom education.

Item 15- Computer-based foreign language learning is more efficient than traditional classroom education.

Item 16- After some time, learning a foreign language with computers may turn out to be boring.

Item 17- Studying a foreign language with computers leads to an unsocial setting of learning.

Item 18- Computer-based language learning is not as satisfying as conventional classroom education.

5-point Likert scales ranging from “Strongly disagree: 1” to “Strongly agree: 5” was employed to reveal the attitudes of participants towards CALL. The results indicated that item 6 (M: 3,95) stating that computers gave the learner the opportunity to learn on his own pace had the highest mean. What could be derived from this figure was that students were mostly satisfied with afore mentioned opportunity the computers provided them, and the subsequent item ranking second in the table was item 7 (M: 3,93) pointing out that computers were flexible in terms of times to study a foreign language. Therefore, it could be told that the majority of students favored computers as they provided them with the flexibility of studying-hours, that is it gave them the opportunity to study at any desired time, and item 9 (M: 3,83) emphasizing that computers facilitate foreign language learning had the third highest mean. So it could be seen that most of the students agreed that computers alleviated long and hard process of language learning.

Item 17 (M=2,40), which emphasizes that studying a foreign language with computers leads to an unsocial setting of learning got the lowest mean score. By considering that the item was recoded, it could be stated that participants favored the idea that studying on computer created an unsocial learning atmosphere. Moreover, being one of the items with the lowest mean value, item 18 (M=2,43) was recoded, and judging from the mean of that item, one can say that students thought that foreign language learning through computer was not as satisfying as the conventional classroom instruction. Besides, it can be stated that students indicated their positive attitudes towards classroom education given the mean of the item 15 (M: 2,48), comparing computer based language learning and traditional classroom education in terms of effectiveness; That is to say, by their evaluations, traditional classroom education was more efficient than a computer based one.

So the total mean of the items (M=3,20) indicates that participants had a neutral attitude towards CALL after the study.

#### 4.2.2.1.1 Differences according to Genders

To see whether gender differences had any influence on participants' attitudes towards CALL *t*-test was run.

**Table 19.** Results of *t*-test for the relationship between gender and attitudes towards CALL

| Gender | N  | M    | SD    | t     | df | Sig.  |
|--------|----|------|-------|-------|----|-------|
| Male   | 38 | 3,16 | 0,732 | -,522 | 58 | 0,604 |
| Female | 22 | 3,26 | 0,619 |       |    |       |

$P > 0,05$

The gender proved to have no outstanding influence on the thoughts of participants ( $p=0,604$ ). According to the figures displayed in the table, it could be stated that male participants ( $M=3,16$ ) did not differ much from the female ones ( $M=3,26$ ) as for their view on CALL, and both genders were viewed to have neutral attitudes towards CALL after the study.

#### 4.2.2.1.2 Differences according to Age

ANOVA was run in order to see whether there was any effect of the age of the participant on their thoughts about CALL.

**Table 20.** Results of ANOVA for the relationship between age and attitudes towards CALL

| Age               | N  | M    | SD    | f    | Sig.  |
|-------------------|----|------|-------|------|-------|
| Between 20 and 30 | 39 | 3,12 | 0,672 | ,837 | 0,438 |
| Between 31 and 40 | 15 | 3,32 | 0,804 |      |       |
| 41 and over       | 6  | 3,42 | 0,446 |      |       |
| Total             | 60 | 3,20 | 0,689 |      |       |

$P > 0,05$

As can be seen from the table, the age of the participants did not play a important role on students attitudes towards CALL ( $p=0,438$ ). The students, mostly composed of young adults ( $n=39$ ), did not differ much from one another with regard to their mean values. Participants at 41 and over had the highest mean value ( $M=3,42$ ) and they were successively followed by the ones between 31 and 40 ( $M=3,32$ ) and the ones

between 20 and 30 ( $M=3,12$ ). Judging from their mean value, it can be stated that there was not a salient divergence among the students with different ages.

#### 4.2.2.1.3 Differences according to Education Level

ANOVA was used to see if the level of education affected the attitudes of students toward CALL.

**Table 21.** Results of ANOVA for the relationship between education level and attitudes towards CALL

| Education Level | n  | M    | SD    | F     | Sig.  |
|-----------------|----|------|-------|-------|-------|
| Bachelor        | 38 | 3,09 | 0,621 | 1,339 | 0,270 |
| Master          | 14 | 3,32 | 0,846 |       |       |
| PhD             | 8  | 3,48 | 0,677 |       |       |
| Total           | 60 | 3,20 | 0,689 |       |       |

$P>0,05$

No significant difference was displayed in the table above with regard to the influence of the education of the students on their ideas about CALL ( $p=0,270$ ). The students with bachelor degrees formed the biggest group in the study with the lowest mean value ( $M=3,09$ ), and the group with master degree ( $M=3,32$ ) and the one with PhD ( $M=3,48$ ) followed it. As can be seen from the figures, the students with master and PhD degrees were quite similar to each other regarding their opinion on CALL, but they were observed to faintly differentiate from the ones with bachelor degree. However, when we consider holistically, it can be stated that the participants were undecided and there was not a significant difference among them in terms of their thoughts.

#### 4.2.2.1.4 Differences according to Status of Employment

*t*-test was applied for the purpose of revealing whether having or not having a job affects the attitudes of students towards CALL.

**Table 22.** Results of *t*-test for the relationship between status of employment and attitudes towards CALL

| Status of Employment | n  | M    | SD    | t     | df | Sig.  |
|----------------------|----|------|-------|-------|----|-------|
| Student/unemployed   | 16 | 3,16 | 0,502 | -,272 | 58 | 0,786 |
| Employed             | 44 | 3,21 | 0,750 |       |    |       |

$P > 0,05$

It was clear from the table that participants' state of being employed or not being employed did not make any difference in terms their thoughts on CALL ( $P=0,786$ ). As can be seen from the table the employed participants outnumbered the unemployed ones; however, those who were employed ( $M=3,21$ ) were not that much different from the unemployed ones ( $3,16$ ) with respect to their thoughts on CALL. Moreover, with regard to their mean values it could be stated that both of the groups stood at the same interval and could be considered as having neutral attitude towards CALL.

#### 4.2.2.1.5 Differences according to Duration of English Learning

In the analysis performed after data analysis, it was observed that there was a difference among the mean levels of students. To find out whether this result was significant, ANOVA was performed.

**Table 23.** Results of ANOVA for the relationship between duration of English learning and attitudes towards CALL

| Duration of English Learning | n  | M    | SD    | f     | Sig.  |
|------------------------------|----|------|-------|-------|-------|
| 1 to 5 years                 | 47 | 3,22 | 0,700 | 2,423 | 0,098 |
| 6 to 10 years                | 6  | 3,54 | 0,689 |       |       |
| 11 years and over            | 7  | 2,74 | 0,391 |       |       |
| Total                        | 60 | 3,20 | 0,689 |       |       |

$P > 0,05$

The results showed that statistically there was no important difference among the groups formed on the basis of age differences ( $p=0,098$ ), but there were some points worth paying attention. The group having participants with 1 to 5 years of English

learning experience stood out compared with the other groups in terms of number of participants. That meant most of the students in the study were quite new to English. On the other hand, although the groups statistically proved to have no difference in terms of their attitudes, it could be clearly seen from the mean values above that the participants who had been studying English for 11 years or over ( $M=2,74$ ) had much lower mean value than the other two groups. So that means they had less positive attitudes towards CALL.

#### 4.2.2.1.6 Differences according to Exam Scores of Students

ANOVA was employed after the study to see whether the students' previous exam scores had any influence on their thoughts about CALL.

**Table 24.** Results of ANOVA for the relationship between exam scores of the students and attitudes towards CALL

| Exam Scores of Students | n  | M    | SD    | f    | Sig.  |
|-------------------------|----|------|-------|------|-------|
| 0-44                    | 39 | 3,23 | 0,673 | ,150 | 0,929 |
| 45-54                   | 10 | 3,10 | 0,710 |      |       |
| 55-64                   | 8  | 3,13 | 0,688 |      |       |
| 65 and over             | 3  | 3,35 | 1,165 |      |       |
| Total                   | 60 | 3,20 | 0,689 |      |       |

$P>0,05$

No significant difference was observed in students' attitudes according to the last scores they got ( $p=0,929$ ), but it was obvious that most of the students had a score under 44 and only a few participants had a score over 65. That meant the subjects of that study were mostly formed by participants who were not proficient in English, and when we consider the mean values, it can be seen that the students with a score at 65 and over ranked first ( $M=3,35$ ) and they were successively followed by the ones at 0-44 intervals ( $M=3,23$ ), the ones at 55-64 intervals ( $M=3,13$ ) and the ones at 45-54 intervals ( $M=3,10$ ). With respect to these figures it is evident that the students in each groups had quite similar mean values and it could be stated that they had neutral attitudes towards CALL.

#### 4.2.2.1.7 Differences according to Class Level

ANOVA was used in order to determine whether the class level of students had any influence on the thoughts of students.

**Table 25.** Results of ANOVA for the relationship between class level and attitudes towards CALL

| Class Level | n  | M    | SD    | f     | Sig.  |
|-------------|----|------|-------|-------|-------|
| Basic-level | 21 | 3,17 | 0,641 | 0,941 | 0,396 |
| Mid-level   | 20 | 3,36 | 0,744 |       |       |
| High-level  | 19 | 3,06 | 0,683 |       |       |
| Total       | 60 | 3,20 | 0,689 |       |       |

$P > 0,05$

It can be seen from the table that the level of the students had no significant effect on students' attitudes ( $p = 0,396$ ). Each group had similar mean values and they all were at an interval that could denote us that they were undecided after the study in terms of their approaches to CALL

#### 4.2.2.1.8 Differences according to Frequency of Engagement in Computer

ANOVA was utilized to see if frequency of computer engagement could be a factor affecting students' attitudes, and it should be emphasized that the data were derived from students' self-evaluation.

**Table 26.** Results of ANOVA for the relationship between frequency of engagement in computer and attitudes towards CALL

| Frequency of Engagement in Computer | N  | M    | SD    | f     | Sig.  |
|-------------------------------------|----|------|-------|-------|-------|
| Never/Rarely                        | 0  | 0    | 0     | 0,016 | 0,900 |
| Sometimes                           | 19 | 3,18 | 0,621 |       |       |
| Often/Always                        | 41 | 3,21 | 0,726 |       |       |
| Total                               | 60 | 3,20 | 0,689 |       |       |

$P > 0,05$

The results displayed in the table clearly indicated that the participants' frequency of computer usage did have no bearing on their thoughts about CALL ( $p = 0,900$ ). It can be seen from the figures above that most of the students ( $n = 41$ ) stated

that they often or always used computers and no one chose the option “Never/Rarely”. Judging from this, it could be stated that all the participants were engaged in computers to some extent in their daily lives. Judging from the mean values, it can be pointed out that the participants choosing the “Sometimes” option ( $M=3,18$ ) and the ones marking “Often/Always ( $M=3,21$ ) had quite similar mean values and they could be regarded as having neutral attitudes.

#### 4.2.2.1.9 Differences according to Level of Computer Skills

ANOVA was employed to evaluate whether the level of computer literacy had any influence on students’ attitudes.

**Table 27.** Results of ANOVA for the relationship between level of computer skills and attitudes towards CALL

| Level of Computer Skills | n  | M    | SD    | F     | Sig.  |
|--------------------------|----|------|-------|-------|-------|
| Low                      | 2  | 3,36 | 1,060 | 1,751 | 0,183 |
| Mid                      | 34 | 3,33 | 0,756 |       |       |
| High                     | 24 | 3,00 | 0,529 |       |       |
| Total                    | 60 | 3,20 | 0,689 |       |       |

$P>0,05$

The students’ self-evaluations were utilized to rate their proficiency in computer. The results obtained from their self-evaluations were analysed and reflected to above table. They revealed that 34 out of 60 students rated their proficiency level as “Mid” and they were followed by 24 participants rating theirs as “High” and 2 participants rating theirs as “Low”. This figure shows that most of the participants held the belief that they were somewhat proficient in computer. As for their attitudes, the students with low proficiency ( $M=3,36$ ) had the highest mean value and they were followed by the ones with mid proficiency ( $M=3,33$ ) and the ones with high proficiency ( $M=3,00$ ). So it can be seen that as the proficiency of students improves, their mean values decreases. That is to say, the students with low proficiency had more positive attitudes towards CALL than the ones with mid proficiency. When we compare the two groups to the ones with high proficiency, the difference deepens, showing that students with high proficiency in computer had much less positive attitudes CALL. However, if an overall evaluation is

made, it can be seen that proficiency in computer had no salient impact on students' thoughts about CALL ( $p=0,183$ ).

#### 4.2.2.1.10 Differences according to Students' Previous Experience in CALL

In order to see whether the students' previous CALL experience affected their ideas *t*-test was run.

**Table 28.** Results of *t*-test for the relationship between students' previous experience in CALL and attitudes towards CALL

| Previous CALL Experience | N  | M    | SD    | t     | df | Sig.  |
|--------------------------|----|------|-------|-------|----|-------|
| Yes                      | 10 | 3,26 | 0,532 | 0,286 | 58 | 0,776 |
| No                       | 50 | 3,19 | 0,720 |       |    |       |

$P>0,05$

The figures above revealed that the participant with CALL experience ( $M=3,26$ ) had slightly more positive approaches compared with the ones lacking any experience ( $M=3,19$ ). However, that divergence did not make any sense, and both remained undecided after the study. So it can be said that the students' former experience on CALL did not have any significant effect on their attitudes ( $p=0,776$ )

#### 4.2.2.2 Students' attitudes towards the Internet-based computer program after study

The third part of the questionnaire was administered to the students after the study in order to get a deeper insight into students' attitudes towards the computer-based program, focusing on improving reading comprehension as a part of preparation for an examination.

**Table 29.** Students' attitudes towards the Internet-based reading program after study

| Items        | Strongly disagree |     | Disagree |      | Neutral |      | Agree |      | Strongly agree |      | M           | SD           |
|--------------|-------------------|-----|----------|------|---------|------|-------|------|----------------|------|-------------|--------------|
|              | f                 | %   | f        | %    | f       | %    | f     | %    | f              | %    |             |              |
| Item1        | 3                 | 5   | 4        | 6,7  | 19      | 31,7 | 24    | 40   | 10             | 16,7 | 3,56        | 1,014        |
| Item2        | 1                 | 1,7 | 7        | 11,7 | 15      | 25   | 26    | 43,3 | 11             | 18,3 | 3,65        | 0,971        |
| Item3        | 1                 | 1,7 | 4        | 6,7  | 12      | 20   | 35    | 58,3 | 8              | 13,3 | 3,75        | 0,838        |
| Item4        | 2                 | 3,3 | 7        | 11,7 | 8       | 13,3 | 33    | 55   | 10             | 16,7 | 3,70        | 0,996        |
| Item5        | 3                 | 5,0 | 18       | 30   | 12      | 20   | 20    | 33,3 | 7              | 11,7 | 3,16        | 1,137        |
| Item6        | 3                 | 5   | 20       | 33,3 | 17      | 28,3 | 14    | 23,3 | 6              | 10   | 3,00        | 1,089        |
| Item7        | 2                 | 3,3 | 2        | 3,3  | 7       | 11,7 | 30    | 50   | 19             | 31,7 | 4,03        | 0,938        |
| Item8        | 0                 | 0   | 3        | 5    | 13      | 21,7 | 25    | 41,7 | 19             | 31,7 | 4,00        | 0,863        |
| Item9        | 0                 | 0   | 7        | 11,7 | 17      | 28,3 | 24    | 40   | 12             | 20   | 3,68        | 0,929        |
| Item10       | 0                 | 0   | 11       | 18,3 | 21      | 35   | 23    | 38,3 | 5              | 8,3  | 3,36        | 0,882        |
| Item11       | 0                 | 0   | 4        | 6,7  | 18      | 30   | 33    | 55   | 5              | 8,3  | 3,65        | 0,732        |
| Item12       | 1                 | 1,7 | 5        | 8,3  | 13      | 21,7 | 34    | 56,7 | 7              | 11,7 | 3,68        | 0,853        |
| Item13       | 1                 | 1,7 | 4        | 6,7  | 13      | 21,7 | 32    | 53,3 | 10             | 16,7 | 3,76        | 0,870        |
| <b>Total</b> |                   |     |          |      |         |      |       |      |                |      | <b>3,61</b> | <b>0,605</b> |

Note: f: Frequency M: Mean %: percentage  
1 (Strongly disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly agree)

Item 1-This program increases my interest and motivation in reading.

Item 2-It helps me learn better.

Item 3-It enables me to improve my reading skills through various activities designed.

Item 4-It helps me comprehend reading texts easily.

Item 5-It helps me solve all the problems I encounter while reading a text.

Item 6-It provides me with satisfying explanations on grammar points I have difficulty while reading.

Item 7- It helps me learn vocabulary easily.

Item 8- It provides useful games to improve the vocabulary capacity.

Item 9- It provides me adequate translation if I have trouble while reading.

Item 10- It provides useful explanations on how to answers the question related to the text.

Item 11- It provides me with satisfactory statistical data to follow the improvements in my reading comprehension.

Item 12-The design of the program is very successful.

Item 13-I can use the program easily.

The results indicated that item 7 stating that the program helps the students learn vocabulary easily had the highest mean value (M=4,03), proving that the program

greatly contributed to the process of vocabulary learning according to the students. That is, most of the students were satisfied with the vocabulary teaching aspect of that program, and the second-ranking item was 8<sup>th</sup> one (M=4,00), which emphasized that the games included in the program were helpful for improving vocabulary capacity. As items regarding the vocabulary learning aspect of the program got the highest mean values, it can be stated that participants were of the opinion that the program was efficient as for learning vocabulary and the program aroused positive attitude with respect to learning vocabulary, and item 13, pointing out that the program is easy to use, held the third highest mean (M=3,76). That means the students used the program without having great troubles, so it proves that the program was well-organized and practical.

