The Effect of a Computerized Program on Developing 9th Graders' Reading Comprehension Skills and their Attitudes towards Reading in Palestine

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ومن ءايتِه خلق السماوَت والأرض وأختلف السّنتكم
وأولوكم إن في ذلك لآيت للعلَمِين

صلى الله العَظِيم

سورة الروم، آية رقم 23
نتيجة الحكم على أطروحة ماجستير

بُناءً على موافقة عمادة الدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحث/ علماء على عبد ربه العبدي لقبول درجة الماجستير في كلية التربية/ قسم مناهج وطرق تدريس- اللغة الإنجليزية وموضوعها:

The Effect of a Computerized Program on Developing 9th Graders' Reading Comprehension Skills and their Attitudes towards Reading in Palestine

وبعد المداولات العلمية التي تمت اليوم الأربعاء 04 محرم 1433 هـ الموافق 30/11/2011م الساعة الثانية عشرة ظهراً، اجتمعت لجنة الحكم على الأطروحة والكودية من:

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وبعد المداولة أوصت اللجنة بقبول الباحث درجة الماجستير في كلية التربية/قسم مناهج وطرق تدريس- اللغة الإنجليزية.

وأقرت هذه الدرجة فإنها تقصى يتقى الله والرسول صلى الله عليه وسلم وأن يعصر علمه في خدمة دينه ووطنه.

أ.د. فؤاد علي الجيزي

عميد الدراسات العليا
Dedication

To the soul of my brother, Mohammad & my son, Baraa

To my parents,

who waited patiently throughout this journey

To my beloved wife,

without her support, understanding, and encouragement I would never

have been able to complete this journey.

To my son Mo’men and my daughter Mira,

remember, learning is a lifelong endeavor.

To my brothers and sisters,

who supported and encouraged me a lot.
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IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

All praise to Allah, the One to whom all dignity, honor, and glory are due, the Unique with perfect attributes, who begets not, nor is He begotten. He has no equal but He is the Almighty Omnipotent. Peace and blessings of Allah be upon the last prophet, Muhammad, and on all who follow him in righteousness until the Day of Judgment. All Praise be to Allah for enabling me to finish this paper. As the prophet Muhammad, peace be upon him, said, "He who is thankless to people, is thankless to Allah." I therefore gratefully acknowledge the many people who so graciously helped and supported me so as to successfully complete this thesis.

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MAY ALLAH BLESS THEM ALL
The Effect of a Computerized Program on Developing 9th Graders' Reading Comprehension Skills and their Attitudes towards Reading in Palestine

Abstract

This study aimed at investigating the effect of a computerized program on developing ninth graders' reading comprehension skills and students' attitudes towards reading. The targeted reading comprehension skills were prediction, skimming, scanning, recognizing synonyms and antonyms, deducing meaning from context and relating the text to personal experience, opinion or evaluation.

The researcher purposively chose a representative sample of (60) ninth graders from Deir Al Balah Preparatory "B" Boys' school which is run by UNRWA in the Gaza Strip. The participants were divided into two equivalent groups: each group had (30) students.

The researcher used four tools: 1) a questionnaire for teachers to determine the most important reading comprehension skills for ninth graders, 2) an achievement test (Pre & Post), 3) the suggested computerized program for the reading texts included in the second-term of English for Palestine 9, and 4) an attitude scale (pre & post) to determine the students' attitudes towards reading.

The results of the study revealed that the computerized program was effective to develop the reading comprehension skills for ninth graders. In addition, the study findings confirmed that the technological environment develops and enhances the students' attitudes towards learning in general and towards reading via computers in particular.

In the light of these results, the researcher recommends that EFL Palestinian teachers should use computers as a tool of enhancing students' reading comprehension and developing their attitudes towards not only reading but also learning.
ملخص الدراسة

"أثر برامج محوسب على تحسين مهارات القراءة الفاهمة لدى طلاب الصف التاسع الأساسي في مبحث اللغة الإنجليزية واتجاهاتهم نحو القراءة في فلسطين"

تهدف هذه الدراسة إلى التحقق من أثر استخدام برامج محوسب في تحسين مهارات القراءة الفاهمة لدى طلاب الصف التاسع الأساسي في مبحث اللغة الإنجليزية واتجاهاتهم نحو القراءة، وقد شملت هذه الدراسة مهارات القراءة الفاهمة التالية: التنبؤ، التصحيح، ادراك معنى الكلمات، وعكسها، استنتاج المعنى من خلال السياق وربط النص بالخبرة الشخصية أو إبداء الرأي.

لقد بُنِِعت الدراسة على عينة قصديرية ممثلة مكونة من (٢٠٠) طالبًا من طلاب الصف التاسع من مدرسة ذكور دير البلح الإعدادية (ب) للاجئين التابعة لوكالة غوث وتشغيل اللاجئين الفلسطينيين في قطاع غزة، وقد وُزِعت العينة على مجموعتين متكافئتين: إحداهما ضابطة تشمل (١٠٠) طالبًا، والأخرى تجريبية تشمل (٠٣) طالبًا آخر.

استخدم الباحث أربع أدوات لهذه الدراسة وهي استبان لمعالم خبيطة يمكنها تحديد أهم مهارات القراءة الفاهمة للصف التاسع، وأخيرًا، مقياس اتجاهات لتحديد اتجاهات الطلاب تجاه القراءة قبل وبعد التجربة.

توصل الباحث من خلال تحليل نتائج هذه الدراسة إلى أن البرنامج المحوسب كان فعالًا في تحسين مهارات القراءة الفاهمة للصف التاسع الأساسي، بالإضافة إلى ذلك أثبتت نتائج الدراسة بأن البيئة التكنولوجياً حسنًا ودُور اتجاهات الطلاب نحو التعلم بشكل عام وقراءة عن طريق الحاسوب بشكل خاص.

وقد يستلزم توجيه الباحث دسرة اللغة الإنجليزية بضرورة استخدام الحاسوب كأداة لتحسين مهارات القراءة لدى الطلاب وتطوير اتجاهاتهم ليس نحو القراءة فقط بل نحو التعليم أيضًا.
# Table of Contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dedication</td>
<td>I</td>
</tr>
<tr>
<td>2</td>
<td>Acknowledgments</td>
<td>II</td>
</tr>
<tr>
<td>3</td>
<td>Abstract in English</td>
<td>III</td>
</tr>
<tr>
<td>4</td>
<td>Abstract in Arabic</td>
<td>IV</td>
</tr>
<tr>
<td>5</td>
<td>Table of contents</td>
<td>V</td>
</tr>
<tr>
<td>6</td>
<td>List of Appendices</td>
<td>XI</td>
</tr>
<tr>
<td>7</td>
<td>List of tables</td>
<td>XII</td>
</tr>
<tr>
<td>8</td>
<td>List of charts</td>
<td>XIV</td>
</tr>
<tr>
<td>9</td>
<td>List of figures</td>
<td>XIV</td>
</tr>
</tbody>
</table>

## Chapter I  Introduction

1. Introduction 1
2. Statement of the problem 6
3. The need of the study 6
4. Research questions 7
5. Research Hypotheses 8
6. Purpose of the study 8
7. Significance of the study 9
8. Limitations 9
9. Operational definitions of terms 10
10. Abbreviations 10

## Chapter II  Literature Review (A)

### Section I  Reading

- Introduction 11
- What is Reading 12
- Reading in Islam 14
- The Importance of Reading 16
- Categories of Readers 18
- Decoding in the total process of learning to read 20
| 6  | Reading purposes                      | 22  |
| 7  | Types of reading                     | 23  |
| 7.1| Extensive reading                    | 23  |
| 7.2| Intensive reading                    | 24  |
| 7.3| Reading aloud                        | 26  |
| 7.4| Silent reading                       | 27  |
| 7.5| SQ 3R                                | 28  |
| 7.6| SQ 4R                                | 29  |
| 7.7| SQ 5R                                | 31  |
| 7.8| Top-down and bottom-up               | 33  |
| 7.9| Word by word reading                 | 33  |
| 7.10| Critical reading                     | 33  |
| 7.11| Model reading                        | 34  |
| 7.12| speed-reading                        | 34  |