When it comes to the items with the relatively lower means, item 6 pointing out that the program provides the students with satisfactory explanations on grammar points stands out with the lowest mean value (M=3,00). That means the students were not sure whether the explanation on grammar point were satisfying or not, and item 5 stating that the program helps the students with all the problems they encounter while reading got a lower mean value (M=3,16) compared with the others. Judging from its mean value, it could be stated that the participants were not clear about program's efficiency in meeting all the needs of participants, and item 10 displayed a compelling point because by evaluating its mean value (M=3,36) it could be pointed out that the students were not sure about whether the program provided them with useful explanations on how to answer text-related questions.

Although there were items with comparatively lower and higher mean values, it could be stated that students had a positive approach to this program when the total mean (M=3,61) was taken into consideration.

### 4.2.3. The comparison of students' attitudes towards CALL before and after the study

**Table 30.** Students' attitudes towards CALL before and after the study

|         | Strongly disagree |     |       |      | Disagree |      |       |      | Neutral |      |       |      | Agree  |      |       |      | Strongly agree |      |       |      | M      |       |
|---------|-------------------|-----|-------|------|----------|------|-------|------|---------|------|-------|------|--------|------|-------|------|----------------|------|-------|------|--------|-------|
|         | Before            |     | After |      | Before   |      | After |      | Before  |      | After |      | Before |      | After |      | Before         |      | After |      | Before | After |
|         | f                 | %   | f     | %    | f        | %    | f     | %    | f       | %    | f     | %    | f      | %    | f     | %    | f              | %    | f     | %    |        |       |
| Item 1  | 1                 | 1,7 | 1     | 1,7  | 5        | 8,3  | 12    | 20   | 27      | 45   | 9     | 15   | 19     | 31,7 | 29    | 48,3 | 8              | 13,3 | 9     | 15   | 3,46   | 3,55  |
| Item 2  | 1                 | 1,7 | 2     | 3,3  | 9        | 15   | 16    | 26,7 | 22      | 36,7 | 11    | 18,3 | 23     | 38,3 | 20    | 33,3 | 5              | 8,3  | 11    | 18,3 | 3,36   | 3,36  |
| Item 3  | 1                 | 1,7 | 0     | 0    | 13       | 21,7 | 10    | 16,7 | 12      | 20   | 8     | 13,3 | 24     | 40   | 31    | 51,7 | 10             | 16,7 | 11    | 18,3 | 3,48   | 3,71  |
| Item 4  | 3                 | 5   | 1     | 1,7  | 13       | 21,7 | 10    | 16,7 | 19      | 31,7 | 16    | 26,7 | 15     | 25   | 28    | 46,7 | 10             | 16,7 | 5     | 8,3  | 3,26   | 3,43  |
| Item 5  | 1                 | 1,7 | 2     | 3,3  | 8        | 13,3 | 7     | 11,7 | 18      | 30   | 8     | 13,3 | 22     | 36,7 | 27    | 45   | 11             | 18,3 | 16    | 26,7 | 3,56   | 3,80  |
| Item 6  | 1                 | 1,7 | 3     | 5    | 6        | 10   | 3     | 5    | 11      | 18,3 | 7     | 11,7 | 28     | 46,7 | 28    | 46,7 | 14             | 23,3 | 19    | 31,7 | 3,80   | 3,95  |
| Item 7  | 3                 | 5   | 2     | 3,3  | 3        | 5    | 4     | 6,7  | 15      | 25   | 8     | 13,3 | 27     | 45   | 28    | 46,7 | 12             | 20   | 18    | 30   | 3,70   | 3,93  |
| Item 8  | 2                 | 3,3 | 2     | 3,3  | 10       | 16,7 | 10    | 16,7 | 17      | 28,3 | 15    | 25,0 | 23     | 38,3 | 22    | 36,7 | 8              | 13,3 | 11    | 18,3 | 3,41   | 3,50  |
| Item 9  | 1                 | 1,7 | 3     | 5    | 5        | 8,3  | 4     | 6,7  | 25      | 41,7 | 11    | 18,3 | 21     | 35   | 24    | 40   | 8              | 13,3 | 18    | 30   | 3,50   | 3,83  |
| Item 10 | 2                 | 3,3 | 2     | 3,3  | 12       | 20   | 13    | 21,7 | 19      | 31,7 | 14    | 23,3 | 24     | 40   | 22    | 36,7 | 3              | 5    | 9     | 15   | 3,23   | 3,38  |
| Item 11 | 2                 | 3,3 | 3     | 5    | 10       | 16,7 | 14    | 23,3 | 25      | 41,7 | 16    | 26,7 | 16     | 26,7 | 19    | 31,7 | 7              | 11,7 | 8     | 13,3 | 3,26   | 3,25  |
| Item 12 | 4                 | 6,7 | 6     | 10   | 18       | 30   | 27    | 45   | 30      | 50   | 14    | 23,3 | 4      | 6,7  | 7     | 11,7 | 4              | 6,7  | 6     | 10   | 2,76   | 2,66  |
| Item 13 | 3                 | 5   | 8     | 13,3 | 21       | 35   | 24    | 40   | 24      | 40   | 15    | 25   | 9      | 15   | 9     | 15   | 2              | 5    | 4     | 6,7  | 2,80   | 2,61  |
| Item 14 | 2                 | 3,3 | 5     | 8,3  | 23       | 38,3 | 29    | 48,3 | 24      | 40   | 15    | 25   | 7      | 11,7 | 9     | 15   | 4              | 6,7  | 2     | 3,3  | 2,80   | 2,56  |
| Item 15 | 2                 | 3,3 | 6     | 10   | 27       | 45   | 31    | 51,7 | 23      | 38,3 | 13    | 21,7 | 5      | 8,3  | 8     | 13,3 | 3              | 5    | 2     | 3,3  | 2,66   | 2,48  |
| Item 16 | 2                 | 3,3 | 7     | 11,7 | 19       | 31,7 | 21    | 35   | 24      | 40   | 12    | 20   | 11     | 18,3 | 18    | 30   | 4              | 6,7  | 2     | 3,3  | 2,93   | 2,78  |
| Item 17 | 6                 | 10  | 14    | 23,3 | 21       | 35   | 21    | 35   | 22      | 36,7 | 13    | 21,7 | 9      | 15   | 11    | 18,3 | 2              | 3,3  | 1     | 1,7  | 2,66   | 2,40  |
| Item 18 | 3                 | 5   | 13    | 21,7 | 26       | 43,3 | 23    | 38,3 | 20      | 33,3 | 9     | 15   | 5      | 8,3  | 15    | 25   | 6              | 10   | 0     | 0    | 2,75   | 2,43  |

Note: f: Frequency M: Mean %: percentage  
1 (Strongly disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly agree)

Item 1- I feel more comfortable and relaxed while learning a foreign language with computer.

Item 2- The time passes quickly while learning a foreign language with computer.

Item 3- It is hard to learn a foreign language with computer.

Item 4- My confidence increases while learning a foreign language with computer.

Item 5- It is quite enjoyable to learn a foreign language with computers.

Item 6- Computers give me the opportunity to learn a foreign language at my own pace.

Item 7- Computers provide me with the flexibility in terms of time to study a foreign language.

Item 8- I can study a foreign language in a planned way with computer.

Item 9- Computers facilitate my foreign language learning.

Item 10- I concentrate better while learning a foreign language with computers

Item 11- I have positive attitude towards using computers to learn a foreign language.

Item 12- Computer-based foreign language learning is more motivating than traditional classroom education.

Item 13- Computer based foreign language learning is more enjoyable than traditional classroom education.

Item 14- I learn a foreign language better with computer-based education than I do with traditional classroom education.

Item 15- Computer-based foreign language learning is more efficient than traditional classroom education.

Item 16- After some time, learning a foreign language with computers may turn out to be boring.

Item 17- Studying a foreign language with computers leads to an unsocial setting of learning.

Item 18- Computer-based language learning is not as satisfying as conventional classroom education.

The table above indicates the differences between the students' attitudes towards CALL before and after the study. When we take a look at the table, some changes stand out.

One of these changes can be observed in item 3 stating that learning a foreign language with computer is hard. By keeping in mind that this item was recoded and considering the mean values before ( $M=3,48$ ) and after ( $M=3,71$ ) the study, it can be said that they developed more positive attitudes, and after the study, 70% of students were of the opinion that computers facilitated the foreign language learning process (agree=51,7, strongly agree=18,3).

Another point that draws attention was that given item 4, it was clear that the percentage of students thinking that learning with computer made them feel confident rose to 55% after the study (agree=46,7%, strongly agree=8,3%) compared with the 41,7% recorded before the study (agree=25%, strongly agree=16,7). That means more than half of the participants believed that studying with computer increased their confidence, and that change could also be observed through the mean values of the item presented before ( $M=3,26$ ) and after the study ( $M=3,43$ ).

Moreover, the fact that the mean value of item 5 increased from 3,56 to 3,80 stands out. That is being the case, it can be stated that after using the program students developed better attitudes towards CALL, and 71,7% of the students found studying a foreign language with computer more enjoyable (agree=45%, strongly agree=26,7%).

When it comes to item 6 pointing out that computers give one the opportunity to study at his own pace, an increase in the number of the participants who are for this item draws attention, and it can be clearly seen that 78,4% of the participants agree that while studying with the computer, they can progress at their own pace (agree=46,7%, strongly agree=31,7%). Even before the study 70% of the students thought in the same

way (agree=46,7%, strongly agree=23,3%), but following the study there was an increase and that stands out.

After the study the mean value of item 7 rose to 3,93 up from 3,70, indicating that there was a positive improvement in the attitudes of students towards CALL in terms of time flexibility it offered. Before the study 65% of the students had the opinion that computers provided them with flexibility in terms of time (agree=45%, strongly agree=20%), and after the study the percentage of students sharing that idea increased to 76,7 (agree=46,7%, strongly agree=30%). As a result, it can be stated most of the students thought that they could study a foreign language with computers without any restrictions in terms of time.

As for item 9, when we take the former (M=3,50) and latter mean values (M=3,83) into account, it can be stated that students proved to have more positive attitudes after the study towards the opinion that computers facilitated learning a foreign language. A remarkable increase in the number of students favouring that item could be observed because before the study 48,3% of the students agreed with that (agree=35%, strongly agree=13,3%); however, following the study it turned out that 70% of students thought that computers made learning a foreign language easier (agree=40%, strongly agree=30%), so it can be seen that even before the study nearly half of the students had the same idea, but after studying with computer for some time, their number increased enormously.

Besides, the figures referring to item 10 indicate that before the study, 45% of the students (agree=40%, strongly agree=5%) stated that they could concentrate better while studying with computer, however, after the study, 51,7% of the students shared the same idea (agree=36,7%, strongly agree=15%). That showed getting engaged in computers had changed the ideas of the students in a positive way.

Although the items bearing positive attitudes towards CALL had high mean values before and after the study, the items comparing CALL and the traditional language learning displayed rather low mean values, and that situation can be viewed through the items in the above table. When we consider item 13 stating that computer-based language learning is more enjoyable than traditional one, it is clear that it had a low mean value (M=2,80) before the study, and after the study that mean value

decreased to 2,61. That meant according to students, traditional method was more enjoyable than computer-based one. Moreover, it can be seen that 53,3% of the students disagreed with that item after studying with computer for four months (disagree=40%, strongly disagree=13,3%).

Before the study 41,6% of the students disagreed with the item 14 pointing out that language can be learned better through computers (disagree=38,3%, strongly disagree=3,3%), and the percentage of students disagreeing with this item rose to 56,6% after they used the program for four months (disagree=48,3%, strongly disagree=8,3%). That means after using the computer-based program for some time, more than half of the students believed that they could not learn a language better via computers.

Moreover, item 15 indicates that before the study, 48,3% of the participants stated that CALL was not more efficient than the conventional classroom education (disagree=45%, strongly disagree=3,3%), and after using the program during the two-months study, 61,7% of the students disagreed with that item (disagree=51,7%, strongly disagree=10%), indicating that a great majority of students did not think that CALL was more efficient than traditional classroom education. That situation could also be viewed through the mean values of the item before ( $M=2,66$ ) and after ( $M=2,48$ ) the study because that the students' attitudes changed in a negative way was quite evident.

Another salient change that occurred after the study can be seen through the figures appertaining to item 17 which was recoded. Before the study 45% of the students said that computers created an unsocial setting of learning (disagree=35%, strongly disagree=10%), and after the study 58,3% of the students sided with that idea (disagree=35%, strongly disagree=23,3%). That shows students' attitudes developed in a negative way, and after the study more than half of them were of the opinion that CALL was bereft of social interaction that could be provided through traditional classroom education.

And the figures belonging to item 18, comparing CALL with traditional classroom education in terms of being satisfactory, indicated that before the study, 48,3% of the students did not see CALL as satisfying as the traditional classroom education (disagree=43,3%, strongly disagree=5%), and it can be seen that idea gained

steam after the study since 60% of the students stated that CALL was not as satisfying as conventional classroom education (disagree=38,3%, strongly disagree=21,7%).

#### 4.2.4 Differences between students' attitudes towards CALL before and after the study

**Table 31.** Paired-Samples T test for attitudes of students towards CALL before and after the study

| Measurement      | n  | $\bar{X}$ | S    | sd | t     | p    |
|------------------|----|-----------|------|----|-------|------|
| Before the study | 60 | 3,19      | ,550 | 59 | -,129 | ,898 |
| After the study  | 60 | 3,20      | ,689 |    |       |      |

P>0,05

No significant difference was observed between the attitudes of students towards CALL before and after the study ( $p=0,898$ ). It can be seen from the figures that students' attitudes towards the CALL before ( $M=3,19$ ) and after the study ( $M=3,20$ ) were quite similar, showing that no significant change occurred in students attitudes towards CALL after they used a computer program aimed at enhancing reading abilities of students.

#### 4.2.5 The comparison of students' attitudes towards the Internet-based computer program before and after study

**Table 32.** students' attitudes towards the Internet-based reading program before and after study

|         | Strongly disagree |     |       |     | Disagree |      |       |      | Neutral |      |       |      | Agree  |      |       |      | Strongly agree |      |       |      | M      |       |
|---------|-------------------|-----|-------|-----|----------|------|-------|------|---------|------|-------|------|--------|------|-------|------|----------------|------|-------|------|--------|-------|
|         | Before            |     | After |     | Before   |      | After |      | Before  |      | After |      | Before |      | After |      | Before         |      | After |      | Before | After |
|         | f                 | %   | f     | %   | f        | %    | f     | %    | f       | %    | f     | %    | f      | %    | f     | %    | f              | %    | f     | %    |        |       |
| Item 1  | 3                 | 5   | 3     | 5   | 5        | 8,3  | 4     | 6,7  | 9       | 15   | 19    | 31,7 | 36     | 60   | 24    | 40   | 7              | 11,7 | 10    | 16,7 | 3,65   | 3,56  |
| Item 2  | 5                 | 8,3 | 1     | 1,7 | 6        | 10   | 7     | 11,7 | 11      | 18,3 | 15    | 25   | 25     | 41,7 | 26    | 43,3 | 13             | 21,7 | 11    | 18,3 | 3,58   | 3,65  |
| Item 3  | 3                 | 5   | 1     | 1,7 | 6        | 10   | 4     | 6,7  | 7       | 11,7 | 12    | 20   | 29     | 48,3 | 35    | 58,3 | 15             | 25   | 8     | 13,3 | 3,78   | 3,75  |
| Item 4  | 3                 | 5   | 2     | 3,3 | 3        | 5    | 7     | 11,7 | 12      | 20   | 8     | 13,3 | 29     | 48,3 | 33    | 55   | 13             | 21,7 | 10    | 16,7 | 3,76   | 3,70  |
| Item 5  | 4                 | 6,7 | 3     | 5   | 17       | 28,3 | 18    | 30   | 6       | 10   | 12    | 20   | 18     | 30   | 20    | 33,3 | 15             | 25   | 7     | 11,7 | 3,38   | 3,16  |
| Item 6  | 3                 | 5   | 3     | 5   | 14       | 23,3 | 20    | 33,3 | 7       | 11,7 | 17    | 28,3 | 19     | 31,7 | 14    | 23,3 | 17             | 28,3 | 6     | 10   | 3,55   | 3,00  |
| Item 7  | 2                 | 3,3 | 2     | 3,3 | 5        | 8,3  | 2     | 3,3  | 9       | 15   | 7     | 11,7 | 21     | 35   | 30    | 50   | 23             | 38,3 | 19    | 31,7 | 3,96   | 4,03  |
| Item 8  | 3                 | 5   | 0     | 0   | 5        | 8,3  | 3     | 5    | 12      | 20   | 13    | 21,7 | 18     | 30   | 25    | 41,7 | 22             | 36,7 | 19    | 31,7 | 3,85   | 4,00  |
| Item 9  | 4                 | 6,7 | 0     | 0   | 7        | 11,7 | 7     | 11,7 | 11      | 18,3 | 17    | 28,3 | 31     | 51,7 | 24    | 40   | 7              | 11,7 | 12    | 20   | 3,50   | 3,68  |
| Item 10 | 6                 | 10  | 0     | 0   | 7        | 11,7 | 11    | 18,3 | 18      | 30   | 21    | 35   | 19     | 31,7 | 23    | 38,3 | 10             | 16,7 | 5     | 8,3  | 3,33   | 3,36  |
| Item 11 | 4                 | 6,7 | 0     | 0   | 7        | 11,7 | 4     | 6,7  | 6       | 10   | 18    | 30   | 29     | 48,3 | 33    | 55   | 14             | 23,3 | 5     | 8,3  | 3,70   | 3,65  |
| Item 12 | 3                 | 5   | 1     | 1,7 | 3        | 5    | 5     | 8,3  | 11      | 18,3 | 13    | 21,7 | 32     | 53,3 | 34    | 56,7 | 11             | 18,3 | 7     | 11,7 | 3,75   | 3,68  |
| Item 13 | 4                 | 6,7 | 1     | 1,7 | 1        | 1,7  | 4     | 6,7  | 10      | 16,7 | 13    | 21,7 | 24     | 40   | 32    | 53,3 | 21             | 35   | 10    | 16,7 | 3,95   | 3,76  |

Note: f: Frequency M: Mean %: percentage  
1 (Strongly disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly agree)

Item 1-This program increases my interest and motivation in reading.