**Section II Reading Comprehension**

<p>| 1  | Comprehension                         | 35  |
| 2  | Reading comprehension                  | 37  |
| 3  | Reading Comprehension skills          | 38  |
| 3.1| Skimming                              | 39  |
| 3.2| Scanning                              | 39  |
| 3.3| Identifying the topic                 | 40  |
| 3.4| Prediction                            | 41  |
| 3.5| Inferring                             | 41  |
| 3.6| Gaining the meanings from the figurative use of language. | 41  |
| 3.7| Making connections                    | 42  |
| 3.8| Judging the truth and logic of what they read | 42  |
| 3.9| Asking and answering questions        | 42  |
| 3.10| Drawing conclusions                  | 43  |
| 3.11| Interpreting texts                   | 43  |
| 3.12| Note-taking                           | 43  |
| 3.13| Sequencing                            | 43  |
| 3.14| Visualizing                           | 43  |</p>
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.15</td>
<td>Summarizing text</td>
<td>44</td>
</tr>
<tr>
<td>3.16</td>
<td>Distinguishing fact from opinion</td>
<td>45</td>
</tr>
<tr>
<td>3.17</td>
<td>Knowing the meaning of words through context</td>
<td>45</td>
</tr>
<tr>
<td>4</td>
<td>Schemata and their importance</td>
<td>45</td>
</tr>
<tr>
<td>5</td>
<td>Levels of Reading comprehension skills</td>
<td>45</td>
</tr>
<tr>
<td>5.1</td>
<td>Literal Comprehension</td>
<td>46</td>
</tr>
<tr>
<td>5.2</td>
<td>Interpretive Skills</td>
<td>47</td>
</tr>
<tr>
<td>5.3</td>
<td>Critical reading ability</td>
<td>48</td>
</tr>
<tr>
<td>6</td>
<td>Major approaches to reaching reading</td>
<td>50</td>
</tr>
<tr>
<td>6.1</td>
<td>Alphabetical approach</td>
<td>50</td>
</tr>
<tr>
<td>6.2</td>
<td>Traditional phonic approach</td>
<td>51</td>
</tr>
<tr>
<td>6.3</td>
<td>Visuo-phonic and linguistic approaches</td>
<td>51</td>
</tr>
<tr>
<td>6.4</td>
<td>Synthetic Method</td>
<td>52</td>
</tr>
<tr>
<td>6.5</td>
<td>Whole-word and Look/say approaches</td>
<td>52</td>
</tr>
<tr>
<td>6.6</td>
<td>Story approach</td>
<td>53</td>
</tr>
<tr>
<td>6.7</td>
<td>Language-experience approaches</td>
<td>53</td>
</tr>
<tr>
<td>6.8</td>
<td>Individualized reading</td>
<td>54</td>
</tr>
<tr>
<td>6.9</td>
<td>Eclectic or mixed method approaches</td>
<td>54</td>
</tr>
<tr>
<td>7</td>
<td>Reading Difficulties</td>
<td>55</td>
</tr>
<tr>
<td>7.1</td>
<td>Low Intelligence</td>
<td>55</td>
</tr>
<tr>
<td>7.2</td>
<td>Dyslexia</td>
<td>56</td>
</tr>
<tr>
<td>7.3</td>
<td>Physical conditions</td>
<td>57</td>
</tr>
<tr>
<td>7.4</td>
<td>Visual and aural discrimination</td>
<td>57</td>
</tr>
<tr>
<td>7.5</td>
<td>Language difficulties</td>
<td>57</td>
</tr>
<tr>
<td>7.6</td>
<td>Motivational Factors</td>
<td>58</td>
</tr>
<tr>
<td>7.7</td>
<td>Personality and emotional factors</td>
<td>58</td>
</tr>
<tr>
<td>7.8</td>
<td>Environmental factors</td>
<td>58</td>
</tr>
<tr>
<td>7.9</td>
<td>Factors in the school</td>
<td>59</td>
</tr>
<tr>
<td>8</td>
<td>Reading Comprehension Difficulties for Palestinian EFL learners</td>
<td>59</td>
</tr>
<tr>
<td>8.1</td>
<td>Problems related to the misunderstanding of the reading process</td>
<td>59</td>
</tr>
<tr>
<td>8.2</td>
<td>Reading Problems Related to Insufficient Linguistic Competence in</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>General and Use of English</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>VIII</td>
<td>Problems related to the differences between Arabic and English</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Problems related to the English spelling/sound system</td>
<td>62</td>
</tr>
<tr>
<td>9</td>
<td>Suggested Solutions for the Reading Comprehension</td>
<td>65</td>
</tr>
<tr>
<td>10</td>
<td>Reading in English For Palestine curriculum</td>
<td>69</td>
</tr>
<tr>
<td>10.1</td>
<td>English for Palestine-Grade 9</td>
<td>70</td>
</tr>
<tr>
<td>10.2</td>
<td>Components of <em>English for Palestine Grade 9</em></td>
<td>71</td>
</tr>
<tr>
<td>10.3</td>
<td>Reading Objectives in English for Palestine Grade 9</td>
<td>71</td>
</tr>
<tr>
<td>11</td>
<td>How to Teach Reading Skills</td>
<td>72</td>
</tr>
<tr>
<td>11.1</td>
<td>The Pre-reading Phase</td>
<td>72</td>
</tr>
<tr>
<td>11.2</td>
<td>The While-reading phase</td>
<td>73</td>
</tr>
<tr>
<td>11.3</td>
<td>The post-reading phase</td>
<td>73</td>
</tr>
</tbody>
</table>

### Section III

**Computer-Based-Learning**

| 1 | Technology in the learning Process | 73 |
| 2 | Computer Assisted Language Learning (CALL) | 77 |
| 3 | History of Computers in the classroom | 79 |
| 4 | Advantages of Computer Assisted Language Learning (CALL) | 80 |
| 5 | Disadvantages of Computer Assisted Language Learning (CALL) | 82 |
| 6 | CALL and reading skills | 83 |
| 7 | Using computers in a reading class | 85 |
| 8 | Multimedia aids for comprehension | 86 |
| 9 | CALL Methodology | 88 |
| 10 | Video-based lessons | 90 |
| 10.1 | Video as a Technological Tool for Developing Reading Skills | 91 |

### Section IV

**Attitudes**

| 1 | Attitudes and achievement | 93 |
| 2 | Attitudes and Motivation | 93 |
| 3 | Teacher's and students' attitudes towards computer-based learning | 94 |
### Chapter II (B)  
**Previous Studies**

<table>
<thead>
<tr>
<th></th>
<th>Studies related to Computer-Based-Learning and its effect on reading</th>
<th>96</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Studies related to students' attitudes towards integrating computers in education</td>
<td>120</td>
</tr>
<tr>
<td>3</td>
<td>Summary of the findings of previous studies</td>
<td>142</td>
</tr>
</tbody>
</table>

### Chapter III  Methodology

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2</td>
<td>Types of research design</td>
</tr>
<tr>
<td>3</td>
<td>Sampling procedures</td>
</tr>
<tr>
<td>3.1</td>
<td>Instrumentation</td>
</tr>
<tr>
<td>3.1.1</td>
<td>A questionnaire of reading comprehension skills</td>
</tr>
<tr>
<td>3.1.2</td>
<td>The aim of the questionnaire</td>
</tr>
<tr>
<td>3.1.3</td>
<td>The source of constructing the questionnaire</td>
</tr>
<tr>
<td>3.1.4</td>
<td>Description of the questionnaire</td>
</tr>
<tr>
<td>3.1.5</td>
<td>Validity of the questionnaire</td>
</tr>
<tr>
<td>3.2</td>
<td>The application of the questionnaire</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Achievement test</td>
</tr>
<tr>
<td>3.2.2</td>
<td>The general aims of the test</td>
</tr>
<tr>
<td>3.2.3</td>
<td>The Sources of Constructing the test</td>
</tr>
<tr>
<td>3.2.4</td>
<td>The items of the test</td>
</tr>
<tr>
<td>3.2.5</td>
<td>Instructions of the Test (for students)</td>
</tr>
<tr>
<td>3.2.5.1</td>
<td>The pilot study</td>
</tr>
<tr>
<td>3.2.5.2</td>
<td>The validity of the test</td>
</tr>
<tr>
<td>3.3</td>
<td>Reliability of the test</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Attitudes scale</td>
</tr>
<tr>
<td>3.3.2</td>
<td>The aim of the scale</td>
</tr>
<tr>
<td>3.3.3</td>
<td>Steps of constructing the scale</td>
</tr>
<tr>
<td>3.3.4</td>
<td>Description of the scale</td>
</tr>
<tr>
<td>3.3.5</td>
<td>Instructions of the scale (for students)</td>
</tr>
</tbody>
</table>
### 3.3.5 Pilot study

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3.5.1 The validity of the scale</td>
<td>158</td>
</tr>
<tr>
<td>3.3.5.2 Reliability</td>
<td>162</td>
</tr>
</tbody>
</table>

### 3.4 The suggested computerized program

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.1 Aims of the computerized program</td>
<td>164</td>
</tr>
<tr>
<td>3.4.2 Objectives of the computerized program</td>
<td>164</td>
</tr>
<tr>
<td>3.4.3 The design of the program</td>
<td>164</td>
</tr>
<tr>
<td>3.4.4 Content of the computerized program</td>
<td>164</td>
</tr>
<tr>
<td>3.4.5 Validity of the program</td>
<td>166</td>
</tr>
<tr>
<td>3.4.6 Program implementation plan</td>
<td>166</td>
</tr>
<tr>
<td>3.4.7 Program evaluation</td>
<td>166</td>
</tr>
<tr>
<td>3.4.7.1 Formative Evaluation</td>
<td>167</td>
</tr>
<tr>
<td>3.4.7.2 Summative Evaluation</td>
<td>167</td>
</tr>
</tbody>
</table>

### 3.4.7.2 Summative Evaluation

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Controlling the variables</td>
<td>168</td>
</tr>
<tr>
<td>4.1 Age variable</td>
<td>168</td>
</tr>
<tr>
<td>4.2 General achievement variable</td>
<td>169</td>
</tr>
<tr>
<td>4.3 English general achievement variable</td>
<td>169</td>
</tr>
<tr>
<td>4.4 Reading comprehension skills variable</td>
<td>170</td>
</tr>
<tr>
<td>4.5 Previous attitudes towards reading</td>
<td>171</td>
</tr>
</tbody>
</table>

### 4 Controlling the variables

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Study Procedures</td>
<td>172</td>
</tr>
<tr>
<td>6 Statistical Analysis Procedures</td>
<td>174</td>
</tr>
</tbody>
</table>

### Chapter IV

**Results: Analysis of data**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Introduction</td>
<td>175</td>
</tr>
<tr>
<td>2 The results of the study</td>
<td>175</td>
</tr>
<tr>
<td>3 Answer of the first question</td>
<td>175</td>
</tr>
<tr>
<td>4 Results of the first hypothesis</td>
<td>177</td>
</tr>
<tr>
<td>5 Results of the second hypothesis</td>
<td>180</td>
</tr>
<tr>
<td>6 Results of the third hypothesis</td>
<td>182</td>
</tr>
<tr>
<td>7 Results of the fourth hypothesis</td>
<td>185</td>
</tr>
<tr>
<td>8 Results of the fifth hypothesis</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>Results of the sixth hypothesis</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>12</td>
<td>Summary</td>
</tr>
</tbody>
</table>

### Chapter V  Findings, Discussion, Conclusions, Implications and Recommendations

<table>
<thead>
<tr>
<th></th>
<th>Introduction</th>
<th>195</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Discussion</td>
<td>195</td>
</tr>
<tr>
<td>3</td>
<td>Conclusion</td>
<td>206</td>
</tr>
<tr>
<td>4</td>
<td>Pedagogical Implications</td>
<td>207</td>
</tr>
<tr>
<td>5</td>
<td>Recommendations</td>
<td>208</td>
</tr>
<tr>
<td>6</td>
<td>Recommendations for further studies</td>
<td>210</td>
</tr>
<tr>
<td>7</td>
<td><strong>References</strong></td>
<td>211</td>
</tr>
</tbody>
</table>