Item 2-It helps me learn better.

Item 3-It enables me to improve my reading skills through various activities designed.

Item 4-It helps me comprehend reading texts easily.

Item 5-It helps me solve all the problems I encounter while reading a text.

Item 6-It provides me with satisfying explanations on grammar points I have difficulty while reading.

Item 7-It helps me learn vocabulary easily.

Item 8-It provides useful games to improve the vocabulary capacity.

Item 9-It provides me adequate translation if I have trouble while reading.

Item 10-It provides useful explanations on how to answers the question related to the text.

Item 11-It provides me with satisfactory statistical data to follow the improvements in my reading comprehension.

Item 12-The design of the program is very successful.

Item 13-I can use the program easily.

The table above indicates the discrepancies between students' attitudes towards the Internet-based computer program before and after they experienced it. Given the figures displayed in the table, it can be stated that there were some changes regarding the students' attitudes.

One of these changes can be seen in item 5 stating that the program helps the students solve all the problems they encounter while reading a text. At the beginning of the study 55% of the students gave positive answers to that item (agree=30%, strongly agree=25%), but after the study, that rate went down and 45% of the students displayed positive attitudes towards that item (agree=33,3%, strongly agree=11,7%). So it can be stated after getting familiar with the program, some students realized that the program did not appeal to all their needs while they were studying to improve their reading ability, and that change in their attitudes could be observed through the mean values of the item before ( $M=3,38$ ) and after the study ( $M=3,16$ ).

Another outstanding change can be seen in item 6 stating that the program provides students with satisfying explanations on grammar points they have difficulty while reading. At the outset of the study, 60% of the students agreed that the explanations provided on grammar points were satisfactory (agree=31,7%, strongly agree=28,3%); however, after the study 33,3% of students agreed on that point (agree=23,3%, strongly agree=10%). So this figure indicates that after using the program for a while, students changed their minds in negative way and they decided that the explanations on grammar points were not that satisfactory, and that change in students attitudes can also be seen through the mean values of the item before ( $M=3,55$ ) and after the study ( $M=3,00$ ).

As for item 8 stating that the program provides useful games to improve the vocabulary capacity, an increase draws attention when its mean values before ( $M=3,85$ ) and after the study ( $M=4,00$ ) are compared. That increase can also be observed through the frequencies of students' answers given to the questionnaire. Before the study 66,7% of the students thought that the program provided them with useful games to improve their vocabulary (agree=30%, strongly agree=36,7%), and that rate increased to 73,4% after the study (agree=41,7%, strongly agree=31,7%). That shows even at the beginning of the study, students found the program useful in terms of improving vocabulary and

after they deeply involved in it, these positive attitudes of the students were consolidated.

Moreover, when it comes to item 9, a positive change draws attention. At the beginning of the study the students displayed positive attitudes ( $M=3,50$ ), and judging from its mean value ( $M=3,68$ ), it can be stated that these positive attitudes of students strengthened after the study. That means at the beginning of the study, the students were satisfied with the translations provided by the program, and after using that program, their already positive attitudes improved.

When the items related to the computer program, used in this study, were evaluated, the above mentioned changes stood out. However, when the other items were taken into account no important change was encountered, and it was observed that students had positive attitudes towards the Internet-based reading program before and after the study.

#### 4.2.6 Differences between attitudes of students towards the Internet-based computer program before and after the study

**Table 33.** Paired-Samples T test for attitudes of students towards the Internet-based reading program before and after the study

| Measurement      | n  | $\bar{X}$ | S    | Sd | t    | p    |
|------------------|----|-----------|------|----|------|------|
| Before the study | 60 | 3,67      | ,666 | 59 | ,510 | ,612 |
| After the study  | 60 | 3,61      | ,605 |    |      |      |

$P>0,05$

When the students' attitudes towards the Internet-based reading program before and after the study were compared, statistically no significant difference was observed ( $p=0,612$ ). Before the study, the students had more positive attitudes towards the program ( $M=3,67$ ) compared with their attitudes ( $p=3,61$ ) after the study. But that little change was not statistically meaningful. So it could be stated that employing the Internet-based reading program during the study did not make any significant difference in students' attitudes.

### 4.3 Qualitative analysis

In this section, the data gathered through open-ended questions are analysed. The open-ended questions were employed for the purpose of eliciting some information about the attitudes of students towards CALL and an Internet based computer program employed to enhance reading comprehension. The responses of the participants were recorded and then transcribed. Afterwards, their answers were classified into two groups: the answers regarding CALL and the ones regarding the program they used through the study.

#### 4.3.1 Students' attitudes towards CALL

Students' attitudes were enquired through open-ended questions, and in this section, both positive and negative attitudes of them were presented.

After the study, students were asked what they thought about CALL, and some of the students expressed their positive attitudes towards it:

**Table 34.** The reasons why the students found the CALL useful

| Categories                          | Number of students | Total number of students |
|-------------------------------------|--------------------|--------------------------|
| Useful while learning language      | 40                 | 60                       |
| Flexible in terms of time and place | 11                 | 60                       |
| Enjoyable                           | 7                  | 60                       |
| Accelerates learning                | 4                  | 60                       |
| Motivating                          | 6                  | 60                       |

As can be seen from the table above, the students' responses revealed that many students (40/60) were of the opinion that computers were quite useful in terms of learning a language and it was evident from their answers that they favoured it as a helpful means of learning:

*“As the new generation is quite familiar with computers, I believe that using computers to help students learn a foreign language will be useful” (57)*

*“I believe that computer assisted learning will greatly contribute to learning English particularly in terms of consolidating the newly gained information” (13)*

Some students (11/60) in their responses to the questions also stated CALL provided them with the opportunity to study and learn a language without being bogged down in a strict schedule by letting them to engage in the learning process whenever they spared time and felt all set. This finding supports the results of the data analysis performed for item 7, stating that computers provide the learner with the flexibility in terms of time to study a foreign language:

*“In a traditional course, you have to follow pre-settled schedule, but with CALL you get the chance to study whenever you want”* (38)

*“That CALL provides us flexibility in terms of time and place facilitates the learning process”* (1)

*“We can study whenever and wherever we want. It provides us a flexible schedule”* (5)

Another point stated by some of the students (7/60) was that CALL was enjoyable for them, and this finding was in line with the results of the item 5 which clearly indicated that students found learning a foreign language with computers quite enjoyable:

*“I think that it is enjoyable and helpful, so it facilitates learning and practicing the language”* (20)

*“It gives us the opportunity to learn without getting bored”* (51)

Some students (4/60) also pointed out that one can learn faster with the assistance of computers:

*“We can learn a language faster by using a computer because every material or explanation needed are readily provided by the computers, so it facilitates the strenuous process of learning”* (38)

Moreover, some students (6/60) noted that they found CALL quite motivating compared with the traditional ones:

*“For someone who is determined to learn a foreign language it is quite useful because it motivates you by facilitating the learning process” (37)*

Students also mentioned the negative aspects of CALL:

**Table 35.** Students’ negative attitudes towards CALL

| Categories                                | Number of students | Total number of students |
|-------------------------------------------|--------------------|--------------------------|
| Unable go beyond being a supportive means | 18                 | 60                       |
| Lacks interaction                         | 5                  | 60                       |
| Gets boring                               | 3                  | 60                       |
| Difficult to concentrate                  | 8                  | 60                       |
| Not as effective as traditional education | 37                 | 60                       |

It is clear from the table above that although students regarded CALL useful, they (18/60) further stated that it could not be viewed as a main source of language learning process and that it should be used as a means of education, supporting the traditional language learning. Judging from that it can be said that participants embraced CALL, but they did not think that they could succeed in learning a language merely through it, and it could only support your traditional language learning process:

*“If it is maintained in line with a well-organized English course, it can be successful. Otherwise, I do not think that it will prove useful” (10)*

*“It is useful, but you get bored after some time and the explanations on the points that you have trouble may not be satisfactory. However, it is not like that in classroom. Teacher has the flexibility to properly respond to all the troubles that you may have during the class, so it can only be used as means that can support your classroom education” (4)*

Some of the students (5/60) stated that CALL lacked the interaction between teacher and the students, and this finding supports the results of the data analysis performed for item 17:

*“While using a computer, you cannot ask the questions that you have difficulty and need explanations, and you just rely on the restricted explanations supplied by the computer, so I think this is a prominent lack of CALL” (42)*

*“In my opinion, such a way of learning a language cannot be useful because it lacks face-to-face interaction that is an inherent part of learning” (40)*

Students (3/60) also stated that they got bored after some time while they were studying at computer and this finding supports the results of the item 16 stating that after some time, learning a foreign language with computers turns out to be boring:

*“I can learn better with books because computers may become boring and tiring after some time” (41)*

Moreover some students (8/60) said that they could not concentrate on the subject while they were studying via computers:

*“I do not favour studying through computer since I lose my concentration in front of the computers, but in a classroom, with a teacher you get concentrated” (4)*

Another point that stands out was that many students (37/60) thought that conventional classroom education was more effective than CALL, and computers could only be used as a support. This finding is in line with the results of the data analysis performed for item 15:

*“It is not like classroom education. Sure it is supporting, but cannot replace conventional classroom education” (47)*

*“We spend a lot of time with computers, and that is why I think it can be useful. However, I am of the opinion that it can only be useful if used along with traditional classroom education” (36)*

*“It cannot be as effective as classroom education as you can ask questions during a class, but on computer you have to follow what is offered to you” (27)*

*“Since primary school we have been used to learning via paper and pencil, so I admit that it is useful, but to some extent. There are some points where it can help me, but except for them I need a teacher, a sheet of paper and a pencil” (24)*

### 4.3.2 Students' attitudes towards the Internet-based computer program used in the study

The students were asked some questions to elicit information on their thoughts about the Internet-based reading program and its effects on enhancing reading comprehension. There were both positive and negative points.

The positive answers obtained from students are shown in the following table:

**Table 36.** Students' positive attitudes towards the Internet-based reading program used in this study

| Categories                                        | Number of students | Total number of students |
|---------------------------------------------------|--------------------|--------------------------|
| Facilitates learning vocabulary                   | 45                 | 60                       |
| Gives chance to repeat                            | 18                 | 60                       |
| Allow to study at one's own pace                  | 14                 | 60                       |
| Provides useful translations                      | 15                 | 60                       |
| Chance the ideas in a positive way                | 23                 | 60                       |
| Useful when no traditional education is available | 5                  | 60                       |
| Enjoyable                                         | 12                 | 60                       |

As for the positive attitudes, the results displayed in the table revealed that the most outstanding aspect of that program was its vocabulary studies. A great number of students (45/60) emphasized that the program was very useful in terms of improving vocabulary via diverse and well-prepared games. This result supports the results of item 7 stating that computers help one learn vocabulary easily:

*"It is very useful in terms of vocabulary since finding the meanings of unknown vocabulary is a gruelling task, but the computer helps me find them easily"* (9)

*"The vocabulary games make it more enjoyable, so I can learn easily. It is quite easy to attain the meaning of an unknown word while studying on computer"* (41)

*"The way that program teaches you vocabulary is very useful, and it does not drive you hard, and it teaches the vocabulary in an enjoyable way. I have used a few computer programs so far, but for me this one is much better than the others"* (47)

*“I can easily find the meanings of the words. When I looked up the words in the dictionary, I had difficulty finding their exact meanings, so that led to erroneous translations while studying a text and that made me lose my self-confidence” (36)*

Moreover, some students (18/60) pointed out that they were allowed to repeat the vocabulary many times:

*“The program was very useful in terms of repeating the words via different games. For me, the most challenging thing of learning a language is the chore of learning vocabulary. I hate repeating the same words, but that program gave me the opportunity to repeat them many times through joyful games” (14)*

Another point stated by the participants (14/60) was that the computer helped them to study at their own pace, and it should be stated that this finding parallels the results of the item 6 appertaining to the second part of the questionnaire:

*“It literally makes up for the incompleteness that we have. It also gives you the chance to repeat as many times as you wish, but actually it is not possible to do that in the classroom” (31)*

*“It gives me the opportunity to focus on the points where I have trouble. I can study the subjects as many times as I want, but in classroom, the teacher cannot wait till you learn a topic. They have a pre-set schedule and you have to follow it” (6)*

*“It gives you the chance to individually study and learn the subjects that you cannot understand during the class, and allows you to embrace the information and learn it at your own pace” (10)*

The results also indicated that participants (15/60) thought that the translations provided by the computer were quite satisfactory, and they really benefited from them. It should also be stated that this finding supports the results of the data analysis performed for item 9 stating that the internet-based computer program provides adequate translation:

*“The program provided me with satisfactory translations while I was reading the texts. It was very helpful when I had difficulty. It helped me see the points that I could not notice on my own” (1)*

*“The program first provides the vocabulary, and then it makes you translate the sentences. Afterwards, it gives you the proper translation, so we can make comparison and see the points where we make mistakes” (28)*

Moreover, the participants (23/60) reported that after they used that program, their attitudes towards using a computer program to enhance the reading skill have changed in a positive way:

*“I had never thought of using computers to learn English; however, after using it I realized that it was quite useful. I think it can be used as a supplementary means of education as it facilitates learning in various ways” (22)*

*“I had prejudices against that sort of computer programs before using this program; nevertheless, when I started to study paragraphs, I decided to try it. After some time I noticed that it was very useful in terms of improving reading” (11)*

*“After using that program, I now have more positive attitudes towards Computer Assisted Language Learning. It facilitated my learning to a great extent. I just tap at the computer, and reach the meaning of a word, so I do not have to look the words up in the dictionary for long hours” (27)*

Another point stated by the participants (5/60) was that the program could be effectively used if the learners did not have access to a traditional learning setting:

*“If you do not have the opportunity to enrol in a language course, that kind of a program could be very helpful to you” (53)*

Some students (12/60) also noted that learning through that program was quite enjoyable because of the games and some other activities, and this finding supports the data analysis performed for item 5 belonging to the second part of the questionnaire:

*“It gives me the opportunity to learn a foreign language without getting bored” (56)*

The results also revealed that besides having positive attitudes, the participants had some negative feelings, as well.

**Table 37.** Students' negative attitudes towards the Internet-based reading program used in this study

| Categories                                | Number of students | Total number of students |
|-------------------------------------------|--------------------|--------------------------|
| Not as effective as traditional education | 37                 | 60                       |
| Lack adequate explanations for each point | 14                 | 60                       |
| Not all words included                    | 10                 | 60                       |
| Lack of adequate explanations for grammar | 8                  | 60                       |
| Have some technical problems              | 6                  | 60                       |
| Challenge of access to the Internet       | 5                  | 60                       |

Their responses indicated that a great majority of students (37/60) stated that although such Internet-based computer programs were quite helpful for a student to improve their reading skills during the course of English learning, it could never overtake the traditional classroom setting as a means of education, but could be supportive, and this finding supports the results of the data analysis performed for the 15<sup>th</sup> item of the second part of the questionnaire:

*“It is partially useful, yet learning from a teacher is my priority. If your fundamental knowledge is in place, then that sort of a program may enhance it, but if you lack them you absolutely need a teacher”* (26)

*“It can be an additional study, but the traditional methods are more useful. It can only be supportive”* (22)

*“Yeah! It can be helpful to some extent, but there is a frontier, and it does not take you beyond it. Therefore, you need a teacher. That is, no matter how good it is, it cannot replace a teacher”* (47)

Another point highlighted by the students (14/60) was that the program lacked the quality to provide the students with proper explanations on every point where students had difficulty. The responses of the participants indicated that although they found the program useful, they were of the opinion that it lacked adequate explanations when it comes to grammar and multiple-choice questions:

*“There were paragraph studies, and a few multiple choice questions followed each paragraph. The vocabulary and translation activities provided were very helpful, but when it comes to answering the multiple-choice questions, the explanations on how to solve the questions were inefficient. More detailed explanations could be given” (47)*

*“I liked the program in terms of vocabulary exercises, but the rest were not that good, and the explanations were limited” (26)*

In addition, students (10/60) pointed out that even though the program provided them with various ways to study vocabulary, it did not focus on all the words that students might have trouble with. It only handled some words, ignoring the rest:

*“We did not have the chance to learn different words with the help of the program. We could learn and practice solely the word pre-determined by the designers of the program; therefore the vocabulary capacity of the program was limited” (53)*

*“While studying by myself, I looked up many words in the dictionary, and therefore I could learn a lot of words; however, while I was studying with this program, I was able to learn a limited number of words because only some words were highlighted and practiced in each paragraph” (26)*

As regards the grammar, some students (8/60) stated that there were explanations related to the grammatical points that could be needed while studying a paragraph, but they were inadequate:

*“I felt that the program did not support me in terms of grammar because although I study for a long time I still had difficulties in understanding the grammatical points even though I felt that I had improved my vocabulary” (23)*

*“The program was inadequate in terms of teaching grammar. Actually, there were some explanations, but I couldn’t understand just by reading. I think I need a teacher to explain them to me” (22)*

Moreover, some students (6/60) mentioned that they often encountered the same kinds of technical problems while using the program:

*“It was not satisfactory given to its speed. It was running quite slowly, and sometimes there is a disconnection. As a computer buff, I can say that it had technical problems” (25)*

Another point spoken of by the students was the challenge of access to the Internet connection. Some of the participants (5/60), particularly the undergraduates, said that they did not have the Internet connection, so the program was not useful for them:

*“In Turkey, using the Internet is rather costly. Therefore, I cannot afford to use it. Because of that, that sort of programs requiring the Internet connection cannot be useful to me” (31)*

*“I stay in a dormitory, and therefore, it is not that easy to reach the Internet connection. That is why I could not use the program effectively” (36)*

## CHAPTER V

### DISCUSSION

#### 5.1 Presentation

This study was made for the purpose of getting an insight into the attitudes of students towards improving their reading skills through an Internet-based computer program in the school of foreign languages at Dicle University, and the study also aimed to indicate whether the students' attitudes towards utilizing computers to enhance reading skills changed after they used an Internet-based computer program for four months.