### Appendices

<table>
<thead>
<tr>
<th></th>
<th>English reading comprehension skills questionnaire</th>
<th>241</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Results' analysis of the reading comprehension skills questionnaire</td>
<td>243</td>
</tr>
<tr>
<td>3</td>
<td>English Reading comprehension skills achievement test</td>
<td>244</td>
</tr>
<tr>
<td>4</td>
<td>Attitudes scale towards reading</td>
<td>250</td>
</tr>
<tr>
<td>5</td>
<td>The computerized program</td>
<td>253</td>
</tr>
<tr>
<td>6</td>
<td>Teacher's Guide</td>
<td>304</td>
</tr>
<tr>
<td>7</td>
<td>Referee committee</td>
<td>324</td>
</tr>
<tr>
<td>8</td>
<td>The researcher Curriculum Vitae (CV)</td>
<td>325</td>
</tr>
<tr>
<td>9</td>
<td>Permission from UN Education Department for implementing the experiment</td>
<td>326</td>
</tr>
</tbody>
</table>
## Lists of tables

<table>
<thead>
<tr>
<th>No</th>
<th>Subject</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The distribution of the sample according to the groups</td>
<td>145</td>
</tr>
<tr>
<td>2</td>
<td>Table of specification</td>
<td>149</td>
</tr>
<tr>
<td>3</td>
<td>Correlation coefficients of each item degree with the total degree</td>
<td>152</td>
</tr>
<tr>
<td>4</td>
<td>Correlation between two parts (even X odd) and modified by Spearman brown</td>
<td>153</td>
</tr>
<tr>
<td>5</td>
<td>(K_R20) Coefficients for the Questions of the Test</td>
<td>153</td>
</tr>
<tr>
<td>6</td>
<td>Difficulty coefficient for each items of the test</td>
<td>154</td>
</tr>
<tr>
<td>7</td>
<td>Discrimination coefficient for each items of the test</td>
<td>155</td>
</tr>
<tr>
<td>8</td>
<td>The attitudes’ scale domains</td>
<td>157</td>
</tr>
<tr>
<td>9</td>
<td>Likert Scale</td>
<td>157</td>
</tr>
<tr>
<td>10</td>
<td>Correlation coefficient for each sentence in the first domain</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>Attitudes towards the value and importance of reading</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Correlation coefficient for each sentence in the second domain</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>Attitudes towards enjoying reading</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Correlation coefficient for each sentence in the third domain</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>Attitudes towards learning reading via computer</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Correlation coefficient for each sentence in the fourth domain</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>Attitudes towards the reading teacher</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Pearson Correlation coefficient for every domain from the scale with the</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>total degree of the scale and the domains with others domains</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Correlation coefficient between the two halves of each domain before</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td>modification and the reliability after modification</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Alpha Correlation Coefficient of the Scale Reliability</td>
<td>163</td>
</tr>
<tr>
<td>17</td>
<td>T-test results of controlling age variable</td>
<td>168</td>
</tr>
<tr>
<td>18</td>
<td>T-test results of controlling general achievement variable</td>
<td>169</td>
</tr>
<tr>
<td>Page</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>T-test results of controlling English general achievement variable</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>T-test results of controlling previous learning of the reading comprehension skills</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>T-test results of controlling previous attitudes towards reading</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>T-test independent sample results of differences between the experimental and the control group in the post test</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>The table references to determine the level of size effect ($\eta^2$) and (d)</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>&quot;t&quot; value, eta square &quot; $\eta^2$&quot;, and &quot;d&quot; for each skill and the total degree</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>T-test independent sample results of differences between experimental and control group for all domains and total score of the domain</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>The Effect Size of the computerized program on the experimental group post-attitude scale towards reading</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>U and Z value to examine the differences between the high-achievers' post-test between the experimental group and the control group</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>&quot;Z&quot; value and Eta square &quot; $\eta^2$&quot; for each skill and the total degree of the test</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>U and Z value to examine the differences between the high-achievers' post-attitude scale between the experimental group and the control group</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>&quot;Z&quot; value and Eta square &quot; $\eta^2$&quot; for each domain and the total degree of the scale</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>U and Z value to examine the differences between the low-achievers' post-test between the experimental group and the control group</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Z&quot; value and Eta square &quot; $\eta^2$&quot; for each skill and the total degree of the test</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>U and Z value to examine the differences between the low-achievers' post-attitude scale between the experimental group and the control group</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>&quot;Z&quot; value and Eta square &quot; $\eta^2$&quot; for each domain and the total degree of the scale</td>
<td></td>
</tr>
</tbody>
</table>
## List of Charts

<table>
<thead>
<tr>
<th>No.</th>
<th>Subject</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The most important skills</td>
<td>147</td>
</tr>
<tr>
<td>2</td>
<td>The content of the computerized program</td>
<td>165</td>
</tr>
</tbody>
</table>

## List of figures

<table>
<thead>
<tr>
<th>No.</th>
<th>Subject</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SQ5R</td>
<td>32</td>
</tr>
</tbody>
</table>
Chapter I

Introduction
I

Introduction

Language is the most important feature for developing nations. It's a means of communication between individuals all over the world. It's clear that humans were created with different languages, as it is cited in the Holy Qura'n in surah ar-Rum 30:22 "And of His signs is the creation of the heavens and the earth, and the difference of your languages and colours. Lo! herein indeed are portents for men of knowledge. ". Therefore, people learn the languages of others to be able to communicate effectively.

English language is considered as the first international language which is used in all fields as; politics, technology, economy, formal conferences, industry, commerce, tourism, journalism and education. Baron (2001; 36) confirms that over the past two decades there has been a significant increase in the number of people around the world who speak English as a second language. In the same respect, Harmer (2001;14) argues that various countries are placing more importance on learning English as a second or other languages and it becomes the "lingua Franca" for business transactions between countries. Thus, Arab Countries including Palestine provide plans and programs for teaching English to enable students to use English Language effectively.

All elementary and secondary school students currently in Palestine and the Middle East will be living in and contributing to an increasingly interdependent community of nations in the 21st century. To realize their personal, social and long-term career goals, individuals will need to be able to communicate with others skillfully, appropriately, and effectively. The challenge of contemporary education is to prepare all students for life in this new world. Clearly, English is recognized
international as the major worldwide language, with over 300 million native speakers and 1.5 billion second or fluent foreign language speakers. Its preeminence in the affairs of the global community, its role as the most common international medium of communication, and its value in accessing the economic machinery of a large number of regions and countries are also recognized. In particular, one can argue that a functional knowledge of English will help school graduates get full advantage of economic and occupational opportunities in Palestine and many other regions of the world. In addition, by learning English, students will be empowered with the language skills and literacy necessary to become productive workers and will allow Palestine to capitalize on the experience and linguistic diversity of its graduates in a growing, competitive global market and in the world of global communications. Consequently, English serves an economic-reproductive function in addition to its ideological function. Thus, English qualifies people to operate the technology to which it provides access. Moreover, developing Palestinian students' competence in English and providing them with the ability to use it both accurately and appropriately serves Palestinian national interests by increasing the language resources available as Palestine competes in the global economy. (Ministry of Education, 1999:17)

As it is known, English has main four skills namely: Listening, Reading, Speaking and writing. The main goal of teaching these skills is to enable students to interact successfully with native and non-native users of English in a variety of social and academic settings.

Reading is considered as the most important skill which is firstly recommended by the Holy Qur'an as it is cited in Surah Al 'Alaq (96:597):
Proclaim! (or Read!) in the name of thy Lord and Cherisher, Who created-(1) Created man, out of a ( mere ) clot of congealed blood (2) proclaim! And thy Lord is Most Bountiful, (3) He Who taught (the use of) the pen, (4)Taught man that which he knew not (5).

Clearly, reading is a pivotal skill for students which enables them to acquire knowledge and develop their academic areas. The essential goal of teaching reading is to train students to read efficiently and quickly so as to get information and meaning from the written material rapidly with full understanding and enjoyment.

Reading is considered as an additional tool of communication to listening and speaking. People who have no chance to talk with native speakers of the target language can have an access through reading to their literature, journals, and then understand much about their civilization. In this sense, reading is the window through which other cultures can be seen and more general or specific knowledge can be gained. (Kailani and Muqattash, 2008:85)

Mikulecky in (Badr El-Deen, 2009:27) reports that "Reading helps you learn to think in the new language. Reading helps you build a better vocabulary. Reading makes you more comfortable with written English."

National Center for Educational Statistics [NCES], (2005:2) defines reading as “an active and complex process that involves understanding written text, developing and interpreting meaning, and using meaning as appropriate to type of text, purpose and situation”. Consequently, Reading comprehension is essential to develop students' reading skills. Moreover, (Paris,& Hamilton, 2008) point out that "Without comprehension, reading words is reduced to imitating the sounds of language, repeating text is simply memorization and oral drill."
Unsurprisingly, the English Language Curriculum committee in the Palestinian Ministry of Education (1999) concludes that Reading comprehension is the most important skill to be taught in school and the ability to read accurately and fluently is the most important need for the Palestinian student. The students will be trained for: (1) Information and understanding: collect data, facts, or ideas; discover relationships, concepts, or generalizations; and use knowledge generated from text, (2) Aesthetic Response: enjoy and appreciate texts, relate texts to oneself, and respond sensitively to texts with diverse social, historical, and cultural dimensions. (3) Critical Analysis and Evaluation: Use personal and objective criteria to form opinions or to make judgments about ideas and information in written texts. Obviously, reading comprehension enables students to communicate effectively and appropriately with the written text, and then obtain an education.

As an experienced teacher, the researcher believes that students in Palestine face difficulties in reading comprehension. To confirm this belief, UNRWA has modified the curriculum from grade 1 to grade 9 in the Gaza Strip in 2008, 2009 and 2010. Supervisors confirm the curriculum difficulties saying: "It's a well-known fact that the curricula are too long and have too many activities. Moreover, they were designed for a certain type of students as the elite. So, teachers were obliged for the lack of time to concentrate upon quantity not quality in order to be able to cover the syllabi in the due time. As a result, students do not grasp knowledge properly in their classes and when they go home most parents cannot help their kids because they are not educated enough."(Education Department/UNRWA, 2010-2011:3). Thus, It's clear that students in Palestine face a serious problem in grasping the items of the curriculum in general and in reading comprehension in particular. "Comprehension is
complex and multifaceted, and it is thus no surprise that the population of children identified as having reading comprehension difficulties. (Nation 2004:12)

Therefore, the researcher reviewed some studies in Palestine suggesting new methods, strategies and techniques to try tackling the reading comprehension difficulties to enable students to grasp the reading text effectively. (Abu Shamla, 2010) focuses on the correlation between prior knowledge and reading comprehension drawing special attention to the importance of activating prior knowledge before introducing a reading comprehension text to eighth graders in Gaza. While Haboush (2010) suggests a program based on Multiple Intelligences in order to increase students' reading comprehension in Gaza. In addition, El-Kahlout (2010) uses Guided discovery so as to develop students' reading comprehension in Gaza Governorates. Moreover, Bader El-Deen (2009) conducts a study examining the effectiveness of assisted extensive reading on developing reading comprehension strategies for Ninth graders in Gaza Governorates.

The researcher, in this study, suggests a well-designed computerized program to develop students' reading comprehension because technology in general and computers in particular have become the most used tool in all fields especially in education. Students have become familiar with the text and comprehend its idea when using computers. Using computers is one of the most efficient ways to make the lessons audio-visual, to supply a fluent and effective education, to keep the students away from memorization, to obtain speed and permanence in perception. Computers address more senses compared to other technological tools and make abstract and complicated concepts concrete digitally because of their extensive multimedia properties. (Abo Oda, 2010). In the same concern, Becker (2000:4) declares that computer technologies and the environments they support can help motivate the
learner to learn, increase the learner’s control over the material being presented, and allow the learner to take an active role in the learning process.

2. Statement of the problem

The researcher has been teaching at UNRWA Prep. schools for twelve years. He used some techniques to improve students' reading comprehension and motivation, he found that these techniques were interesting for some students but others felt bored while reading from textbooks and this caused lack in comprehension. Fortunately, with the help of computer laboratories which were provided recently in the UNRWA schools in Gaza Governorates, the researcher was able to get students involved in a technological environment. Further, he noticed that students perform better when being involved in a technological environment. Thus, the main intent of this research is to identify the effect of computers on developing students' reading comprehension and their attitudes towards reading.

3. The Need for the study

Teaching reading traditionally became boring with the rapid development of technology which motivates students to be attentive readers. Palestinian teachers should be aware of the new technologies especially computers and their effect on improving students' skills and enhancing their reading competency. Recent studies were carried out to show the effect of using technology – mainly computers – on reading comprehension and motivation.
4. Research Questions

The research main question is:

"What is the effect of a computerized programme on developing ninth graders' reading comprehension and students' attitudes towards reading?"

The research sub-questions are:

1. What is the suggested computerized programme which may develop ninth graders' reading comprehension and their attitudes towards reading?
2. Are there statistically significant differences at (α ≤ 0.05) in the total average score of the post-test between the experimental group and the control group?
3. Are there statistically significant differences at (α ≤ 0.05) in the total average score of the post attitude scale between the experimental group and the control group?
4. Are there statistically significant differences at (α ≤ 0.05) in the total average score of the high-achievers' post-test between the experimental group and the control group?
5. Are there statistically significant differences at (α ≤ 0.05) in the total average score of the high-achievers' post-attitude scale between the experimental group and the control group?
6. Are there statistically significant differences at (α ≤ 0.05) in the total average score of the low-achievers' post-test between the experimental group and the control group?
7. Are there statistically significant differences at (α ≤ 0.05) in the total average score of the low-achievers' post-attitude scale between the experimental group and the control group?
5. Research Hypotheses

1. There are no statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the post-test in between the experimental group and the control group.

2. There are no statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the post attitude scale in between the experimental group and the control group.

3. There are no statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the high-achievers' post-test between the experimental group and the control group.

4. There are no statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the high-achievers' post-attitude scale between the experimental group and the control group.

5. There are no statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the low-achievers' post-test between the experimental group and the control group.

6. There are no statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the low-achievers' post-attitude scale between the experimental group and the control group.

6. Purpose of the study

This study aims at investigating the effect of a computerized program on developing reading comprehension skills. In addition, it seeks for examining the students' attitudes towards reading importance, reading method, reading teacher and the integration of computer in a reading course.
7. Significance of the Study

Computerized language is now a reality to all language learners, educators and applied linguists. Web-based programs allow existing computer labs to become a good technological center for effective teaching. Educators desire to know the ways that computer can be utilized to support and nurture students' learning and understanding. This study may help teachers to use computer in their classes to improve reading comprehension and motivation. In addition, it may encourage supervisors to prepare training courses for teachers to use computers when teaching reading. Moreover, syllabus designers may change the curriculum design to suit the new technological environment. Further, the study will evoke researchers to do more studies about using different technologies in developing other skills as listening, writing or speaking.

8. Limitations of the study

The current study is applied in accordance with these limitations:

1- It was applied in Deir Al Balah Prep. " B " Boys' school in Deir Al Balah city.

2- The study was limited to the effect of computer on six reading comprehension skills.

3- The study was limited to the second-term reading comprehension passages in English for Palestine 9.
9. Definition of Operational Terms

9.1 A Computerized program: De Ridder (2000) defines instructional package that involves visual and audio computerized stimuli to provide a context for learning.

9.2 An attitude: Eagly & Chaiken (1993) define the attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor”

9.3 Reading comprehension: The researcher defines reading comprehension as the process of extracting and constructing meaning through interaction and involvement with written text. In addition, it's the ability to make sense of the author’s message.

10. Abbreviations

SPSS = Statistical Package for Social Science
EFL = English as a foreign language
CBL = Computer-Based Learning
CBI = Computer-Based Instruction
CALL = Computer-Assisted-Language-Learning
UNRWA = United Nations Relief and Works Agency
SB = Student's Book
Ss = Students
T. = Teacher
ELC = English Language Curriculum
ELT = English Language Teaching
ICT = Information and Communication Technology
Chapter II

Literature Review
II

Literature Review (A)

Introduction

This chapter consists of four sections:

1- Section one discusses the concept of reading, reading in Islam, the importance of reading, categories of readers, decoding in the total process of learning to read, reading purposes and types of reading

2- Section two focuses on reading comprehension, levels of reading comprehension skills, major approaches to teaching reading, reading difficulties, reading comprehension difficulties for Palestinian EFL learners, suggested solutions for the reading comprehension, reading in English for Palestine curriculum and how to teach reading skills.

3- Section three concentrates on Computer Based Learning, technology in the learning process, Computer Assisted Language Learning (CALL), history of computers in the classroom, advantages of Computer Assisted Language Learning (CALL), disadvantages of Computer Assisted Language Learning (CALL), CALL and reading skills, using computers in a reading class, multimedia aids for comprehension, CALL methodology, video-based lessons, video as a technological tool for developing reading skills

4- Section four presents attitudes, attitudes and motivation, teacher's and students' attitudes towards computer-based learning.
Section I
Reading

1. What is Reading?

The reading concept has been misunderstood due to some wrong ideas about the nature of reading. As reading is a cognitive process which includes transferring the written symbols by the reader through the eyes, so these symbols need understanding meaning and then integrating this meaning to personal experiences. Therefore, there are some highly complex psychological processes concerned with reading. (Khater et al., 1981:43). Consequently, there are two concepts of reading. Firstly, the mechanic pattern which means the physiological response to what is written. Secondly, the cognitive process in which the reader can think, infer, and understand meaning. As a result, reading is a complex process which includes not only printed words but also understanding meaning of the written expressions. (Yunis et al., 1998:162)

Reading involves two major components: (1) word recognition or the decoding of written symbols; and (2) attachment of meaning to the written forms of language. The ability to read independently is not founded exclusively on one or the other of these two components; both are required. We cannot independently form the symbol-sound correspondences which make up recognizable words unless we are able to decode; and we cannot read unless the written message has meaning for us. (Ward and Skailand, 1983:9)

Zintz (1978:7-8) concludes that reading is the ability to anticipate meaning in lines of print so that the reader is not concerned with the mechanical details but with grasping ideas from words that convey meaning. He also defines reading as a process of
thinking evaluating, judging, imagining, reasoning, and problem-solving. Reading, as
the experienced reader uses the skill, may be thought of as a four-step process:
perceiving words in print, understanding their meaning in context, reacting to the idea
presented by the writer, and integrating new learning into one's accumulated
experience. Reading, for the child just learning the necessary skills, must provide for
the anticipation and acquisition of meaning in context from the very first lessons.
Hittleman (1988:6) reports that reading is a thinking, linguistic, and cultural/social
process that is interrelated with and supportive of the other communication processes-
listening, speaking, and writing. In addition, reading entails both reconstructing an
author's message and constructing one's own meaning using the print on a page. A
reader's reconstruction of the ideas and information intended by an author is
somewhat like a listener's reconstruction of ideas from a speaker's combinations of
sounds. Lafi (2006:163) states that reading is the ability for a reader to transfer written
symbols to meaning and using them communicatively and effectively. In the same
concern, Millrood (2001:117) argues that reading is a visual and cognitive process to
extract meaning from writing by understanding the written text processing
information and relating it to existing experience. Similarly, Abu Shamla (2010:22)
states that reading is "the cognitive process of understanding a written linguistic
message and a mental representation of the meaning." On the other hand, Moyle
(1972:23) clarifies that reading is turning the collection of symbols seen upon a piece
of paper into ‘talk’, or in the case of silent reading, into an image of speech sounds”
Davies (1995:82) proposes that reading is basically a matter of decoding a series of
written symbols into their aural equivalents in the quest for making sense of the text.
He called this process the 'bottom-up' view of reading which is gradually developed as the reader goes on reading.