Sixty participants attending a course prepared by school of foreign languages at Dicle University took part in this study and data collection process was set off by administering a questionnaire consisting of three parts. The first and second part were administered just before the study commenced to gather some background information about the students and find out what their attitudes were towards CALL. Then at the outset of the study, the students were introduced to an Internet-based computer program designed to improve their reading skills, and after a two-week period of getting familiar with it, they were administered the third part of the questionnaire in order to unveil their attitudes towards the program they had just started to use. The study lasted for four months and during that time frame the students continued their course. They also had the opportunity to use that program. After the study ended, the second and third parts of the questionnaire were administered again to the students to see what their attitudes were towards CALL and the program they used during the study. Additionally, all the students were interviewed to get a deeper insight into their attitudes towards CALL and the Internet-based computer program.

Both qualitative and quantitative techniques were employed to analyse the data gathered. First, all the data gathered through questionnaire before the study were analysed and the mean scores of the students were calculated to find out their attitudes

towards CALL and the program they were going to use. Then to find out whether their attitudes varied according to some variables, *t*-test and ANOVA were run and the results were finely transcribed. After the study was completed, the same questionnaire was administered and the mean scores of the students were calculated again to see what their attitudes were after the study. Then, *t*-test and ANOVA were used again to find out whether students' attitudes differed when some variables were taken into account. Afterwards students' mean values obtained from the pre and post-questionnaires were compared to see if there happened to have any possible differences in their attitudes towards CALL and using computer programs to enhance their reading comprehension. Finally, the students' answers to the interview questions were analysed via qualitative analysis procedures.

In this chapter the results of the analyses will be discussed by associating them with the relevant literature. Afterwards, the pedagogical implications and limitations of the study will be presented, and finally, some suggestion for further studies will be made.

## **5.2 Results of quantitative analysis**

### **5.2.1 What are the attitudes of students towards CALL before the study?**

The analysis of data gathered from the first administration of the second part of the questionnaire evaluating the attitudes of students towards CALL revealed that at the beginning of the study the students attending an English course at Dicle University had neutral attitudes at the outset of the study. This may be related to students' not having enough experience with computers as a means of language education because the data obtained from the first part of the questionnaire proved that nearly all of the students had not used computer to learn English before.

According to the data gathered from the questionnaire, it has been proved that the students had neutral attitudes towards CALL, but when the items constituting the second part of the questionnaire were considered, it could be seen that some items stood out with different mean values. The item with the highest mean value revealed that the students thought that computers gave them the opportunity to learn a language at their own pace. That was because they could adjust the learning process according to

themselves. As a result, It could be stated that they did not have to try to fit in a course that they could not follow with ease. The results also indicated that the item stating that the computers provided the students with the flexibility in terms of time to study had one of the highest mean values. That may be related to the fact that in today's world people can hardly find time to follow a fixed and strict program as they lack adequate amount of time to spare, so computers help them to learn whenever they can find enough time to study.

When we consider the other items, it can be seen that a great many students were of the opinion that computers created an enjoyable learning atmosphere. This may be put down to richness of striking visuals, activities and games that can be provided by the computers. Moreover, the answer to the questionnaire proved that the students thought that computers facilitated language learning. The reason for that may be traced back to the fact that while studying with computers, the students do not have to do some gruelling and time-consuming tasks like looking up the words in the dictionary or trying to translate the texts. Computers do all sorts of those grinds that used to take hours for students a couple of decades ago and relieve the burden of studying English for hours. That is why computers are believed to make learning a language easier. Furthermore, the students' answers demonstrated that students felt comfortable and relaxed while studying a foreign language with computers. This idea was supported by Liu, Moore, Graham, and Lee (2002: 263) who noted that students' anxiety were reported to be lower when they used the technology. Bell and LeBlanc (2000:282) were other researchers who concluded that students were comfortable reading on the computer screen and would like to do more reading in a computerized format. That a student has the chance to study on his/her own without being seen by the teacher and his/her classmates may allow him/her to study free of the fear of being embarrassed before the people because of making some sort of mistakes or displaying his/her lack of knowledge that may cause some sort of humiliation in the classroom setting. Therefore, the student can study before the computer in a relaxed and comfortable way without any possible sort of anxiety. A similar outcome stands out in a study by Marzban (2011: 9) in which he concluded that students were free from anxiety and there was no peer pressure which inhibited them from language learning easily. Another reason that may have let students to study comfortably with computers might be that student could study

with their computers at their homes without the necessity of going to a course after a tiring day at work. That means computers give the students the opportunity to study wherever they want.

Although the students appeared to have neutral attitudes towards CALL at the beginning, after comparing CALL and traditional language learning, they evidently chose the latter. That means CALL was not considered as efficient as the traditional language learning if the students' answers to the questionnaire were taken into account. In line with that finding, the results also revealed that students did not find CALL as satisfying as the traditional language learning. Perhaps, that was because they could not get what they wanted from the computers because of computers' inability to be flexible enough to meet all their needs through the process of language learning. A computer could only provide the students with a pre-set and limited amount of data, activities and facilities. However, in classroom, a teacher can reorganize the learning setting and meet the needs of the students properly. Besides, it turned out the students were of the opinion that computers were starkly bereft of the social interaction that could be easily attained in a traditional language learning environment. While studying with a computer, a student only has the chance to interact with it to some extent, but in a classroom setting, there are a lot of people around, and this creates an atmosphere where a student can achieve a satisfying level of social interaction both with the teacher and the other students.

### **5.2.2 How do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?**

The results of the present study revealed that statistically no significant difference was displayed among the students in terms of the relationship between their attitudes towards CALL and some variables like gender, age, education level, status of employment, duration of language learning, frequency of engagement in CALL, level of computer skills and previous experience in CALL. However, only one variable stood out, revealing that there was significant difference among students' attitudes towards CALL when it comes to their class level which, to some extent, indicated their

proficiency in English. The results showed that there was a significant difference between the attitudes of students attending the high-level class and the ones participating in the basic-level class. The students in the basic-level class had much more positive attitudes towards CALL than the ones in the high-level class. This difference may have resulted from their level of experience in CALL because the students in the high-level class were more experienced in terms of language learning processes, so during some of these processes they might have had some sort of experience in CALL, and after that experience, negative attitudes might have developed owing to some failures or disappointments. On the other hand, the students in the low-level class were quite new to English and had nearly no idea about what the process of language learning was like, so at the beginning of the study, the idea of CALL may have seemed quite attractive to them and aroused positive feeling.

### **5.2.3 What are the attitudes of students towards employing the Internet based computer program to enhance their proficiency in reading before the study?**

The results revealed that students had positive attitudes towards the Internet-based reading program at the outset of the study. That may be put down to some facilities that are provided to the students through that program. For example: looking up words in a dictionary is quite a gruelling work. As the program frees students from doing that hard work by giving the meaning of the word readily, it may seem appealing to them. Although in total, the students had positive attitudes, some points stood out when we considered their mean values. Judging from the statistic data obtained through the questionnaire, it could be pointed out that students believed that the computer program helped them learn the vocabulary easily. A similar outcome was reported by Mahmoudi, Samad and Razak (2012: 497) stating that students' vocabulary increased significantly after using computers in their learning. Moreover, the students were of the opinion that the computer program provided useful games to improve their vocabulary capacity. During the language learning process, one of the most gruelling tasks includes looking up words in the dictionary. For a beginner it takes hours to find the correct meanings of the words. But, while using that program the students can reach the meaning of any word just by clicking on it, so it saves time for students and facilitates their learning. Besides another problem that the students encounter while learning a

language is that they have difficulty in memorizing the newly-learned words and they forget them easily. That program tries to help the students repeat and memorize those words easily through various activities and games without getting bored. This is similar to Wang's (2011: 15) finding that the textual, visual and aural website contents such as 'games' helped to enhance not only students' learning interest but also students' English performance. So that is why the students were quite satisfied with the program in terms of learning vocabulary.

The results also indicated that students believed that the program improved their reading skills through various activities and helped them comprehend the text easily. That was because the program included different facilities. For example, students could have an easy access to the meanings of the unknown words, the correct translations of the sentences and the information on grammar points causing problems. That means the program facilitates the language learning process in many ways and help the students learn easily and quickly. A similar outcome stands out in Lim and Shen's study (2006: 227) which reveals that the integration of technology into the English reading classroom enhanced learning by providing more opportunities for exposure and interaction with a variety of engaging learning materials and tasks.

As for the design of the program, it was obvious that the students were satisfied because they stated that they could use the program easily and the design of the program was quite successful. That means at the beginning of the study, they did not encounter any difficulty in using the program and they liked the design of the program.

Although students hold positive attitudes towards most points, there were some points that they were undecided about. The students stated that even though the program helped them to overcome most of the problems they run into while they were reading a text, it failed to solve some of them. That means the program could not meet all the needs of the students as it was programmed to do some certain tasks, and it could not go beyond them to adjust itself to the different needs of an individual. The students also pointed out that the explanations given to the questions related to the texts were not satisfactory enough to make the students learn why an option can be the correct answer of a question.

To conclude, it is clear that while the students had neutral attitudes towards CALL, they bore positive attitudes towards the Internet-based reading program in the beginning of the study.

#### **5.2.4 What are the attitudes of students towards CALL after the study?**

The students' responses to the questionnaire that was applied for the second time after the study were quite similar to the ones elicited before the study. Although the mean scores of the items differed slightly from the former ones, the items drawing attention did not change. That means the students' attitudes were almost the same after the study. Besides, when the total mean value was taken into account, it could be concluded that the students still had neutral attitudes towards CALL after the study. That clearly indicated that there was no significant change in their attitudes even though they got engaged in the program for four months during their course.

The results indicated that the item stating that the computers give the students the chance to study at their own pace got the highest mean value. The reason may have been that some students could learn quickly, but some were slow learners, and that program gave the students the chance to study in line with their own learning speed. Another point that drew attention was that the students stated that the computers gave them the flexibility in terms of finding time to study. So it can be concluded that following a scheduled program may be hard for students, but if you study with a computer, you are not required to adjust yourself to a fixed program and you can study whenever you can spare time. The results also indicated that students were of the opinion that computers facilitated the learning process. Similarly Mahmoudi, Samad and Razak (2012: 497) revealed that most of the students reported generally positive attitudes towards computers and stated that computers make their learning easier and enjoyable. Today, while you are trying to learn a foreign language, computers can perform many tasks like giving the exact meaning of the unknown words, providing the correct translations of the texts or helping the students to practice easily and joyfully, and that may be the reason why students believe computers facilitate their foreign language learning. Another point that was emphasized by the students was that the computers made learning a foreign language enjoyable. The reason for that may be that the computers employ visual and auditory means to convey information. This idea is

supported by Talebinezhad and Abarghoui (2013: 334) stating that visual information which is easily presented via computers is supportive in students reading comprehension.

Besides the positive attitudes the students also bore some negative attitudes towards CALL after the study. These negative attitudes were mostly displayed when comparison between CALL and traditional classroom education were made. That is being the case, it could be concluded that although students had some positive attitudes towards CALL, they prefer traditional classroom education to CALL. This situation is supported by the answers of the students elicited through the questionnaire. Students stated that computer-based foreign language learning was not as satisfying as traditional classroom language learning. Moreover they pointed out that studying foreign language with the help of computers learning led to an unsocial setting of learning. The reason for this may be that in classroom education you have a lot of people around with whom you can interact, but if you are at the computer, you may feel the lack of interaction. Powell (1998: 186) supported that finding by stating that self-access could lead to isolation and avoidance of contact. Another point that should be emphasized was that the students believed that the computer-based language learning was not more efficient than traditional classroom education. That clearly shows that they did not benefit from computers as much as they did from traditional classroom education. Moreover, another item stating that students can learn a foreign language better with computer-based education than they do with traditional language education had quite a low mean value denoting that students did disagree with that view, and that item also supports the idea that computers are not more efficient than traditional classroom education.

To conclude, it can be understood from the results that although students had some positive attitudes towards CALL after the study, they clearly stated that computers could not substitute for the traditional classroom education when it comes to foreign language learning.

### **5.2.5 How do their attitudes differ according to some variables (Gender, Age, Education Level, Status of Employment, Duration of English Learning, Exam Scores of Students, Class Level, Frequency of Engagement in Computer, Level of Computer Skills, Students' Previous Engagement in CALL)?**

After the study, the answers of the students to the questionnaire were analysed in terms of some variables to get an understanding of whether the attitudes of the students displayed any difference when some variable were taken into account. The results revealed that the attitudes of students statistically proved to bear no significant difference when they were analysed according to the variables. Before the study, only difference that was observed among students was related to their class-level, but after the study, there was no such difference. This finding supported Rahimi and Yadollahi's (2011: 171) assertion that students who study English as a foreign language show positive attitudes towards CALL application and language learning itself, regardless of some personal variables such as age, gender, and computer accessibility.

### **5.2.6 What are the attitudes of students towards employing the Internet based computer program to enhance their proficiency in reading after the study?**

After the study, the students had positive attitudes towards the Internet-based reading program when the total mean value was taken into account, and some items with relatively higher and lower mean values drew attention. The item with the highest mean value indicated that most of the students thought that the program helped them learn the vocabulary easily. That means the students were quite satisfied with that program as they believed that it helped them learn vocabulary easily. Moreover another item stating that the program provides useful games to improve vocabulary capacity also got the second highest mean value, consolidating the item afore touched on. That is being the case, it could be concluded that according to the students, the program was quite useful in terms of learning vocabulary. The students' being complacent about the program may have resulted from the fact that it provided the meanings of the unknown words and let the learner practice them through various enjoyable games and activities thereby freeing them of the strenuous process of learning vocabulary. Li (2010: 271) also supported this finding by stating that CALL programs had considerable promise in promoting extensive reading and vocabulary learning. Besides, the results indicated that

the students were of the idea that they could improve their reading through diverse activities, so it could be inferred that a wide variety of activities were included in the program to enhance the reading ability of students, and another point that was emphasised by the students was that the program was so effectively designed that they did not encounter any difficulty while using it.

On the other hand, students' answers made it clear that successful as this program was, it could not meet all the needs of the students while they were trying to enhance their reading. The program included a lot of activities and games, but a great proportion of those were focused on teaching vocabulary, ignoring the aspects like grammar and translation. That is being the case, there stood out a deficit in terms of activities and explanations on grammar or translation, while the process of vocabulary learning was facilitated. That lack was justified by the low mean value of an item stating that the program provided satisfying explanations on grammar points that the students had difficulty. In addition, the results revealed that students believed that the explanations on how to solve the questions related to the text were insufficient, in that after reading the explanations provided, they could not clearly understand why a particular option must be chosen as the correct answer. So it can be stated that the program had fairly helpful facets, however, when evaluated holistically, some sides of the program were not that well-designed and they did not satisfy the students. For instance, as for improving vocabulary it proves useful, but when it comes to grammar it cannot be as useful as anticipated. That means it can be efficient in developing reading ability to some extent.

#### **5.2.7 Is there a significant difference between the attitudes of students towards CALL before and after the study?**

The results of the questionnaires, applied before and after the study, were compared, and that comparison revealed that there was no significant difference when considered as a whole. However, some changes were quite outstanding when the changes were evaluated on the item base.

Before the study students had positive attitudes towards the item stating that it is easy to learn a foreign language with computer. However, after the study, that positive

attitude of them strengthened. That means using that program for four months contributed to their attitudes in a positive way, and they thought that studying with computers facilitated foreign language learning. Perhaps that is because they found out that most of what they needed while learning a language were provided by the computers. Another point that captured the attention was that before the study, students had neutral attitudes towards the notion that one felt more confident while studying with the computer. However, after the study, it was quite clear that students developed positive attitudes, and they agreed that while studying with computer, their confidence increased. The reason for that may be traced back to the anxiety of making mistakes in the classroom and therefore being embarrassed in front of people. However, when you are at the computer, you have no such worry. This idea is supported by Al-mansour and Al-shorman (2012: 55) who stated that using computer instruction makes students become less shy of committing mistakes, which encourages them to learn much better and then improve their achievements.

The results also revealed that at the beginning of the study the students agreed that learning a foreign language via computers was enjoyable and it was quite obvious that two-month experience with computers added this because after the study; it could be observed that their ideas regarding that point remarkably improved in a positive way. The fact that the computers use visual and auditory elements overwhelmingly and effectively may be the reason why students find learning a foreign language enjoyable through computers. The results also revealed that before the study, students held that computers gave them the opportunity to learn a foreign language at their own pace, and that notion seemed to have strengthened at the end of the two-month period. This was similar to Liu, Moore, Graham, and Lee's (2002: 263) finding that students generally reported enjoying the autonomy of working alone and at their own pace supported by computer-based technologies. One of the most outstanding results of the study was that students favoured computers since they believed computers gave them the opportunity to learn a foreign language at a pace that could be in line with their level of understanding. Al-Mansour and Al-Shorman (2012: 55) also argued that computers depended on programs that were based on individual learning and consider the level and pace of the individual. As for finding enough time to learn a foreign language, students showed their complacency with computers. The students already agreed that computers

provided them with flexibility in time at the outset of the study, and their attitudes displayed a positive improvement at the end of the study. While studying a foreign language with computers, there is no worry about missing the classes as in the traditional classroom education since the lessons can be studied or repeated whenever the time is available, so that is the reason why students endorsed the idea that computers provided flexibility in terms of time to study.