Paran (1996: 24) reports that reading is an activity including constant guesses that are later rejected or confirmed. This means that one does not read all the sentences in the same way, but one relies on a number of words – or ‘cues’ - to get an idea of what kind of sentence is likely to follow.

Clearly, most writers define reading as a complex process in which the reader can encode the symbols then interact with the text after understanding the meaning.

Thus, reading is an interactive process in which the reader interacts with the text and employs his/her experience and knowledge to get meaning. Consequently, it can be concluded that reading is a basic, purposeful skill in which the teacher has to get students decode the symbols and understand the meaning.

2. Reading in Islam

The Holy Qur'an is the basic source that confirms the importance of reading. Reading is found in different occasions in the Holy Qur'an as follows:

*Read! In the Name of your Lord, Who has created* (all that exists), *Has created man from a clot* (a piece of thick coagulated blood). *Read! And your Lord is the Most Generous, Who has taught* (the writing) *by the pen*” (the Holy Qur'an, Al-Alaq Surah 96: 1,2, 3). On another occasion, Allah (SWT) states: “*We made the Quran easy to learn. Do any of you wish to learn?*” (the Holy Qur'an, Al-Qamar Surah /54:17). In addition, in (An-Nahl Surah , 75)" *and when thou recitest the Qur'an, seek refuge in Allah from Satan the outcast.*" Also, (Al-Qiyámah Surah, 17 - 18) "*Lo! Upon us the putting together thereof and the reading thereof. And when we read it, follow thou the reading.*"
The message was very clear from that first day and was implemented in letter and spirit by Prophet Muhammad (Peace Be Upon Him). He encouraged his followers to broaden their horizons by seeking out knowledge – with some going as far afield as China in their search, "Seek Knowledge even in China", Hadith. He welcomed traders from different parts of the world to come to Madinah so his followers could learn from them and their respective cultures. Most Muslims during the early years of Islam were poor and illiterate. Many of them had been purposely kept this way by the wealthy who used to practice discrimination. When the small number of Madinah Muslims triumphed over the soldiers from Makkah in the battle at Badr, many of the enemy combatants were held as prisoners. Prophet Muhammad (Peace Be Upon Him) asked the prisoners to teach 10 Muslims to read and write in order to win their freedom. Companions of the Prophet (PBUH) and the following generations of Muslims took this message by heart, proving to be an impetus for one of the greatest periods in Islamic history. The truly great Islamic civilization was the one that was based on superior knowledge and adherence to the teachings of Al-Quran and Prophet (Peace Be Upon Him). During the golden age of the Islamic empire, Islamic scholars flourished on the back of an openness to the sciences, art, and literature. It was during this period that the Islamic world made most of its contributions to the realms of science and art. Outstanding contributions were made in areas of chemistry, botany, physics, mineralogy, mathematics, and astronomy, as many Muslim thinkers regarded scientific truths as gateways to religious truth. (The Brunei Times, 2010:16)
3. The Importance of Reading

Reading is the most important skill which humans should acquire, as it is the means of communication, enjoyment and pleasure and it is one of the cognitive and emotional factors for humans. In addition, it has a social value where the human cultural and social heritage pass from one generation to another and from one individual to another through written or printed text.

Budir and Sadiq (2002:90) clarify the importance of reading as follows:

- It is a means of communication between people.
- It is a crucial factor for students to acquire several experiences and knowledge.
- It is a means for teaching good manners and values for pupils.

In addition, Abu Shamla (2010:15) states that reading is the most essential skill needed to acquire knowledge. It develops critical thinking and increases students' ability to concentrate. It also increases the pleasure and effectiveness. Moreover, it helps in all the other subjects and in the personal and professional lives. In the same context, Badr El-Deen (2009:33) concludes that reading is an essential skill for students who are learning English as a foreign language and the development of good reading abilities will greatly help them progress in other academic areas.

Reading is a very necessary skill in our lives. We read newspapers and magazines, labels on food, instructions, we read textbooks. People who cannot read well do not do well in school and miss out a lot of things in life. (Swihart, 2009:2). In the same concern, Mikulecky (1986:1) clarifies that Reading helps us learn to think in the new language, and build a better vocabulary. In addition, it helps us be more comfortable with written English. According to Ali (2010:32), reading is a very important skill as it provides students with knowledge, various skills, values and good manners and
pleasure as well. Reading, the mother of all skills, is a basic tool of learning and one of the most important skills in everyday life. All children begin school with the expectation they will learn to read, and one of the most important things a child is asked to do is to read. Also, it develops critical thinking and increases a student's ability to concentrate. In addition, it increases the pleasure and effectiveness. Moreover, it helps in all the other subjects and in the personal and professional lives. It is through reading that students can advance their English background, broaden their vision, inspire their thoughts, build their values and develop their skills and creative performance. (Delia, 2003:2) Reading can be conceived as the material that enables basic instrumental learning of others, therefore it becomes an essential activity for the acquisition of knowledge.

Reading is an important language skill and a highly complicated act that everyone must learn. Reading is not solely a single skill but a combination of many skills and processes in which the readers interact with printed words and texts for content and pleasure. Through reading, one can teach writing, speaking, vocabulary items, grammar, spelling and other language aspects. The basic goals of reading are to enable students to gain an understanding of the world and themselves, to develop appreciation and interests, and to find solutions to their personal and group problems. (Al Mansour and Al Shorman, 2010:1)

It's clear that reading enjoys a very important role in acquiring knowledge. It gets us benefit from our ancestors' experience. Reading is essential for cognitive growth and language progress. It enables individuals to enrich their attitudes. It is also a key for recognizing others' cultures. In addition, it creates a special human with a critical and
creative cognition. Generally speaking, reading is a means of getting different types of knowledge as religious, scientific, cultural and literary.

4. Categories of Readers

Bruke (as cited in Birmingham 2006:23) clarifies that there are three categories of readers: "powerful, proficient, and reluctant". Powerful readers are the ideal type of readers we would like to have in our classrooms. They ask questions about the literature, characterization and the author's message. These readers also look beyond the literature in order to understand the historical importance of the piece. Literature, from a powerful reader's perspective, requires much more than reading words on the page; it is an act that requires more in-depth attention.

Proficient readers at any level know what and when they are comprehending and when they do not comprehend. They can identify their purposes for reading and identify the demands placed on them by a particular text. (New Hampshire, 2007:12)

Proficient readers are the typical readers. They are described as students who have mastered the requisite skills, but these readers have stumbling points that the powerful readers do not. For example, vocabulary or contextual information may be lacking, and so a solid understanding evades them. These students who often can do the reading and usually will do the required reading, but they tend never to surpass the basic reading expectations as a powerful reader would. They lack the guidance and motivation to move to the next level. (Birmingham, 2006:13)

Proficient readers actively make connections between what they already know and the new material. These connections activate previous learning and tap on past experiences, which helps the readers understand new information and establish interest and motivation for reading a specific text.
In a pre-conference in North Carolina (2008:1), it is stated that Proficient readers pose questions to themselves as they read, because they are curious and they realize that self-questioning helps them sort through information and make sense of it.

- Proficient readers visualize while they read, using their imagination to help them picture in their minds what an author represents in prose. They can “see” what an author is describing.

- Proficient readers are able to determine what is most important in a text. They differentiate key ideas and information from details, so that they are not overwhelmed by a mass of facts. Instead they target main themes and salient details.

- Proficient readers make inferences, they “read between the lines,” which enables them to discern implicit meanings as well as explicitly stated messages. They make predictions, read critically, and realize that authors do not necessarily always directly state everything they wish to communicate.

- Proficient readers are adept at summarizing the essence of what they read into a personal synthesis of meaning. As a result, they are able to make evaluations, construct generalizations, and draw conclusions from a text. In addition, their perceptions of the gist of a text influence how they might decide to act upon what they have read.

- Proficient readers monitor their comprehension while reading. They make extensive use of fix-up strategies as they read. If they encounter breakdowns in their comprehension difficult vocabulary perhaps, or references to unfamiliar information—they pause to make a determination whether to adjust their reading, or to kick-in additional strategies to make sense of the unclear passage.
- Proficient readers are comfortable choosing from a variety of problem solving options to guarantee that they understand a text and that they achieve their purposes for reading it.

Less proficient readers of any age group are hindered by a number of factors that do not allow them to develop such a skill to the point where they can perform integrative and complex tasks of language use, communication and literacy. In addition, less proficient readers need to be empowered to handle their struggle with the automaticity of word recognition through the acquisition of learner strategies that will further promote the motivation and confidence to progress. Without acknowledgement and application of such considerations, the discontinuity of learner development in this area will remain the same. (Warrington, 2006:3)

Birmingham (2006) adds that the reluctant or reluctant readers, however, have a far more complex and frustrating journey. What unifies all these readers is the anxiety that their reading limitations will make them appear dumb or otherwise embarrass them in front of their peers. Struggling readers, however, have found strategies to avoid reading and understanding whenever possible. In the same context, Gill (2008:12) states that many average or reluctant readers do not actively create meaning or go beyond the text. These readers are often bored by reading because they are unable to engage and play with the text; the reading is on the surface and doesn’t deepen or explore possibilities or different perspectives from within the story.

5. **Decoding in the total process of learning to read**

Decoding suggests something about what it means in regard to reading. The printed symbols you are reading now are a code for the spoken language. As part of the process of reading, we must translate from this written code into the spoken
language, the language which we know and to which we attach meaning. This is decoding: the process of translating from written graphic symbols to the appropriate sounds of our speech. Decoding is not simply a process of associating single letters of the alphabet with single speech sounds. The letter-to-sound correspondence in English is not a one-to-one matching of each letter to a sound element. Decoding requires associating sounds or sound groups with the letters by which they are represented. (Gibson, 1970)

Teaching decoding skills doesn’t suffice to produce proficient readers. Before learning to decode, the beginner must possess certain critical pre-reading skills. He must have developed a left-to-right orientation and sufficient visual and auditory discrimination to permit accurate association of groups of alphabet letters with clusters of speech sounds. The beginner must also have established the vital link between written and oral forms for language - the understanding that written words represent words he already knows in spoken language. Similarly, even after decoding skills are acquired, the learner is not a proficient reader until he develops other reading skills – notably skills of comprehension. He must be able to utilize different approaches to reading – skimming, scanning, and studying – according to the purpose for which he is reading, and he needs to be able to relate what he is reading to his own range of experience. In the total process of learning to read, then, the development of decoding ability occurs somewhere between acquisition of pre-reading skills and attainment of reading proficiency. Learning to decode is important not because it is sufficient to make a skillful reader but because it is a prerequisite to proficiency in reading. (Ward and Skailand, 1983:2). According to Stanovich (1986:2), early attainment of decoding skill is important because this early skill accurately predicts
later skill in reading comprehension. There is strong and persuasive evidence that children who get off to a slow start rarely become strong readers.

Reading is not a passive process or a mere decoding of letters and words; rather it must include: visual decoding, mental processing of what has been decoded, and relating it to one’s experience. So, when students read, they should not focus on memorizing patterns and practicing fluency; this is a passive view of reading. (Haboush, 2010:38)

It is obvious that reading and decoding are entirely connected because no one can read without decoding the letters and words then read them and after that we can understand the meaning.

6. Reading purposes

Kailani and Muqattash (2008:82) state that there are several purposes for reading most important of which are the following:

- Reading for referential material so as to get factual information with which to operate in the environment.
- Reading for research to get some information concerning a certain problem under study.
- Reading for improving intellectual skills, or to gain more general or specific knowledge.
- Reading for summarizing a text or for writing a report on a subject.
- Reading for entertainment or self-development as when we read a novel, story, a poem, in a newspaper, magazine, or journal.
Each purpose affects the process depending on reading. Several types of skills are included depending on the reading activity. In other words, one focuses on related data and ignores material irrelevant to his objectives, when reading for pleasure one is free to read what one likes and how to read it. Consequently, reading is carried out for a purpose other than reading the language itself.

7. Types of reading

The researcher has reviewed many researches and books but he didn’t find a clear classification of the types of reading. Some authors and researchers consider skimming and scanning, for example, as types of reading while others think that they are skills of reading or reading comprehension and some methodologists consider them as reading strategies. Regardless of this difference, reading should be preceded by the purpose of reading. The researcher is going to handle the types of reading as discussed in different books and researches as follows:

7.1. Extensive reading

Extensive reading means to read at length, for pleasure and in slow and relaxed way, intensive reading is likely to be more focused, less relaxed and dedicated to achieve study objectives. (Haboush, 2010:17). In the same concern, Ali (2010:27) concludes that extensive reading can be defined as free voluntary reading that involves rapid reading of large amounts of material or longer reading for general understanding with focus on meaning of what is being read than on language. Readers should read a large amount of easy, interesting, enjoyable, authentic material. It should be practiced in low anxiety environment to create a natural setting for
language acquisition. In fact, extensive reading improves the general knowledge of the reader and widens the reader's intellectual exposure.

Extensive reading is usually done at home for entertainment, or for getting general information. It has a supplementary role in the process of learning a foreign language as it widens the general knowledge of the learner and reinforces previously learned items. The material usually has the form of short stories, novels, plays, poems, texts, magazines and journals. It includes survey reading, superficial reading and skimming. (Kailani and Muqattash, 2008:37)

Extensive reading is an approach to language teaching in which learners read a lot of easy material in the new language. They choose their own reading material and read it independently of the teacher. They read for general, overall meaning, and they read for information and enjoyment. (Bamford and Day, 2004:12)

Concerning *English For Palestine* 9, no extensive reading is included because it needs time. The researcher believes that it should be included in the curriculum as it widens and enriches students' knowledge.

### 7.2. Intensive reading

Ali (2010:15) states that intensive reading involves learners reading in detail with specific learning aims and tasks. It can be compared with extensive reading, which involves learners reading texts for enjoyment and developing general reading skills. The purpose of intensive reading is to teach new words and new patterns. Therefore, the reading material designed for intensive reading is usually a little higher than the students' level. In the classroom, intensive reading activities include skimming a text for specific information to answer true or false statements or filling gaps in a summary, scanning a text to match headings to paragraphs, and scanning...
jumbled paragraphs and then reading them carefully to put them into the correct order. So intensive reading is a process of learning instead of acquisition. Similar to Ali's, Kailani and Muqattash (2008:90) suggest that intensive reading is a classroom task carried on under the teacher's guidance. It is mainly concerned with texts and includes concentrating on new words, structures, expressions, functions, pronunciation and on cultural insights. It is carefully guided so that thorough understanding of the content may be achieved. The reading material designed for intensive reading is usually a little higher than the students' level. Associated with intensive reading are silent reading, reading aloud, SQ3R, skimming, scanning. Similarly, Paran(2003:39) states that intensive reading activities are needed for four main reasons: to help learners comprehend written texts, to become more aware of text organization to better comprehend, to learn how to use and monitor effective reading strategies, and to develop generally literacy skills necessary to generate productive expressions in L2.

*English For Palestine 9* includes this type of reading as an essential one because it enables students to understand and comprehend the written text. It also, gets students achieve the learning aims.

The researcher agrees with many previous studies that the only two types of reading are extensive and intensive reading, but he will discuss all the reading types he found out in some studies as follows:
7.3. Reading aloud

Reading aloud is another type of reading skill that can be used for certain purposes such as checking pupils' pronunciation, word stress, pauses, intonation and understanding. The passage to be read aloud should be short, complete and topical. Moreover, the content and the language of the text should be familiar and clear enough to be understood. Training on reading stimulates the rapid association of word-word concepts and affords practice in pronunciation and expression particularly for shy pupils who are embarrassed when called upon to use the foreign language orally. (Kailani and Muqattash: 2008:34)

Family Literacy Foundation (2002:1) illustrates the benefits of Reading Aloud with Children as follows:

• Children's self-esteem grows as they experience the security of having a parent or other caring person read aloud with them.
• Children experience increased communication with parents and other family members.
• Children are introduced to new concepts such as colors, shapes, numbers, and alphabet, in a fun, age suitable way.
• Children build listening skills, vocabulary, memory and language skills.
• Children improve imagination and creativity.
• Children learn information about the world around them.
• Children develop individual interests in certain subjects like dinosaurs, cats, or cars.
• Children learn positive behavior patterns and social values.
• Children learn positive attitudes towards themselves and others.
Chomsky (1972) states that reading aloud can promote students' syntactic development. Also, Morrow & Gambrell (2002) confirms that reading aloud can increase listening comprehension skills. In addition, Beck et al. (2002) and Brabham & Lynch-Brown (2002) concludes that reading aloud increases students' vocabulary as well. To confirm the importance of this type, Primamore (1994) states that reading aloud also has positive effects on the development of vocabulary reading comprehension. argues that learners benefit more than others when they are read to because they often enter school lacking the necessary tools of literacy, and may be ‘at risk’ in developing their reading and writing skills. Reading aloud to children can be used proactively to avoid problems in reading such as poor vocabulary and lack of comprehension and motivation towards reading in general and would guarantee reading success.

7.4. Silent reading

Silent reading is called silent because it is supposed to be performed silently without labial movements or vibration of vocal cords. This implies that graphic forms are visually perceived and then transformed into meanings and ideas without passing through the vocal stage. Most of our reading, in fact, is done silently. Silent reading is an important skill that has to be developed properly through guidance and practice. (Abu Shamla, 2010:16; Jaber, 1991:20; Abu Maghli, 1986:10; Al Qudah and Al Tartouri, 2006:107)

Silent reading is reading for understanding or for comprehension. It is an essential skill that needs practicing by students. This skill needs more teacher guidance and assistance in the early stages of learning the languages. It should be
introduced only after the new words and expressions have been learned. The teacher is expected to help students develop their speed in silent reading. This can be realized by forming good habits such as the right sitting position, the proper distance between the page and the eyes, and the right eye movements to increase the span. The larger the span is, the faster reading can go. One way to attain such increase in eye span is to get students read a certain passage under pressure of time. Timing in silent reading increases the eye span to a great extent and forces pupils to read faster. The experienced teacher can estimate the adequate time for the pupils to go through the reading passage and for checking comprehension questions and language exercises. Comprehension questions should immediately follow silent reading. (Kailani and Muqattash, 2008:85)

The researcher concludes that silent reading enables the reader to recognize the intended meaning using eye movements, whispering or lips movements. Students read using their eyes to understand the meaning of the written text. Additionally, silent reading gets shy students to read freely and interact with the text.

7.5. SQ 3R

Active reading requires thinking about text, activating background knowledge, making connections, taking notes, reviewing notes, rereading text and testing newly acquired knowledge. SQ3R is a proven systematic strategy for actively reading a text with a goal for improved reading comprehension and retention of learned information. Cambium Learning Technologies (2008:1), Additionally, Wright (2003:1), Hennings (1982:27) and Kailani & Muqattash (2008:86) discuss this type of reading as more
suitable for advanced students who benefit from this technique in retaining information. The SQ 3R stands for the following five steps:

**Survey**: Students survey the assigned chapters so as to acquire a general idea of the material: its topic headings, sequence, assumptions, charts or questions.

**Question**: After surveying, the student answers some questions based on the material surveyed, these questions help him read with a purpose in search of specific answers to have the information he has concentrate on.

**Read**: The student reads as quickly as possible because he knows what he is searching for, that is, seeking answers for the questions he has set. While reading, he underlines the basic ideas and key concepts.

**Recite**: At the end of each section, the student recites what he has read so as to check whether he can recall the material and to relate it to previous information.

**Review**: Finally, when the student has finished the assignment, he reviews the material of the text to form a unified whole, and to check which parts he can recall and which parts he cannot. This also helps him to prepare for the next assignment.