The results also revealed that at the beginning of the study, students believed that computers made it easier to learn a foreign language, and that notion strengthened during the course of the study. That means the facilities that were provided by the computers relieved the burden the students carried while they were trying to learn a foreign language. Another point that stood out was that the students' attitudes changed in a positive way as for concentration. At the end of the study, the students had more positive attitudes towards the idea that they could concentrate better while they were studying a foreign language with computer.

On the other hand, some negative changes were observed in the attitudes of students when their answers to the questionnaires were evaluated. It was quite outstanding that most of those negative attitudes were observed when CALL was compared to traditional classroom education. So it could be concluded that although students found the computers quite helpful for learning a foreign language, they did not think that they were practicable enough to replace the traditional classroom education.

Before the study, students displayed their neutral attitude towards the item, stating that CALL is more enjoyable than the traditional education. However, following the study, it was quite clear that there was downturn in their attitudes, and they were on the verge of having negative attitudes. That shows after using computers for some time, the students got bored with it. Moreover, at the beginning of the study, students were undecided about whether they could learn a foreign language better with the help of computers, but after studying with computers for four months, they developed a negative attitude towards that notion. The reason for that may be put down to their lack of experience before the study, but after spending some time studying with computers they believed that they could not learn better with computers. Another point that is worth mentioning is that the students believed that studying with computers created an

unsocial setting of learning. They were undecided about that before the study, yet having a two-month experience with computers changed their ideas in a negative way. It may be against human nature to learn without a social interaction, and that may be the reason for that. In addition, the results elicited from the questionnaire administered after the study revealed that the students disagreed that CALL was as satisfying as traditional classroom education although they were undecided about that before the study. The reason for that may be various but it was clear that after getting involved with the computers, they developed negative attitudes towards them.

All in all, students were satisfied with the computers in terms of using them to learn a foreign language, but it was evident from their attitudes that computers could only be helpful, and could not substitute for the traditional way of classroom education.

#### **5.2.8 Is there a significant difference between the attitudes of students towards employing the Internet-based computer program to enhance their proficiency in reading before and after the study?**

Students' attitudes towards the Internet-based reading program were evaluated both at the beginning and at the end of the study. When the results of the both evaluation were compared, statistically no significant difference was observed. However, when the comparison was evaluated on the basis of items in the questionnaire, some changes stood out.

At the beginning of the study, students agreed that the games provided to improve vocabulary capacity was useful, and that idea strengthened after they got involved with this program for four months. The idea is also supported by Esit (2011: 224) who argues that reading activities with a computer program have proved to have positive effects on both learners' vocabulary learning and their attitudes towards the use of CALL. One of the biggest troubles the students encounter while learning a language is learning vocabulary because finding proper meanings, repeating and memorizing them takes hours for a student. As that program helps the students during that gruelling process, it may cause the arousal of positive attitudes. Another point where a positive increase in the attitudes of students could be observed was the translation. It was obvious that after the study, the students had more positive attitudes towards the idea

that the program provides adequate translation if the students have trouble while reading. So it can be stated that students were satisfied with the translations provided by the program.

On the other hand there were some attitudes changes that occurred in the negative way. At the beginning of the study, students almost agreed that the computers could help them solve all the problems they encounter while reading a text. Nevertheless, at the end of the study they disagreed with that. So it was clear that after employing the program for some time, they decided that it could not meet all their needs. Furthermore, the results of the comparison revealed that at the outset of the study, students believed that the explanations on grammar points were satisfactory, but the results elicited from the questionnaire administered after the study showed that they were undecided as to whether the explanations on grammar points were sufficient or not. The reason for that may be put down to computer's inability to respond all the needs of the students. Computers are loaded with some specific data, and it can only provide the users with those, so it is clear that computers cannot give you more than they have. That fact may have disappointed the students when they started to get the same explanations even though they were looking for something different.

### **5.3 Results of qualitative analysis**

#### **5.3.1 Results of interview on students' attitudes towards CALL**

Following the questionnaires, interviews were conducted with all the participants to get a deeper insight into their views on CALL. The answers of the students were compiled and categorized, yielding both their positive and negative attitudes towards CALL. The most outstanding point was that the results of the interviews were quite in line with the results obtained from the questionnaires.

Judging from the answers of the students given to the interview questions, it can be clearly seen that a great majority of students believed that computers were useful while learning a foreign language. This outcome is quite consistent with the finding of Abanomey (2013: 9) which showed that the Internet-based technologies were increasingly being integrated into daily life; and there were new web-based products, strategies and theories being developed each day making it a useful educational tool

inside language teaching classrooms. That means when considered as a whole, the computers were regarded as helpful in terms of learning a foreign language. In the study by Talebinezhad and Abarghoui (2013: 334) it was noted that students had positive attitudes towards integrating CALL into the curriculum in general and had positive attitude towards CALL for listening and reading. Furthermore, Almekhlafi (2006: 136) maintained that CALL users had a positive attitude towards using CALL and had a high intention and satisfaction to use it in the future. That may be put down to various facilities that it provides because these facilities dwindle the challenges of learning a foreign language. Moreover, the flexibility provided for the students in terms of the time and place was emphasized. Many students stated that they could study whenever they were able to spare some time without having to fit in a strict schedule, and that may be one of the reasons why they appreciated computers. A similar outcome was reported by Souleyman (2009: 275) who maintained that CALL provided learners with more freedom and choice that could be translated into a perception of freedom and a better level of involvement into the learning process. Another point that was brought to the forefront was that studying a foreign language with computers was enjoyable. Students stated that they could learn a foreign language with computers without getting bored. Because the computers can make use of different games and activities supported by visual and auditory elements, and because it can provide the students with the convenience of studying at any comfortable place like their homes, the students may find it quite enjoyable to learn a foreign language with the help of computers. This finding of the study also supports Dreyer and Nel's (2003: 362) assertion that students can access resources at their own time and within the comfort of their own rooms at the residence or at home. In addition to those points, some of the students also pointed out that computers accelerated learning process. Some tasks like looking up the unknown words may take hours for students; however, with a computer in hand it only requires a click on the word. That means the computers save your time and shorten the duration that will be spent on studying English. So it may be maintained that computers accelerate foreign language learning. Some of the students also suggested that they were more motivated while studying with computers. In a classroom, you cannot be alone, so many things may catch your attention, leading up to disruption of your concentration,

and however, before computer you have the chance to be alone. That may be the reason why students find studying with computers more motivating.

On the other hand, many students stated that computers could only support the language learning process. They believed that computers could not replace the traditional classroom education and further stated that they should be used to support a conventional program that was followed. This finding also confirms the point made by Jimin (2007: 113) that machine can never take the place of man, and CALL is a great approach, but not a sole approach in language teaching and learning. Moreover, some students emphasized the lack of interaction that they experienced while they were studying in front of computers. So it was clear that they needed some sort of interaction while learning something, and computers could provide this to some extent that could not be as intense as it was in a traditional classroom education. The responds of a few students also indicated that they got bored after a while. At the outset of the study, it seemed quite exciting for them, but later it turned out to be boring. The reason for that may be that the students were exposed to the same sort of games, activities or explanations all the time and those may have initially been interesting, but later turn out to be boring. Some of the students also set forth that they had difficulty concentrating while they were studying with computers. Actually, each one of them had their own reasons for that, but there was an outstanding fact that they were used to learning from a book, and it was some sort of habit for them. As they had always learned from book, it seemed hard for them to learn from computer screen. As it was confirmed by the results of the questionnaires, the students put forward that CALL could not be as effective as conventional classroom education as for foreign language education. Although they quite appreciated the usefulness of computers in language teaching when considered as a whole, they clearly stated that computers could not be as effective as classroom education with the help of a teacher. The reason may be the limited potential of computers as they can only do what they are programmed to do, so they can only be helpful on these aspects, but if the needs of students go beyond their capacity(sure it goes most of the time) they cannot meet them. A teacher in the classroom, however, may adjust him/herself to the changing conditions and optimize the resources according to the needs of the students.

### **5.3.2 Results of interview on students attitudes towards the Internet-based computer program**

Following the study, all students were interviewed, and their ideas about the computer-based program were enquired into. That the responses elicited were mostly in line with the results obtained from the questionnaire drew attention. Sure, both positive and negative comments were observed, but in general, it was clear that they appreciated the assistance that was provided by that program during the process of language learning.

The most prominent point emphasized by a great majority of students, as it was in the questionnaires, was that the program facilitated learning vocabulary. Almost all of the students stated that the program profoundly helped them learn the unknown words. The reason may be that students could find the meanings of the words easily, repeat them through diverse games and study the words that were highlighted as important via different activities. So it could be stated that as the programs freed them from the strenuous task of learning words to some extent, the students were profoundly satisfied with the program in that sense. Another point that can support the above mentioned subject was that nearly a third of the students stated that the program gave them the opportunity to repeat the newly learnt words. As mentioned above, the program provided a wide range of games from hang-man to puzzle, so students could repeat the words by playing games, and that helped them repeat and learn the unknown words without getting bored. Those games were appreciated by many students because learning new word is quite a hard and boring task, but this program helped the students learn them relatively in a more enjoyable way, increasing the chance of success. Peterson (2009:89) also supported this idea, stating that participation in gaming and simulation may facilitate aspect of second language learning

Some students also emphasized that the program allowed them to study at their own pace. They stated that they sometimes missed the lessons or could not understand the subjects in the first place, and they further pointed out that it was not always possible to stop the class to ask the teacher repeat the topic because of the disturbance it might cause for the other students. Therefore they say that computer helped them to repeat the subjects again and again till learnt. So it could be concluded that following a strictly

scheduled course program may not always be easy because that sort of course programs are generally compact and aimed at teaching the most in a limited time, leading to a fast progressing learning atmosphere, and that kind of a course may not appeal to everybody as some are slow learners while others are fast. That is being the case, computer programs may prove to be useful as they let the learners to progress as much as they are able to without rushing them. This is in line with Al-mansour and Al-shorman's (2012: 55) finding that using computers allows the students to repeat the same piece of information or drill as many times as necessary for them to understand.

Another point that the students mentioned was that the computers provided them with helpful translations when they needed. They emphasized that those proper translations of the texts provided by the program helped them understand the sentences they had difficulty, and many stated that probably, they could not have understood some sentences without such help. So it was quite clear that the translations presented by the computer program played an important role while the students were trying to improve their reading skills because it functioned like a feedback, giving the students the opportunity to check their mistakes and learn how to translate. A similar outcome is presented in the study conducted by Chang and Hsu (2011: 173) who state that the CALL system provides EFL learners with reading-assisting functions of instant translation, supporting EFL learners in reading comprehension.

The answers of the students also revealed that for the students, the computer-based program was quite enjoyable while they were trying to improve their reading. As mentioned before, the reason may be that the computers could easily make use of various games and activities, containing visual and auditory elements and make the learning process enjoyable. Another compelling point was that some students were of the opinion that this program could be very useful when traditional classroom education was not available. They said that sometimes they had to travel or be outside the city, so during that time they could not follow a course. They further emphasized that under these conditions that sort of computer programs are quite useful because they give the students the chance to study wherever they are.

Lastly, when the students were asked whether their attitudes changed after getting involved with that program in the course of study, nearly half of them stated that

their attitudes changed in a positive way, and they believed that computers could be effectively used to improve reading skills. Similarly, Li (2010: 271) states that CALL programs have considerable promise in promoting extensive reading and vocabulary learning.

On the other hand, some negative attitudes of students were revealed when their answers to the questions related to the Internet-based reading program were evaluated. Most of the students stated that the program was not as effective as the traditional language education although it had quite useful sides. The answers of the students were totally in line with the results derived from the questionnaire because the items comparing CALL and traditional language education yielded results that were all in favour of traditional classroom education. So it was quite clear from the statements of the students that they all appreciated the contributions of the program to language learning, nevertheless, they believed that a computer could not be as effective as traditional classroom teaching. The reason for that may be the computers' having a limited capacity and not being able to adapt itself to the requirements of the on-going learning process. In the study by Neri, Mich, Gerosa, and Giuliani (2008: 404) it was also noted that it was unrealistic to expect that CALL systems could perform all the tasks that a teacher could perform with the same effectiveness. Moreover some of the students criticised the program for not being able to give adequate explanations on each point where they needed assistance. That lack was one of the outstanding results of the questionnaire analyses. The students said that the computer assisted them with some points like vocabulary and grammar; however they felt the shortage of adequate explanations as for the other points like grammar, so they could benefit from the program to some extent. That deficit may stem from the restricted capacity of the program as we mentioned above.

The results also revealed that some students were not quite content with the activities designed to facilitate learning vocabulary in that the games and other activities were only focused on some words, that is, not all the unknown words were included, so they could only repeat and learn the ones prepared by the designers or the teachers. That means their vocabulary studies were narrowed down to some words and they could only study and learn limited amount of words not whatever they wanted. Hasemi and

Aziznezhad (2011: 834) also had a similar finding which stated that students have to limit themselves to predetermined texts, and another point that received much criticism from some students was the lack of proper grammatical explanations which had also been revealed when the results of the questionnaire were evaluated. That means both the results of the questionnaires and the interviews yielded the same results. So it can be concluded that as for grammar, the computer program could not satisfy some students. Students stated that when they sought assistance for some problematic points related to grammar, the program provided them with the same explanations all the time and those did not solve their troubles. The reason for that may be that the program was principally designed to improve reading skills and the grammar side may have been overlooked.

On the other hand, some students stated that they encountered some technical problems. They said they frequently lost the connection with the program after using it for some time, and some stated that the program froze all of a sudden, so they could not use it. The reason for that may be various, but if such a problem exists, it may afflict the user. In addition, some students said that they did not have the chance of getting Internet access. They set forth some reasons for that, but the common reason was that they could afford it as it was relatively costly in Turkey. As the program requires the Internet connection, it may be useless for the student if he/she lacks the connection. That may constitute a drawback for such people.

To conclude, the students believed that the program could have positive contributions to them in several ways while they were studying a foreign language. However, they still hold the view that such programs are not well-developed enough to help them solve all their problems and replace the traditional classroom education when it comes to learning a foreign language. So it could be stated that computers could only be supportive and used as a complementary means of language education. A similar finding was also revealed by Kumaresan, Balamurugan and Thirunavukkarasu (2012: 2086) who stated that CALL could be used to reinforce what had been already learned in the classroom or as a remedial tool to help learners who require additional support.

## CHAPTER VI

### CONCLUSION AND SUGGESTIONS

#### 6.1 Conclusion

This study aimed to examine the attitudes of learners towards enhancing English reading comprehension through an internet-based computer program ([www.passagework.com](http://www.passagework.com)). In order to achieve this aim, the participants' attitudes towards both CALL and the Internet-based computer program were examined via a questionnaire and interviews. The study was conducted on 60 participants attending a preparation course for YDS examination at The School of Foreign Languages at Dicle University.

The results revealed that participants had neutral attitudes towards CALL before ( $M=3,19$ ) and after ( $M=3,20$ ) the study. Therefore, it can be stated that there was no significant change in terms of their attitudes towards CALL ( $p=0,898$ ). However, when the items included in the questionnaire examined separately, an important result stood out. The participants' responses to the items comparing Computer Assisted Language Learning with Traditional Classroom Education displayed their negative attitudes. That means the participants believed that although CALL was helpful when it comes to learning a foreign language, it could not be as effective as traditional classroom education.

When the attitudes of students towards the internet-based computer program ([www.passagework.com](http://www.passagework.com)) were examined, it was seen that they had positive attitudes towards it before ( $M=3,67$ ) and after ( $M=3,61$ ) the study, and no significant difference was observed as for their attitudes at the end of the study ( $p=0,612$ ). The participants pointed out that the program facilitated their learning and was helpful especially in terms of vocabulary learning.

The students' responses elicited from the interviews revealed that they had positive attitudes towards CALL. They thought that CALL was useful, enjoyable and motivating. Besides, they stated that CALL provided them with flexibility in terms of time and place as they could use the program whenever and wherever they wanted. However, they also pointed out some negative attitudes. The most outstanding of them was that according to the results, students believed that CALL could only be supportive and could not be as effective as traditional classroom education. A similar outcome was also observed when the results of the questionnaire were examined. So it could be stated that this study, examining the attitudes of students' towards enhancing reading comprehension via CALL, showed that students regarded CALL as a supportive and helpful means of foreign language education, but believed it could not replace traditional classroom education.

Given the responses elicited from the interviews on the internet-based computer program, it can be stated that students had positive attitudes towards the program. The results of the questionnaire paralleled the results of the interviews in that both revealed that the students had positive attitudes towards the internet-based computer program ([www.passagework.com](http://www.passagework.com)). According to the results of the interview, the students stated that the program helped them improve their reading comprehension especially through facilitating process of learning vocabulary. They further stated that it gave them the chance to repeat and allowed them to study at their own pace. On the other hand, they displayed some negative attitudes. They pointed out that the program was not as effective as traditional classroom education. A similar result was also seen when the results of the questionnaire were evaluated. That means students had positive attitudes towards the program, but they believed that it could not replace traditional classroom education.

In conclusion it can be stated that when the results of both the questionnaire and the interviews were examined as a whole, it can be seen that students had positive attitudes towards CALL and the Internet-based computer program ([www.passagework.com](http://www.passagework.com)), and believed that they could help them enhance their reading comprehension. However, it could be concluded that students were also of the opinion

that CALL and this particular program could only support their reading comprehension and could not be as effective as traditional classroom education.

## **6.2 Pedagogical implications**

Although it is difficult to generalize the findings of this study because of the limited number of participants, some possible pedagogical implications can be drawn.