SQ3R presents a detailed step-by-step outline of what a reader should complete and accomplish while reading. (Baier, 2011:21)

7.6. **SQ 4R**

Learning and Writing Center (n. d.) states that the SQ3R system has been in use for many years. Since it was developed by Robinson in the 1940’s, it has been included in numerous texts on the reading-study process, in many college courses on how to read and study, and in commercial reading efficiency courses offered to business people and professionals. SQ 4R System includes the following steps:
**S-Survey**: Try to become familiar with the organization and general content of the material you are to read. To do this:

1. Read the title.

2. Read the lead-in or introduction. (If it is extremely long, read just the first paragraph.)

3. Read each boldface heading and the first sentence following each heading.

4. Read titles of any maps, charts, or graphs; read the last paragraph or summary.

5. Read through the end-of-chapter questions.

6. After you have surveyed the material, you should know generally what it is about and how it is organized.

**Q-Question**: Try to form questions that you can answer as you read. The easiest way to do this is to turn boldface headings into a question. Write questions for each heading and subheading.

**R-Read**: Read one paragraph at a time and read with a purpose. Read the materials, section by section. As you read, look for the answer to the question you formed from the heading of that section.

**R-Record**: Select a form of note-taking to help locate and comprehend main ideas and important supporting details. Making an outline, writing in margins, or taking notes helps to keep you actively involved with the reading.
**R-Recite**: After you finish each section---stop. Check your level of understanding and answer your question for the section. If you cannot, look back and find the answer. Then check your recall again. Be sure to complete this step after you read each section. As a memory aid, recite out loud whenever you can.

**R-Review**: When you have finished the whole reading assignment, go back to each heading; recall your question and try to answer it. If you can’t recall the answer, be sure to look back and find the answer. Then test yourself again. Use memory strategies and mnemonic techniques to aid recall.

### 7.7. SQ5R

This type includes the same previous Rs but it adds one more skill as follows: (see figure1)

**Reflect**

- Reflect on what you have read.
- Make personal connections with the material.
- Does the material have connections w/ what you are learning in other classes?
- Write any important reflections or connections in your notes.
- Do you have any reservations, concerns, or opinions about the material?

(Tutoring Center, 2011)

Algonquin College (n.d.) replaced this (R) to (RELATE) which means think. Visualize the concept. Come up with an example. Make associations with what you learned before, your own experiences or the overall topic of the chapter. Then move on to the next heading or paragraph!. Differently, Western Washington University and University of South Australia (2010:3) called this (R) as **REMEMBER** which means
remember to test your memory – but don’t worry if you can’t remember much, you can jot down some points without looking at the material.

**Figure (1)**

**SQ5R**

- **Survey**
  - gather information to focus and

- **Question**
  - help your mind engage and concentrate.

- **Review**
  - review your textbook notes

- **Reflect**
  - make the information and ideas your

- **Recite**
  - the facts, figures as completely as

- **Record**
  - as many facts and figures as you can

- **Reduce**
  - summarize these facts and figures
7.8. **Top-down and bottom-up**

It is argued that the pattern of each reading scan-path is mainly dictated by the visual characteristics of the text, such as the length of the next word and the distance from one optimal viewing point to the next;8–10 while others have stressed linguistic factors such as sentential meaning. It is likely that both “bottom-up” (visual) and “top-down” (linguistic and attentional) factors modify reading scan-path. (Upton et al., 2003:1)

7.9. **Word by word reading**

This type of reading is time consuming and demands a high level of concentration. Some material is not readily understood and so requires a slow and careful analytical reading. People use this type of reading for unfamiliar words and concepts, scientific formulae. It can take up to an hour just to read a few lines of text. Mikhailov (as cited in Abu Shamla, 2010:18)

Children read word-by-word when they have been trained to rely on an external monitor (the teacher, aid, or other students) rather than to self-regulate when reading aloud. (Allington, 2006:3)

7.10. **Critical reading**

According to Smith (1982:3), critical reading is defined as the ability to obtain a level of interpretation higher than that needed for literal interpretation. While, Abdullah (1998:2) clarifies that reading critically means actively working out the meaning of the text as it should be intended by the author or as what seems to be true to him. The reader not only engages actively as a responder to the text but also reflects on and contributes his or her own past experiences and pre-existing world knowledge in the process. This type of reading is reported by Lafi (2006:58) as an evaluation process
for the written text and understanding the included meaning in the text. In addition, Al Faleet (2007:40) reports that critical thinking is an interactive process between the reader and the text. The reader interacts with the text using his/her experience and knowledge. Then, He/She understands the meaning of the text and analyses the included concepts.

Critical reading then can be seen as a process of communicating with the author and the texts before any judgment on the validity or the veracity of the text is arrived at. Hence the ability to read critically entails the ability to recognize, comprehend, apply, analyze, synthesize and evaluate written texts in an open-minded, logical and rational manner.

7.11. Model reading

Model reading is reading performed by the teacher who plays as an example to be imitated by students when they read aloud. It usually comes after silent reading and discussion but before students' reading aloud. Abu Shamla (2010:15). Model Reading has three distinct goals: to increase enjoyment in reading, to encourage students to pursue independent reading at appropriately challenging levels, and to improve reading fluency and comprehension. (The National Research Center, 2003:1)

7.12. speed-reading

The importance of speed reading to successful reading is neatly portrayed in the two contrasting circles of the weak reader and the good reader. In “the virtuous circle of the good reader” reading faster is linked to greater quantity of reading, better understanding, and greater enjoyment, whereas in “the vicious circle of the weak
“Comprehension” is a noun derived from the verb "comprehend", which means, “to understand” the content of a text being read. Reading is a key to comprehending a passage. Reading creates an avenue/access for a reader to know the feelings and thoughts of a writer. The aim of teaching reading comprehension is basically to teach correct pronunciation of the component words as well as to understand what they mean and possibly imply. (Idiagbon and Sani, 2005). According to Haboush (2010:22), reading is strongly connected with the term comprehension since the ultimate goal of all instructional readings, beyond academic achievement, is to create readers who are able to comprehend different sorts of texts.
Balogun (2005:109) clarifies features of a comprehension text. He states that these characteristics need to be known by a reader to be able to decode meanings of a passage. These include the following:

(i) facts, fables, Opinion
(ii) specific, general points
(iii) main and subsidiary ideas
(iv) familiar and unfamiliar words
(v) different types of expression as literal, figurative or idiomatic expressions.

Comprehension is the ability to connect to and interpret both oral and written language. It is the ability to recall facts, get the main idea, make an inference, draw a conclusion, predict/extend, and evaluate. It is the ability to reason from language that is heard and language that is read. (Bell, 1991:2). In the same concern, Curriculum Associates (2006) concludes that students utilize comprehension, or thinking skills that range from the literal to the abstract everyday. This allows students to process information well, which is vitally important because as students develop through each grade, the demand to read at a deeper level and understand complex text increases. Being able to read and think beyond the literal/concrete level is not only a concern for classroom teachers, but we are also focusing its attention on students’ abilities to comprehend complex material requiring higher-order thinking skills.
2. Reading comprehension

Comprehension in reading is the ability to understand a written text. When students comprehend a written passage, they construct meaning from the words to understand the passage as a whole. (Paulsen & the IRIS Center, 2004). Reading comprehension is defined by Badr El Deen (2011:11) as the ability to communicate a text leading an integrated process that involves decoding vocabulary and sentences, employing prior knowledge relevant to the text and using cognitive and meta-cognitive strategies in order to make sense and to get the target message the author wants to convey. Further definition is suggested by Block et al. (2002:3) who state that reading comprehension is the thinking process used to make meaning of what a person reads. Meanwhile, Abu Shamla (2010:19) concludes that comprehension is the final goal of reading, whether a person reads for pleasure, to learn, or to locate information. It is "the process of decoding and constructing meaning through interaction and involvement with a written text". Individuals construct meaning from a text as they read, absorbing new information, and comparing it to their pre-existing knowledge.

Reading comprehension is the evolution of thought that occurs as we read. True understanding happens when readers merge their thinking with the text, ask questions, draw inferences, think about what’s important, and summarize and synthesize. This enables them to use their new understanding to ask further questions and guide new learning. This active, constructive, strategic thinking process entails far more than simply retelling. (Harvey and Goudvis, 2008:1). Similarly, Nofal (2003:10) clarifies that reading comprehension is not a purely verbal process; for the written symbols to have meaning, they must be associated with the objects, action,
and qualities they represent. Additionally, Zintz (1978:268) states that developing meaningful concepts is the primary concern of the classroom teacher. Most teachers agree that pronouncing words correctly without getting meanings from the context read is not reading. Boys and girls must learn to synthesize meanings as they read through the passages in their textbooks; otherwise, they have wasted their time. At the same time, teachers know that some children may pronounce words well and comprehend little or they may comprehend much but have great difficulty reading the words. For the majority there is a positive relationship between the ability to handle the mechanics of the reading process and the ability to interpret the ideas in the passage being read. Making sure that skills in comprehending what is read are developed in all elementary classrooms is one of the most basic jobs of the classroom teacher.

The researcher concludes that reading comprehension is the process of extracting and constructing meaning through interaction and involvement with written text, therefore, readers construct meaning by interacting with text through connecting prior knowledge, previous experience, information in the text, and the stance the reader takes in relationship to the text.

3. Reading Comprehension skills

Peterson (2008:1) defines a comprehension skill as an activity that students complete for the purpose of learning about features of text like main idea or cause and effect. Comprehension skill lessons may be disconnected from text and may involve the completion of worksheets or graphic organizers that require lower level thinking.

The researcher reviewed many studies concerning the skills of reading comprehension but there was no consensus between writers that there are certain
skills of reading comprehension. The researcher is going to handle some important skills as discussed in the previous literature.

3.1 Skimming

Harmer (2001:202) states that skimming is the ability to take in a stream of discourse and understand the gist of it without worrying too much about the details. It also means running your eyes over a text to get a quick idea of the gist of a text. Additionally, Wood (2000:41) outlines that skimming involves reading only the opening and closing paragraphs and the intervening sentences and words that carry most of the meaning. Many of the words you will skip over. skimming can help understand a difficult reading that you have already read to help you review the main ideas. According to Kailani and Muqattash (2008:87), this type of reading is usually used when it is not essential to examine the text thoroughly. When we skim, for example, a newspaper or magazine, we just pass our eyes over headlines, titles, topic sentences and summaries. That is, we look for the basic idea of a passage. This kind of reading is effective in improving the students' ability of getting information within a limited period of time. Furthermore, Moyle (1972:180) believes that Skimming is a most useful skill for locating specific information, for classification of material and for revision purposes. Skimming can be undertaken simply to see what a text is about, to locate facts or comments on a certain subject or to obtain the main ideas expressed in the text.