The results of both questionnaires and interviews clearly indicated that computers could be effectively used to help students enhance their reading ability in English. So it can be maintained that as computers could be effectively employed to facilitate language learning process, both the teachers and students may somehow integrate computers into the language learning process. This implication also confirms the point made by Tanyeli (2009: 567) who argued that students should be trained on computer-assisted strategies since they had positive effect on reading comprehension of ESL learners. Furthermore, Blok, Oostdam, Otter, and Overmaat (2002:124) also supported this finding by stating that students did profit from computer-assisted instruction programs aimed at beginning reading instruction where English is the language of instruction. Fasting and Lyster's (2005: 34) finding was also in line with these findings as it concludes that present computer technology has the potential to enhance reading comprehension.

The study also revealed that although the students believed that the computers were quite useful while learning a language, they still held the view that traditional classroom education could not be dispensed in language learning. So, it can be concluded that computers still do not have the capacity to replace the traditional classroom education and can only be used as a complementary means of language education. Therefore, while programs are prepared for language classes, it should be taken into account that in today's world, computers can effectively be employed only to endorse a main course program.

## **6.3 Limitations of the study**

The study is limited to 60 students attending a language course at Dicle University to get prepared for YDS (Foreign Language Examination), and that

limitation in the number of students makes it hard to generalize the conclusions drawn from this study.

Another limitation that should be mentioned was the restricted duration of study that lasted for four months. If more time had been allotted to that study, the quality of students' evaluations would have been much better.

It should also be stated that before the study, the students did not have any experience with the program used, so the third part of the questionnaire, bearing items regarding that program, were administered two weeks after the study started to allow some time to the students to form some attitudes towards the program, and that time might have been limited to have a view on it.

Another limitation was that the study only focused on reading and grammar, ignoring the other aspects of language learning including speaking, listening and writing. So it cannot yield any significant information on how effectively computers can be used to enhance the other skills.

It was a self-study. Participants used the program on their own and their attitudes towards it and CALL were observed through questionnaires and interviews.

Finally, the study is limited to a single computer program. The results cannot be generalized for all computer programs.

#### **6.4 Suggestions for further research**

As the number of students participating that study was limited, another study could be carried out with participations of more students. Moreover, the results elicited from this study pertained to the students at Dicle University, so further researches could be conducted in different settings, and this study only centred on the attitudes of students towards the application of computers to enhance reading skill, so further studies may be conducted to examine attitudes of students towards computers in terms of the other skills like speaking, writing or listening.

## REFERENCES

- Abanomey, A. A. (2013). Do EFL Saudi learners perform differently with online reading? An exploratory study. *Journal of King Saud University – Languages and translation*, 25, 1-11.
- Al-Mansour, N. S., & Al-Shorman, R. A. (2012). The effect of computer-assisted instruction on Saudi university students' learning of English. *Journal of King Saud University- Languages and Translation*, 24, 51-56.
- Almekhlafi, A. G. (2006). The effect of Computer Assisted Language Learning (CALL) on United Arab Emirates English as a foreign language (EFL) school students' achievement and attitude. *Journal of Interactive Learning Research*, 17 (2), 121-142.
- Anderson, N. J. (2003). Scrolling, clicking, and reading English: Online reading strategies in a second/foreign language. *The Reading Matrix*, 3 (3), 1-33.
- Bell, F. L., & LeBlanc, L. B. (2000). The language glosses in L2 reading on computer: Learners' preferences. *Hispania*, 83 (2), 274-285.
- Blok, H., Oostdam, R., Otter, M. E., & Overmaat, M. (2002). Computer-assisted instruction in support of beginning reading instruction: A review. *Review of educational Research*, 72 (1), 101-125.
- Büyükyazı, M. (2007). *The effect of web-based reading activities as extensive reading on the L2 reading motivation and language proficiency*. (Doctoral Dissertation). Retrieved from YÖK Database (206028).
- Chang, C. K., & Hsu, C. K. (2011). A mobile-assisted synchronously collaborative translation-annotation system for English as a foreign language (EFL) reading comprehension. *Computer Assisted Language Learning*, 24 (2), 155-180.

- Crystal, D. (2004). *Language and the Internet*. Cambridge: Cambridge University Press.
- Donaldson, R. P., & Haggstrom, M. A. (2006). *Changing language education through CALL*. New York: Routledge.
- Dreyer, C., & Nel, C. (2003). Teaching reading strategies and reading comprehension within a technology-enhanced learning environment. *System*, 31, 349-365.
- Dudenev, G., & Hockly, N. (2007). *How to...teach English with technology*. Essex: Pearson Education Limited.
- Duffy, G. G. (2009). *Explaining reading*. New York: The Guilford Press.
- Esit, Ö. (2011). Your verbal zone: an intelligent computer-assisted language learning program in support of Turkish learners' vocabulary learning. *Computer Assisted Language Learning*, 24(3), 211-232.
- Fasting, R. B., & Iyster, S. A. H. (2005). The effects of computer technology in assisting the development of literacy in young struggling readers and spellers. *European Journal of Special Needs Education*, 20 (1), 21-40.
- Flynn, N., & Stainthorp, R. (2006). *The learning and teaching of reading and writing*. West Sussex: Whurr Publishers Limited.
- Fung, I. Y.Y., Wilkinson, I. A. G., & Moore, D. W. (2003). L1-assisted reciprocal teaching to improve ESL students' comprehension of English expository text. *Learning and Instruction*, 13, 1-31.
- Gilbert, S. L. (2008). An examination of the effects of computer-assisted-instruction on reading comprehension. (Master's thesis). Retrieved from ProQuest Dissertations and theses database (1465864).
- Harmer, J. (1998). *How to teach English*. Essex: Pearson Education Limited.
- Harmer, J. (2007). *The practice of English language teaching*. Essex: Pearson Education Limited.

- Hashemi, M., & Aziznezhad, M. (2011). Computer Assisted Language Learning freedom or submission to machines?. *Procedia Social and Behavioral Sciences*, 28, 832-835. Doi: 10.1016/j.sbspro.2011.11.152.
- İnsel, İ. A. (2010). *Effectiveness of interactive software design in computer-assisted second language acquisition*. (Master's thesis). Retrieved from YÖK Database (279186).
- Jalilifar, A. (2010). The effect of cooperative learning techniques on college students' reading comprehension. *System*, 38, 96-108. Doi: 10.1016/j.system.2009.12.009.
- Jimin, L. (2007). An attempted evaluation of Computer Assisted Language Learning in china. *Canadian Social Science*, 3 (3), 109-113.
- Katushemerewe, F., & Nerbonne, J. (2013). Computer-assisted language learning (CALL) in support of (re)-learning native languages: the case of Runyakitara. *Computer Assisted Language Learning*, DOI:10.1080/09588221.2013.792842
- Kaya, İ. (2007). *The effect of the reading texts with visual aids on improving the young learners' level of English*. (Master's thesis). Retrieved from YÖK Database (205390).
- Kılıçkaya, F. (2009). The effect of a computer-assisted language learning course on pre-service English teachers' practice teaching. *Educational Studies*, 35 (4), 437-448.
- Kleinmann, H. H. (1987). The effect of computer-assisted instruction on ESL reading achievement. *The Modern Language Journal*, 71(3), 267-276.
- Koçak, A. (2010). *The attitudes of one teacher and her students towards using the Internet sources to develop students' reading skills*. (Master's thesis). Retrieved from YÖK Database (264842).
- Küçük, T. (2009). University preparatory school students' and teachers' perception of computers-assisted language learning environment (master's thesis). Retrieved from YÖK database (250736).

- Kulaç, D. (2011). *The effect of explicit instruction in contextual inferencing strategies on students' attitudes towards reading*. (Master's thesis). Retrieved from YÖK Database (289863).
- Kumaresan, K., Balamurugan, K., & Thirunavukkarasu, S. (2012). Computer assisted language learning. *International Journal of Management Research and Review*, 2 (12), 2083-2086.
- Li, J. (2010). Learning vocabulary via computer-assisted scaffolding for text processing. *Computer Assisted Language Learning*, 23(3), 253-275.
- Lim, K., & Shen, Z. (2006). Integration of computers into an EFL reading Classroom. *Cambridge University Press*, 18 (2), 212-229.
- Liu, M., Moore, Z., Graham, L., & Lee, S. (2002). A look at the research on computer-based technology use in second language learning: A review of the literature from 1990-2000. *Journal of Research on Technology in Education*, 34 (3), 250-269.
- Little, D. G. (1997). Reviews. *System*, 25 (2), 285- 294.
- Mahmoudi, E., Samad, A. A., & Razak, N. Z. (2012). Attitude and students' performance in computer assisted English language learning for learning vocabulary. *Procedia- Social and behavioral Sciences*, 66, 489-498.
- Marzban, A. (2011). Improvement of reading comprehension through computer-assisted language learning in Iranian intermediate EFL students. *Procedia Computer Science*, 3, 3-10. Doi: 10.1016/j.procs.2010.12.003.
- Mendi, H. B. (2009). *The relationship between reading strategies, motivation and reading test performance in foreign language learning*. (Master's thesis). Retrieved from YÖK Database (231832).
- Mohammadi, N., Ghorbani, V., & Hamidi, F. (2011). Effects of e-learning on language learning. *Procedia Computer Science*, 3, 464-468. Doi: 0.1016/j.procs.2010.12.078.

- Myonghee, K. (2002). *The use of the computer in developing L2 reading comprehension: Literature review and its implications*. Retrieved February 2, 2012 from <http://www.eric.ed.gov/PDFS/ED472671.pdf>.
- Namlıca, Ö. (2010). *English language teachers' perceptions of Computer Assisted Language Learning (CALL) within the context of Turkish state schools*. (Master's thesis). Retrieved from YÖK Database (362455).
- Nation, I. S. P. (2008). *Teaching ESL/EFL reading and writing*. New York: Routledge.
- Neri, A., Mich, O., Gerosa, M., & Giuliani, D. (2008). The effectiveness of computer assisted pronunciation training for foreign language learning by children. *Computer Assisted Language Learning*, 21 (5), 393-408.
- Patel, M. F., & Jain, P. M. (2008). *English language teaching*. Jaipur: Sunrise publishers & distributors.
- Peterson, M. (1997). Language teaching and networking. *System*, 25 (1), 29-37.
- Peterson, M. (2009). Computerized games and simulations in computer-assisted language learning: A meta-analysis of research. *Simulation and Gaming*, 41 (1), 72-90
- Powell, B. (1998). The use of Computer Assisted Language Learning. *Forum for Modern Language Studies*, 34(2), 184-194.
- Rahimi, M., & Hosseini, S.F. (2011). The impact of computer-based activities on Iranian high-school students' attitudes towards computer-assisted language learning. *Procedia Computer Science*, 3, 183-190.
- Rahimi, M., & Yadollahi, S. (2011). Foreign language learning attitude as a predictor of attitudes towards computer-assisted language learning. *Procedia Computer Science*, 3, 167-174.
- Silberstein, S. (1994). *Techniques and resources in teaching reading*. Oxford: Oxford University Press.

- Simsek, S. (2008). Students' attitudes towards integration of ICTs in a reading course: A case in Turkey. *Computers and Education*, 51, 200-211.
- Smith, F. (2004). *Understanding reading: A psycholinguistic analysis of reading and learning to read*. New Jersey: Lawrence Erlbaum Associates, Publishers.
- Souleyman, H. M. (2009). *Implicit and explicit vocabulary acquisition with a computer-assisted hypertext reading task: comprehension and retention*. (Doctoral Dissertation). Retrieved from Dicle University Database.
- Sung, Y., Chang, K., & Huang, J. (2008). Improving children's comprehension and use of strategies through computer-based strategy training. *Computers in Human Behavior*, 24, 1552-1571. Doi : 10.1016/j.chb.2007.05.009.
- Talebinezhad, M. R., & Abarghoui, M. A. (2013). The Iranian high school students' attitude toward CALL and the use of CALL for EFL receptive skills. *Theory and Practice in Language Studies*, 3 (2), 329-337. Doi: 10.4304/tpls.3.2.329-337.
- Tanyeli, N. (2009). The efficiency of online English language instruction on students' reading skills. *Procedia Social and Behavioral Sciences*, 1, 564-567. Doi: 10.1016/j.sbspro.2009.01.102.
- Uzunçakmak, P. (2005). *Successful and unsuccessful readers' use of reading strategies*. (Master's thesis). Retrieved from YÖK Database (206250).
- Wang, P. (2011). The effect of computer-assisted whole language instruction on Taiwanese university students' English learning. *English Language Teaching*, 4 (4), 10-20.
- Yang, S. C., & Chen, Y. (2007). Technology- enhanced language learning: A case study. *Computer in Human Behaviour*, 23, 860-879. Doi: 10.1016/j.chb.2006.02.015.

## APPENDICES

### APPENDIX 1

#### QUESTIONNAIRE – ENGLISH VERSION

##### SECTION I - Background Information

Please, tick (✓) the suitable answer for you.

1. What is your gender?

Male ( ) Female ( )

2. Age:

Between 20-30 ( )      Between 31-40 ( )      41 and over ( )

3. Which program did you last graduate from?

Bachelor degree ( )      Master degree ( )      PhD ( )

4. Occupational status:

Student/unemployed ( )      Employed ( )

5. How long have you been learning English?

1-5 years ( )      6-10 years ( )      11 years and over ( )

6. What is your last score in YDS?

0-44 ( )      45-54 ( )      55-64 ( )      65 and over ( )

7. What is the level of class you are studying at?

Basic level ( )      Medium level ( )      High level ( )

8. How often do you use computer?

Never ( ) Seldom ( )      Sometimes ( ) Often ( ) Always ( )

9. How do you rate your competence in computer proficiency?

Low ( )      Medium ( )      High ( )

10. Have you ever been taught English through CALL?

Yes ( )      No ( )

**SECTION II - Please put a (√) in the box which reflects your point of view best, and please choose only one answer for each statement. Please answer the questions regarding attitudes towards use of CALL.**

| <b>No</b> | <b>Items concerning attitudes towards use of CALL</b>                                             | <b>strongly<br/>agree</b> | <b>Agree</b> | <b>Neutral</b> | <b>Disagree</b> | <b>Strongly<br/>disagree</b> |
|-----------|---------------------------------------------------------------------------------------------------|---------------------------|--------------|----------------|-----------------|------------------------------|
| <b>1</b>  | I feel more comfortable and relaxed while learning a foreign language with computer.              |                           |              |                |                 |                              |
| <b>2</b>  | The time passes quickly while learning a foreign language with computer.                          |                           |              |                |                 |                              |
| <b>3</b>  | It is hard to learn a foreign language with computer.                                             |                           |              |                |                 |                              |
| <b>4</b>  | My confidence increases while learning a foreign language with computer.                          |                           |              |                |                 |                              |
| <b>5</b>  | It is quite enjoyable to learn a foreign language with computers.                                 |                           |              |                |                 |                              |
| <b>6</b>  | Computers give me the opportunity to learn a foreign language at my own pace.                     |                           |              |                |                 |                              |
| <b>7</b>  | Computers provide me with the flexibility in terms of time to study a foreign language.           |                           |              |                |                 |                              |
| <b>8</b>  | I can study a foreign language in a planned way with computer                                     |                           |              |                |                 |                              |
| <b>9</b>  | Computers facilitate my foreign language learning                                                 |                           |              |                |                 |                              |
| <b>10</b> | I concentrate better while learning a foreign language with computers                             |                           |              |                |                 |                              |
| <b>11</b> | I have positive attitude towards using computers to learn a foreign language.                     |                           |              |                |                 |                              |
| <b>12</b> | Computer-based foreign language learning is more motivating than traditional classroom education. |                           |              |                |                 |                              |
| <b>13</b> | Computer based foreign language learning is more                                                  |                           |              |                |                 |                              |

|           |                                                                                                               |  |  |  |  |  |
|-----------|---------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
|           | enjoyable than traditional classroom education.                                                               |  |  |  |  |  |
| <b>14</b> | I learn a foreign language better with computer-based education than I do in traditional classroom education. |  |  |  |  |  |
| <b>15</b> | Computer-based foreign language learning is more efficient than traditional classroom education.              |  |  |  |  |  |
| <b>16</b> | After some time, learning a foreign language with computers may turn out to be boring.                        |  |  |  |  |  |
| <b>17</b> | Studying a foreign language with computers leads to an unsocial setting of learning.                          |  |  |  |  |  |
| <b>18</b> | Computer-based language learning is not as satisfying as conventional classroom education                     |  |  |  |  |  |
|           | Other ideas (please add)...                                                                                   |  |  |  |  |  |

**SECTION III- Please put a (✓) in the box which reflects your point of view best, and please choose only one answer for each statement. Please answer the questions regarding attitudes towards use of the Internet-based Computer Program and its effects on enhancing reading comprehension.**

| <b>No</b> | <b>Items concerning attitudes towards use of the Internet-based Computer Program and its effects on enhancing reading comprehension</b> | <b>strongly agree</b> | <b>Agree</b> | <b>Neutral</b> | <b>Disagree</b> | <b>Strongly disagree</b> |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------|----------------|-----------------|--------------------------|
| <b>1</b>  | This program increases my interest and motivation in reading.                                                                           |                       |              |                |                 |                          |
| <b>2</b>  | It helps me learn better.                                                                                                               |                       |              |                |                 |                          |
| <b>3</b>  | It enables me to improve my reading skills through various activities designed                                                          |                       |              |                |                 |                          |
| <b>4</b>  | It helps me comprehend reading texts easily.                                                                                            |                       |              |                |                 |                          |
| <b>5</b>  | It helps me solve all the problems I encounter while reading a text.                                                                    |                       |              |                |                 |                          |
| <b>6</b>  | It provides me with satisfying explanations on grammar points I have difficulty while reading.                                          |                       |              |                |                 |                          |
| <b>7</b>  | It helps me learn vocabulary easily.                                                                                                    |                       |              |                |                 |                          |
| <b>8</b>  | It provides useful games to improve the vocabulary capacity.                                                                            |                       |              |                |                 |                          |
| <b>9</b>  | It provides adequate translation if I have trouble while reading.                                                                       |                       |              |                |                 |                          |
| <b>10</b> | It provides useful explanations on how to answer the questions related to the text.                                                     |                       |              |                |                 |                          |
| <b>11</b> | It provides me with satisfactory statistical data to follow the improvements in my reading comprehension.                               |                       |              |                |                 |                          |
| <b>12</b> | The design of the program is very successful.                                                                                           |                       |              |                |                 |                          |
| <b>13</b> | I can use the program easily.                                                                                                           |                       |              |                |                 |                          |

## APPENDIX 2

### QUESTIONNAIRE – TURKISH VERSION

#### BÖLÜM I-KİŞİSEL BİLGİLER

1. Cinsiyetiniz:  
Bay ( ) Bayan ( )
2. Yaşınız:  
20-30 arası ( ) 31-40 arası ( ) 41 ve üstü ( )
3. En son hangi programı bitirdiniz?  
Lisans ( ) Yüksek Lisans ( ) Doktora ( )
4. Mesleki durumunuz:  
Öğrenci ( ) Çalışan ( )
5. Ne kadar süredir İngilizce eğitimi alıyorsunuz?  
1-5 yıl ( ) 6-10 yıl ( ) 11 yıl ve üzeri ( )
6. YDS sınavından en son kaç puan aldınız?  
0-44 ( ) 45-54 ( ) 55-64 ( ) 65 ve üzeri ( )
7. Hangi seviye sınıfta yer alıyorsunuz?  
Temel düzey ( ) Orta düzey ( ) İleri düzey ( )
8. Ne sıklıkla bilgisayar kullanıyorsunuz?  
Hiç ( ) nadiren ( ) bazen ( ) sık sık ( ) Her zaman ( )
9. Bilgisayar kullanma beceriniz hangi seviyededir?  
Zayıf ( ) Orta ( ) İyi ( )
10. Daha önce bilgisayar destekli bir dil eğitimi aldınız mı?  
Evet ( ) Hayır ( )

**BÖLÜM II–Bu bölümde öğrencilerin bilgisayar ile dil eğitimine dair görüşleri maddeler halinde yer almaktadır. Lütfen aşağıda sıralanmış olan maddelere ait olan ve sizin görüşünüzü en iyi yansıttığını düşündüğünüz şıkka (X) işareti koyunuz. Aşağıdaki verilen görüşlerin dışında ekleyeceğiniz görüş(ler) varsa bu sayfanın alt kısmındaki “Diğer” bölümüne yazabilirsiniz.**

| No | Bilgisayar ile eğitime dair görüşler                                               | Kesinlikle katılıyorum | Katılıyorum | Kararsızım | Katılmıyorum | Kesinlikle katılmıyorum |
|----|------------------------------------------------------------------------------------|------------------------|-------------|------------|--------------|-------------------------|
| 1  | Bilgisayar desteği ile yabancı dili daha rahat öğreniyorum.                        |                        |             |            |              |                         |
| 2  | Bilgisayar ile yabancı dili öğrenirken zamanın nasıl geçtiğini anlamıyorum.        |                        |             |            |              |                         |
| 3  | Bilgisayar ile yabancı dili öğrenmek zordur.                                       |                        |             |            |              |                         |
| 4  | Bilgisayar ile yabancı dil öğrenme kendime olan güvenimi artırıyor.                |                        |             |            |              |                         |
| 5  | Bilgisayar ile yabancı dil öğrenme eğlencelidir.                                   |                        |             |            |              |                         |
| 6  | Bilgisayarla yabancı dil öğrenirken kendi öğrenme hızıma uygun hareket edebilirim. |                        |             |            |              |                         |
| 7  | Bilgisayarla yabancı dil öğrenimi çalışma zamanı açısından bana esneklik sağlar.   |                        |             |            |              |                         |
| 8  | Bilgisayarla yabancı dil öğrenimi bana planlı çalışma imkânı sunar.                |                        |             |            |              |                         |
| 9  | Bilgisayar yabancı dil öğrenmemi kolaylaştırır.                                    |                        |             |            |              |                         |
| 10 | Bilgisayar ile yabancı dil öğrenirken konulara daha iyi yoğunlaşabiliyorum.        |                        |             |            |              |                         |
| 11 | Yabancı dilin bilgisayar ile öğrenilebileceğine inanıyorum.                        |                        |             |            |              |                         |
| 12 | Bilgisayarla yabancı dil öğrenme geleneksel sınıf                                  |                        |             |            |              |                         |

|           |                                                                                         |  |  |  |  |  |
|-----------|-----------------------------------------------------------------------------------------|--|--|--|--|--|
|           | eğitimden daha motive edicidir.                                                         |  |  |  |  |  |
| <b>13</b> | Bilgisayarla yabancı dil öğrenme geleneksel sınıf eğitiminden daha eğlencelidir.        |  |  |  |  |  |
| <b>14</b> | Geleneksel sınıf eğitimindense bilgisayarlı eğitimle yabancı dili daha iyi öğreniyorum. |  |  |  |  |  |
| <b>15</b> | Bilgisayarla yabancı dil öğrenme geleneksel sınıf eğitimden daha etkilidir.             |  |  |  |  |  |
| <b>16</b> | Bir süre sonra bilgisayarla yabancı dil öğrenme sıkıcı hale gelebilir.                  |  |  |  |  |  |
| <b>17</b> | Bilgisayarla yabancı dil öğrenme sosyal olmayan bir öğrenme ortamına yol açar.          |  |  |  |  |  |
| <b>18</b> | Bilgisayarla dil öğrenme, geleneksel sınıf eğitimi kadar tatmin edici değildir.         |  |  |  |  |  |
|           | Diğer (Lütfen Belirtiniz): .....                                                        |  |  |  |  |  |

**BÖLÜM III- Bu bölümde öğrencilerin, kullanmış oldukları internet temelli bilgisayar programına ve onun okuma becerilerini geliştirme üzerindeki etkilerine dair görüşleri maddeler halinde yer almaktadır. Lütfen aşağıda sıralanmış olan maddelere ait olan ve sizin görüşünüzü en iyi yansıttığını düşündüğünüz şıkka (X) işareti koyunuz. Aşağıdaki verilen görüşlerin dışında ekleyeceğiniz görüş(ler) varsa bu sayfanın alt kısmındaki “Diğer” bölümüne yazabilirsiniz.**

| No | Öğrencilerin internet temelli bilgisayar programına dair görüşleri                       | Kesinlikle katılıyorum | Katılıyorum | Kararsızım | Katılmıyorum | Kesinlikle katılmıyorum |
|----|------------------------------------------------------------------------------------------|------------------------|-------------|------------|--------------|-------------------------|
| 1  | Bu program okumaya dair ilgi ve isteğimi arttırıyor.                                     |                        |             |            |              |                         |
| 2  | Daha iyi öğrenmemi sağlıyor.                                                             |                        |             |            |              |                         |
| 3  | Tasarlanmış çeşitli aktiviteler yoluyla okuma becerimi geliştirmemi sağlıyor.            |                        |             |            |              |                         |
| 4  | Okuma parçalarını anlamamı kolaylaştırıyor.                                              |                        |             |            |              |                         |
| 5  | Metinleri okurken karşılaştığım tüm problemleri çözmeme yardımcı oluyor.                 |                        |             |            |              |                         |
| 6  | Okuma sırasında karşılaştığım dilbilgisi problemlerine tatmin edici açıklamalar sunuyor. |                        |             |            |              |                         |
| 7  | Kelime öğrenmemi kolaylaştırıyor.                                                        |                        |             |            |              |                         |
| 8  | Kelime kapasitesini geliştirmek için faydalı oyunlar sunuyor.                            |                        |             |            |              |                         |
| 9  | Sıkıntı yaşadığım çeviri noktalarında sunduğu açıklamalar tatmin edicidir.               |                        |             |            |              |                         |
| 10 | Metin ile ilgili soruların nasıl cevaplanacağına dair yararlı açıklamalar sunuyor.       |                        |             |            |              |                         |
| 11 | Okuma becerimdeki gelişmeleri takip edebilmem için yeterli istatistiksel veri sunuyor.   |                        |             |            |              |                         |
| 12 | Programın başarılı bir tasarımı var.                                                     |                        |             |            |              |                         |
| 13 | Programı kolaylıkla kullanabiliyorum.                                                    |                        |             |            |              |                         |

### **APPENDIX 3**

#### **INTERVIEW QUESTIONS - ENGLISH VERSION**

- 1- What do you think about computer-assisted language learning?
- 2- Can computer-assisted language learning be an efficient method of enhancing reading comprehension?
- 3- Do you believe that the program used during that course is effective in enhancing reading comprehension?
- 4- What are the benefits of this program?
- 5- What are the defects of this program?
- 6- Are there any changes in your attitudes after using this program?

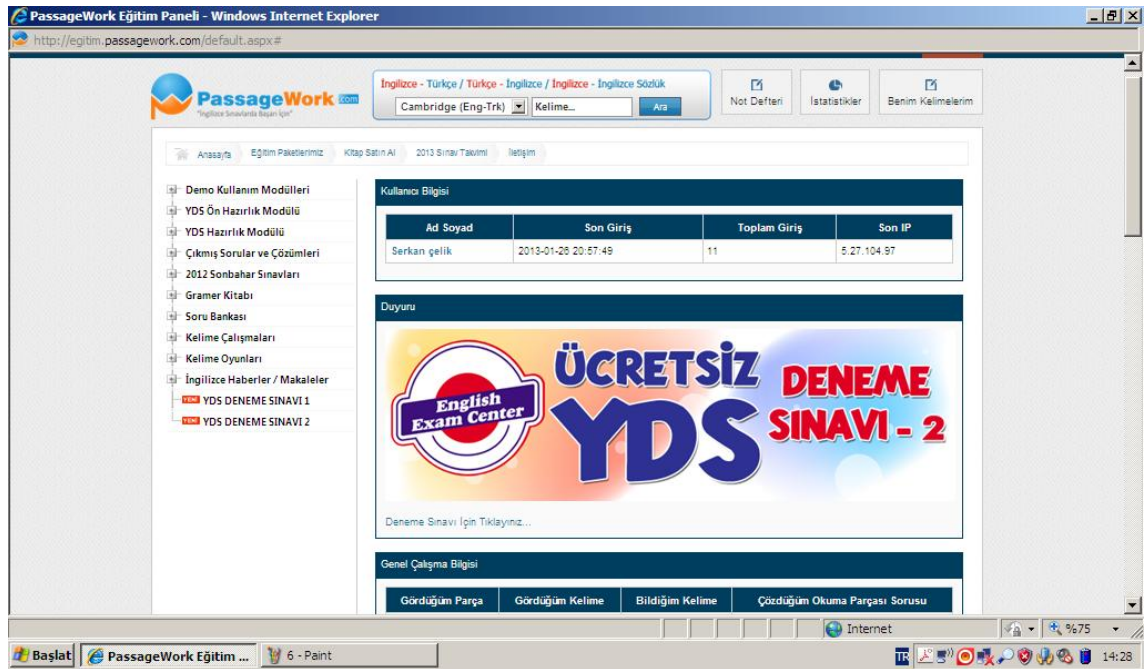
### **APPENDIX 4**

#### **INTERVIEW QUESTIONS – TURKISH VERSION**

- 1- Bilgisayar Destekli Dil Öğrenme hakkında ne düşünüyorsunuz?
- 2- Okuma becerisinin geliştirilmesinde bilgisayar kullanımı etkili bir yöntem olabilir mi?
- 3- Bu derste kullandığınız programın yabancı dilde okuma becerisini geliştirmede etkili olduğuna inanıyor musunuz?
- 4- Sizce bu programın faydalı yönleri nelerdir?
- 5- Programın eksik yönleri nelerdir?
- 6- Programı kullandıktan sonra bu konudaki düşüncelerinizde bir değişiklik oldu mu ?

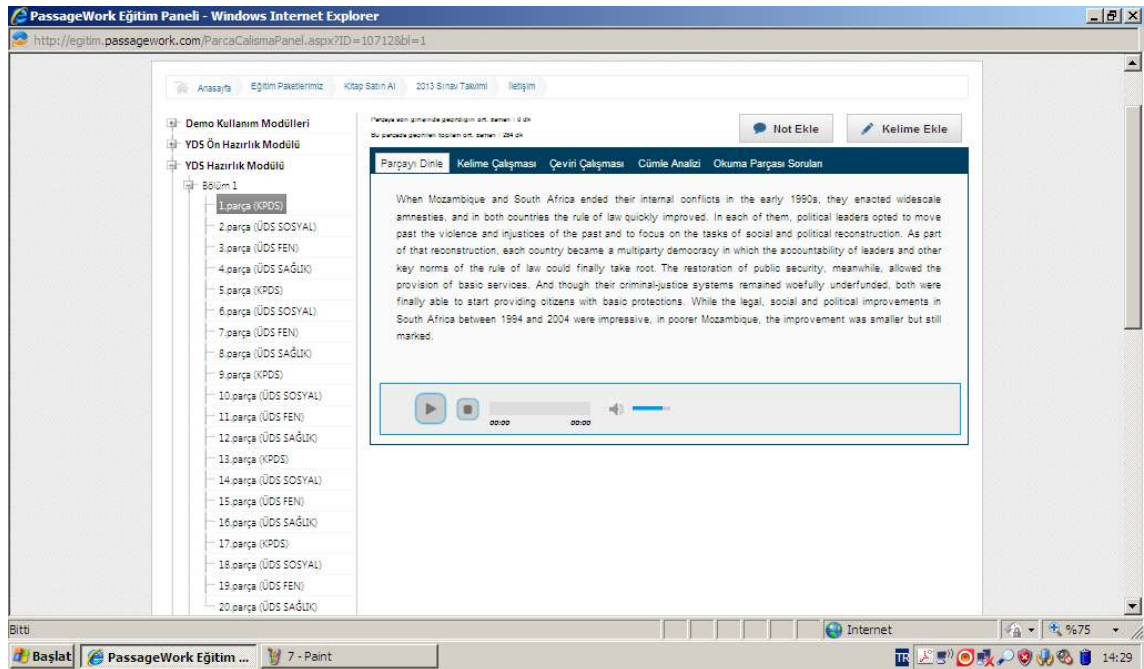
## APPENDIX 5

### MAIN PAGE OF THE PROGRAM



## APPENDIX 6

### PARAGRAF EXERCISE



## APPENDIX 7

### VOCABULARY EXERCISE 1

PassageWork Eğitim Paneli - Windows Internet Explorer

http://egitim.passagework.com/ParcaCalismaPanel.aspx?ID=10712&bl=1

Aşağıdaki cümlelerde boş bırakılan yerlere gelebilecek en uygun ifadeyi her cümle için yanındaki kutudan seçiniz. Bütün eşleştirmeleriniz doğru olduğunda çıkacak olan "Devam Et" butonuna tıklayarak devam edebilirsiniz.

Toplam 24 kelime 5 sayfada gösteriliyor  
Şimdi 1. sayfadasınız.

Communism has never really ----- in England. -- Lütfen Seçiniz--

Carl's starting college in September. -----, he's travelling around Europe. -- Lütfen Seçiniz--

There were furious demands for greater police -----, -- Lütfen Seçiniz--

The safety precautions taken by large resort hotels are often ----- inadequate for the number of people who stay there. -- Lütfen Seçiniz--

The sight of people suffering arouses a deep sense of ----- in her. -- Lütfen Seçiniz--

KONTROL ET

Biti

Başlat PassageWork Eğitim ... 8 - Paint

Internet %75 14:30

## APPENDIX 8

### VOCABULARY EXERCISE 2

PassageWork Eğitim Paneli - Windows Internet Explorer

http://egitim.passagework.com/ParcaCalismaPanel.aspx?ID=10712&bl=1

Aşağıdaki Türkçe kelimenin İngilizce karşılığını ekran klavyesini kullanarak yazınız.

Toplam Kelime Sayısı: 24  
Bilinen Kelime Sayısı: 0

Doğru Karakter Sayısı: 0  
Yanlış Karakter Sayısı: 0

BU SÜRE İÇERİSİNDE

□ □ □ □ □ □ □ □

Q W E R T Y U I O P  
A S D F G H J K L  
Z X C V B N M

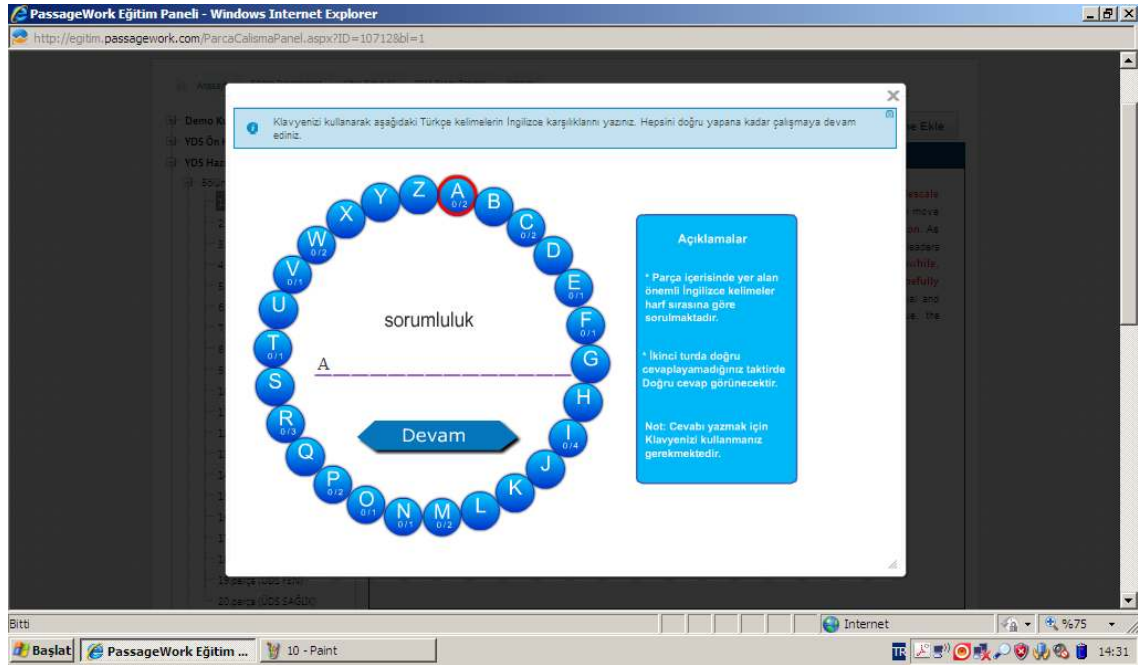
Biti

Başlat PassageWork Eğitim ... 9 - Paint

Internet %75 14:30

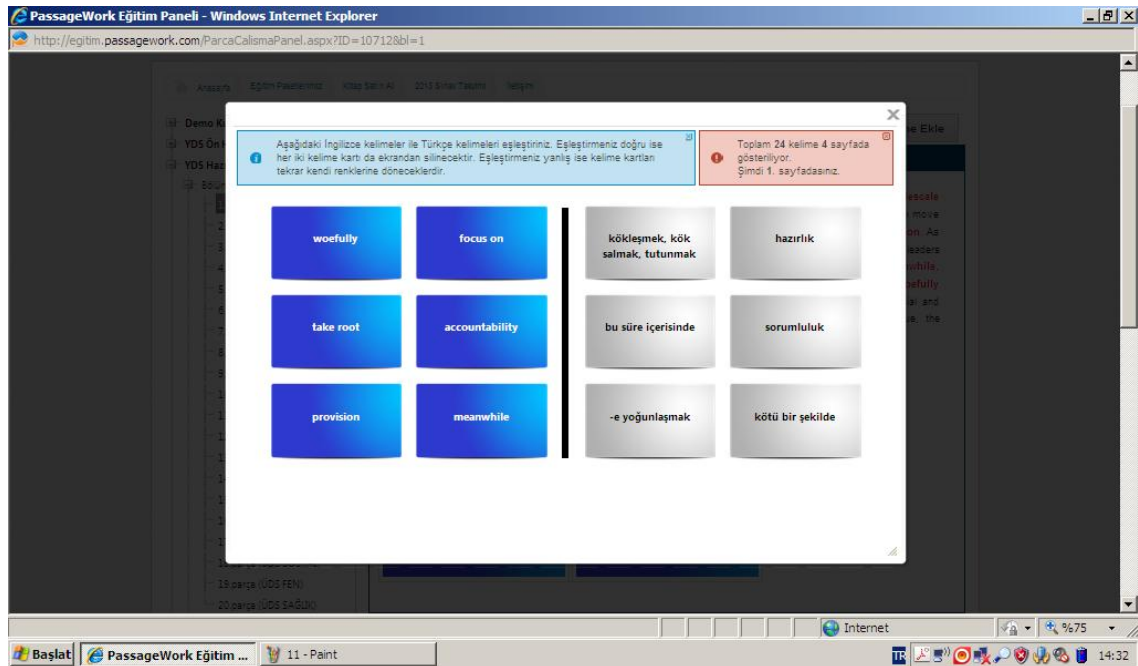
## APPENDIX 9

### VOCABULARY EXERCISE 3



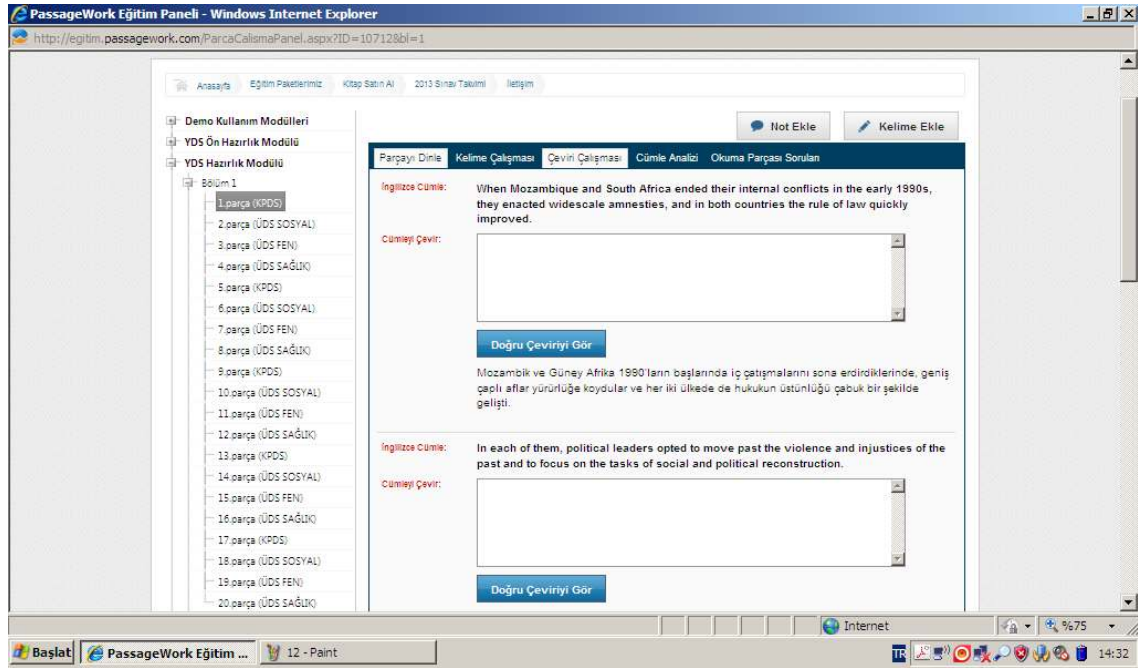
## APPENDIX 10

### VOCABULARY EXERCISE 4



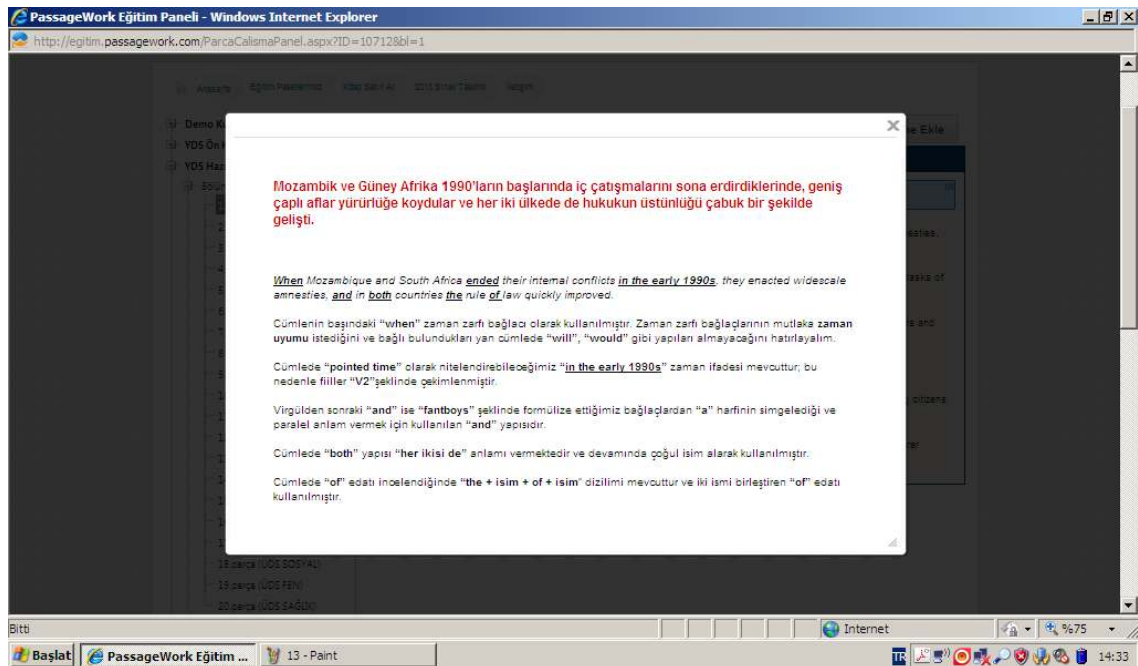
## APPENDIX 11

### ENGLISH-TURKISH TRANSLATION EXERCISE



## APPENDIX 12

### GRAMMAR HINTS REGARDING THE PARAGRAPH



## APPENDIX 13

### QUESTIONS REGARDING THE PARAGRAPH

PassageWork Eğitim Paneli - Windows Internet Explorer

http://egitim.passagework.com/ParcaCalismaPanel.aspx?ID=10712&bl=1

Anasayfa Eğitim Paketlerimiz Kitap Satın Al 2013 Sınav Takvimi İletişim

Demo Kullanım Modülleri

YDS Ön Hazırlık Modülü

YDS Hazırlık Modülü

Bölüm 1

1.parça (KPDS)

2.parça (ÜDS SOSYAL)

3.parça (ÜDS FEN)

4.parça (ÜDS SAĞLIK)

5.parça (KPDS)

6.parça (ÜDS SOSYAL)

7.parça (ÜDS FEN)

8.parça (ÜDS SAĞLIK)

9.parça (KPDS)

10.parça (ÜDS SOSYAL)

11.parça (ÜDS FEN)

12.parça (ÜDS SAĞLIK)

13.parça (KPDS)

14.parça (ÜDS SOSYAL)

15.parça (ÜDS FEN)

16.parça (ÜDS SAĞLIK)

17.parça (KPDS)

18.parça (ÜDS SOSYAL)

19.parça (ÜDS FEN)

20.parça (ÜDS SAĞLIK)

Okunmak istediğiniz kelimeyi "Sözlük Kelimeleri" menüsüne ekleyebilirsiniz.

Sözlük parçaları parçaları sayısı: 12 adet

Parçaları parçaları sayısı: 200 adet

Not Ekle Kelime Ekle

Parçayı Oku Kelime Çalışması Çeviri Çalışması Cümle Analizi Okuma Parçası Soruları

1. Soru

When Mozambique and South Africa ended their internal conflicts in the early 1990s, they enacted widescale amnesties, and in both countries the rule of law quickly improved. In each of them, political leaders opted to move past the violence and injustices of the past and to focus on the tasks of social and political reconstruction. As part of that reconstruction, each country became a multiparty democracy in which the accountability of leaders and other key norms of the rule of law could finally take root. The restoration of public security, meanwhile, allowed the provision of basic services. And though their criminal-justice systems remained woefully underfunded, both were finally able to start providing citizens with basic protections. While the legal, social and political improvements in South Africa between 1994 and 2004 were impressive, in poorer Mozambique, the improvement was smaller but still marked.

It is clear from the passage that both South Africa and Mozambique \_\_\_\_\_.

☐ A) underwent a very radical process of social, political and legal transformation over a decade after the mid-1990s

☐ B) are still extremely obsessed with their political past and have failed to adapt themselves to the norms of democracy

☐ C) are noted for their indifference to the rule of law and have introduced a series of non-democratic measures

☐ D) have not solved their internal conflicts fully although they have made their criminal-justice systems very efficient through radical reforms

☐ E) have resorted to every conceivable means in their efforts to restore public security

Sonraki Soru

Başlat PassageWork Eğitim ... 14 - Paint

Internet %75 14:33

## APPENDIX 14

**STATISTICAL DATA ON PARTICIPANTS' STUDIES ON THE INTERNET-  
BASED COMPUTER PROGRAM ([WWW.PASSAGEWORK.COM](http://WWW.PASSAGEWORK.COM))**

| Name of The Student | The Number of Passages | The Number of Words | The Number of Learnt Words | The Date of Last Entry | The Number of Solved Questions |
|---------------------|------------------------|---------------------|----------------------------|------------------------|--------------------------------|
| Nesrin EREK         | 45                     | 0                   | 135                        | 03.30.2013             | 4                              |
| Orhan UMUT          | 2                      | 9                   | 0                          | 03.17.2013             | 7                              |
| Hasan BULUT         | 7                      | 12                  | 15                         | 02.25.2013             | 10                             |
| Remziye ÇELİK       | 1                      | 0                   | 0                          | 01.20.2013             | 0                              |
| Şeyhmus YILMAZ      | 1                      | 0                   | 0                          | 02.03.2013             | 0                              |
| İlhan UĞURDOĞAN     | 0                      | 0                   | 0                          | No entry               | 0                              |
| Gülray KILINÇ       | 6                      | 11                  | 0                          | 02.20.2013             | 6                              |
| Aslan AÇIKGÖZ       | 2                      | 0                   | 10                         | 02.23.2013             | 0                              |
| Fatma IŞIK          | 7                      | 11                  | 10                         | 02.17.2013             | 9                              |
| Nurcan YILDIRIM     | 17                     | 94                  | 675                        | 03.24.2013             | 33                             |
| Nesrin ÇINAR        | 11                     | 46                  | 44                         | 02.11.2013             | 15                             |
| Ferhat DEMİR        | 0                      | 0                   | 0                          | No entry               | 0                              |
| Ali KÜÇÜK           | 5                      | 0                   | 0                          | 02.02.2013             | 116                            |
| Engin ŞENGÜL        | 20                     | 122                 | 87                         | 03.23.2013             | 46                             |
| Sümeyye YAŞA        | 2                      | 0                   | 23                         | 02.10.2013             | 10                             |
| Hatice ÇELİK        | 5                      | 0                   | 25                         | 03.13.2013             | 1                              |
| Fatih AKAR          | 1                      | 0                   | 0                          | 01.20.2013             | 1                              |
| Hazine ÇİÇEK        | 15                     | 80                  | 241                        | 03.14.2013             | 2                              |
| Aziz YILMAZ         | 25                     | 11                  | 15                         | 03.25.2013             | 10                             |
| Nihal TAVUKÇU       | 7                      | 33                  | 74                         | 03.20.2013             | 21                             |
| Ali YILMAZ          | 146                    | 2553                | 4343                       | 01.29.2013             | 42                             |
| Abdullah OĞUZ       | 4                      | 46                  | 36                         | 03.13.2013             | 15                             |
| Arzu SARI           | 25                     | 187                 | 229                        | 04.04.2013             | 30                             |
| Erhan KAVLAK        | 2                      | 0                   | 6                          | 02.26.2013             | 3                              |
| Çiğdem TÖLÜK        | 24                     | 317                 | 386                        | 03.04.2013             | 11                             |
| Mehmet SALİHOĞLU    | 1                      | 0                   | 0                          | 01.02.2013             | 1                              |
| Erdal ÖZMEN         | 3                      | 0                   | 56                         | 02.21.2013             | 13                             |
| Erol ŞAHİN          | 11                     | 0                   | 0                          | 02.26.2013             | 6                              |
| Erdoğan KUNDURACI   | 0                      | 0                   | 0                          | No entry               | 0                              |
| Ömer USLUKAYA       | 0                      | 0                   | 0                          | No entry               | 0                              |
| Dilara AKBAL        | 27                     | 0                   | 0                          | 02.10.2013             | 15                             |
| Canan BALAMİR       | 52                     | 77                  | 145                        | 04.03.2013             | 24                             |
| Hasan ISI           | 37                     | 103                 | 273                        | 03.29.2013             | 43                             |
| Nizamettin KARAGÖZ  | 5                      | 0                   | 0                          | 01.26.2013             | 0                              |
| Mücahide DAYAN      | 6                      | 23                  | 15                         | 01.26.2013             | 44                             |
| Mehmet BODAKÇI      | 6                      | 0                   | 0                          | 03.28.2013             | 25                             |
| Feruh BİLMEZ        | 1                      | 0                   | 0                          | 03.14.2013             | 1                              |
| Mustafa IPEK        | 44                     | 126                 | 205                        | 01.21.2013             | 34                             |
| Abdullah BAYTAR     | 15                     | 55                  | 93                         | 02.24.2013             | 27                             |
| Selime KIZIL        | 3                      | 24                  | 34                         | 03.25.2013             | 19                             |
| Mansur ÖZGEN        | 31                     | 72                  | 107                        | 04.01.2013             | 14                             |
| Gülbin ESKİYECEK    | 16                     | 0                   | 0                          | 01.29.2013             | 0                              |
| İbrahim YILDIZ      | 27                     | 0                   | 0                          | 03.13.2013             | 52                             |
| Osman UÇ            | 18                     | 0                   | 0                          | 01.23.2013             | 22                             |
| İrfan ŞİMŞEK        | 8                      | 84                  | 189                        | 03.03.2013             | 37                             |
| Mehmet SAKARAYA     | 61                     | 1056                | 1349                       | 04.01.2013             | 29                             |
| Senem KAPAN         | 42                     | 0                   | 0                          | 03.10.2013             | 13                             |
| Mesut AYDIN         | 0                      | 0                   | 0                          | No entry               | 0                              |
| Şeyhmus KARAKUZU    | 35                     | 48                  | 61                         | 01.29.2013             | 72                             |
| Pınar AKMAN         | 5                      | 0                   | 0                          | 01.23.2013             | 20                             |
| Gamze HASDEMİR      | 27                     | 44                  | 75                         | 03.17.2013             | 5                              |
| Niyazi ÖZDEMİR      | 8                      | 11                  | 15                         | 02.05.2013             | 9                              |
| Vedat PİRİNÇ        | 0                      | 0                   | 68                         | 03.28.2013             | 0                              |
| Cahit İYİLİKLİ      | 0                      | 0                   | 0                          | No entry               | 0                              |
| Nilgün BİRCAN       | 39                     | 0                   | 0                          | 02.03.2013             | 0                              |
| Hadi TEZOKUR        | 3                      | 27                  | 114                        | 03.19.2013             | 167                            |
| Perihan BORUCU      | 9                      | 41                  | 98                         | 03.14.2013             | 56                             |
| Barış Aydın         | 2                      | 7                   | 12                         | 03.07.2013             | 6                              |
| Salih ERPOLAT       | 10                     | 22                  | 15                         | 03.27.2013             | 32                             |
| Barış EREN          | 26                     | 61                  | 152                        | 04.01.2013             | 47                             |