3.2. Scanning

Scanning means looking through a text for specific items of information such as a date, a number or a place. It is also used when reading the newspaper to find, for example, what time a TV programme is on, or when looking up a telephone number in the telephone directory. It refers to a quick overview of a passage. This type of
reading occurs when using television listings, programs, catalogues, telephone directories, etc.. Students may be asked to scan such material to solve whatever problem is presented. However, in pleasure reading, we neither skim nor scan, but read for main ideas without paying close attention to details. In brief, skimming is going over a text very quickly in order to get the general idea or gist. (ibid:11)

Scanning is looking through reading material for specific bit of information that you think is likely to be there because you have checked it in the index, because someone has told you it is there, or because you think you remember seeing it there. Scanning can help you locate particular bits of information very quickly. Finding a service and a telephone number is an example of scanning. (Wood, 2000:41)

3.3. Identifying the topic

Riverside Unified School District (2004:2) concludes that the main idea is the sentence within a paragraph that states what the paragraph is mainly about. The supporting details are the related sentences in the paragraph that support the main idea. The topic is what the entire paragraph is about. The topic is determined by identifying the main idea and supporting details. Similarly, Harmer (1999: 201) reports that good readers and listeners are able to pick up the topic of a written or spoken text very quickly. With the help of their own schemata they quickly get an idea of what is being talked about. This ability allows them to process the text more effectively as it progresses.
3.4. Prediction

Both readers and listeners sometimes guess in order to try and understand what is being written or talked about, especially if they have first identified the topic. (ibid, 201)

Good readers have a purpose for reading. One strategy for improving comprehension is predicting, which helps the reader set a purpose for their reading. This strategy also allows for more student interaction, which increases student interest and improves their understanding of the text. Oczkus (cited in McKown and Barnett, 2007)

3.5. Inferring

Harvey and Goudvis (2008:4) identify inferring as the bedrock of understanding. It involves taking what you know, your background knowledge, and merging it with clues in the text to come up with some information that isn’t explicitly stated. Inferential thinking helps readers to figure out unfamiliar words, draw conclusions, develop interpretations, make predictions, surface themes, and even create mental images. Likewise, Serafini (2004:2) states that inferring refers to reading between the lines. Students need to use their own knowledge along with information from the text to draw their own conclusions.

3.6. Gaining the meanings from the figurative use of language.

Readers gain the meanings from the figurative use of language by knowing how to interpret the special meaning of many common figures of speech. Or relating information and understanding gained from reading to other experiences they have had or other reading they have done. Abu Shamla (2010:24)
3.7. Making connections

Duckworth (2009:2) confirms that good readers consider what they already know about a topic before they read, relating what they know to what they are reading. In other words, they make text-to-self connections. Furthermore, McKown and Barnett (2007:5) identify that students can make text-to-self connections through drawing, making a chart, or writing. Teachers might ask students if they have ever experienced anything like the events in the text. Students can make text-to-text connections through drawing, making a chart, writing, and graphic organizers. These text-to-text connections could be based upon how characters in the story relate to each other, or how story elements relate between stories.

3.8. Judge the truth and logic of what they read.

Readers are able to judge the truth and logic of what they read by following the writer's arguments or by using their previous experiences to help them make decisions about the worth of reading materials. Abu Shamla (2010:24)

3.9. Asking and answering questions:

Keene & Zimmerman, (1997:119) state that teaching students how to ask questions before, during, and after reading improves comprehension. In addition, students can be taught how to construct questions that clarify meaning; speculate about text yet to be read; determine an author’s intent, style, content, or format; locate a specific answer in the text or consider rhetorical questions inspired by the text. In addition Harvey & Goudvis (2000) clarify that questioning is a process readers use before, during, and after reading. The questioning process requires readers to ask questions of themselves to construct meaning, enhance understanding, find answers, solve problems, find information, and discover new information.
3.10. Drawing conclusions

When readers draw a conclusion, they put together the facts and information found in the text or the illustrations and come to a conclusion about what it all means. Drawing conclusions based on textual information allows readers to understand things not directly stated in the text. (Riverside Unified School District, 2004:2)

3.11. Interpreting texts

Harmer (1999:202) states that readers and listeners are able to see beyond the literal meaning of words in a passage, using a variety of clues to understand what the writer or a speaker is implying or suggesting. Successful interpretation of this kind depends to a large extent on shared schemata as in the example of the lecturer who, by saying to a student you are in a non-smoking zone was understood to be asking the student to put the cigarette out.

3.12. Note-taking

Note taking involves recalling specific information during and after reading and being able to pinpoint the information in the text.

3.13. Sequencing

Readers use this skill to determine the order in which events happen in a text.

3.14. Visualizing:

Harvey and Goudvis (2000:2) outline that visualizing a text is the process of creating pictures in our minds of what is taking place on the page. Helping students incorporate strategies that create pictures of text will help improve comprehension. Modeling visualization strategies and providing students opportunities to create visual images of text and discuss the images they see in their minds as they read helps
students. Additionally, Harvey and Goudvis (2008:5) state that visualizing is sort of a first cousin to inferring. When readers visualize, they construct meaning by creating mental images, seeing, hearing, tasting, touching, and even smelling! Young children seem particularly inclined to visualize in support of understanding as they listen to and read stories, often living through or living in the stories. When children infer and visualize as they listen, read, and view, they respond with joy, glee, or sometimes dread. Inferring and visualizing enable kids to get at the deeper meaning in text. Furthermore, National Reading Panel (2000) summarizes that students can practice the visualization strategy by writing and drawing or drawing and writing. Teachers have students visualize settings, characters, and actions in a story. Visualization requires the reader to construct an image of what is read. This image is stored in the reader’s memory as a representation of the reader’s interpretation of the text.

3.15 Summarizing text:

Students often have difficulty deciding what is important in text and putting it in their own words. Modeling summarization in class and providing students with opportunities to summarize are important comprehension activities. One activity is to divide the text into chunks and have groups of students work together to summarize each chunk. (Schoenbach et al., 1999:4).

Teacher modeling and student practice of the summarization process has proven effective for improving students’ ability to summarize text and to improve text comprehension. Students can be taught to identify main ideas, connect the main ideas, eliminate redundant and unnecessary information, and remember what they read with the summarization strategy. (McKown and Barnett, 2007). In addition, Riverside Unified School District (2004:2) reports that Summarizing
is a skill that involves selecting the most important information and restating it in a brief, synthesized manner. When this skill becomes automatic, students are able to use it as a reading comprehension strategy and apply it in any situation.

3.16. Distinguishing facts from opinion

Students can differentiate fact from opinion when they understand the text.

3.17. Knowing the meaning of words through context

Students can deduce the meaning of some words from context when understanding the idea in general.

4. Schemata

Schema is all the stuff that’s already inside your head, like places you’ve been to, things you’ve done, books you’ve read—all the experiences you’ve had that make up who you are and what you know and believe to be true. When you use your schema, it helps you use what you know to better understand and interact with the text. Good readers use schema to make connections from their reading (the text) to themselves, so we will call this “text-to-self connections.” Making text-to-self connections as you read is kind of like having a conversation going on in your head. (Duckworth, 2009:2)

5. Levels of Reading comprehension skills

Zintz (1978:269) classifies comprehension skills to; Literal comprehension or the pre-interpretive skills, interpretive skills and critical reading comprehension.

Literal comprehension requires getting meanings from the context through such abilities as finding the main idea, putting ideas in proper sequence to tell a story or finding pertinent information in paragraphs to answer questions. Literal comprehension skills include the following skills:
5.1. Literal Comprehension

A. Foundation skills

1. Expanding vocabulary concepts
   a. Using the rest of the sentence to determine meaning
   b. Matching word meanings
   c. Putting words in categories
   d. Choosing synonyms
   e. Recognizing sequence of ideas within a sentence
   f. Determining if sentence explains Why, when, where
   g. Understanding antecedents of pronoun referents

1. Finding and remembering details

2. Understating and following directions

3. Understating paragraph organization

B. Getting meaning from the context

1. Reading to find answers

2. Finding the main idea in a paragraph or in a story

3. Putting ideas in proper sequence in a story

Berry (2005:1) also confirms that at this level, you would not have to understand the true meaning of a paragraph, however, you could memorize the information. Instructors might ask you to read a chapter dealing with dates or specific facts. In addition, you would memorize these dates and facts. However, even though you have memorized these facts, this does not mean that you necessarily understand their full meaning or see the implication of these dates and facts applied to other situations. Besides, you are looking at what was written by an author at “face value”, little
interpretation is needed. Likewise, Mohamad (1999:1) states that "The first level, literal comprehension, is the most obvious. Comprehension at this level involves surface meanings. At this level, teachers can ask students to find information and ideas that are explicitly stated in the text. In addition, it is also appropriate to test vocabulary. Being able to read for literal meanings is influenced by one's mastery of word meanings in context."

5.2. Interpretive Skills

Zintz (1978:270) clarifies that the second level (interpretive level) includes learning to anticipate meanings, drawing inferences, drawing generalization, and selecting and evaluating. The skills included in this level are the following:

A. Learning to anticipate meanings
   1. The cloze procedure
   2. Predicting what will happen next

B. Drawing inferences

C. Drawing generalizations

D. Selecting and evaluating
   1. Facts vs. fancy
   2. Selecting material pertinent to a given topic
   3. Overstatement
   4. Judging emotional response to what is read

At this level, you are attempting to understand what the author meant by what s/he said in the story, paragraph or textbook. It is presumed that you have already memorized certain facts at the literal level and now you are attempting to see the implications of the author’s words. Also, you are attempting to “read between the
lines.” as they say. Besides, you are attempting to understand that which you memorized at the literal level of comprehension. (Berry, 2005:1)

Mohamad (1999:1) indicates that the second level or strand is interpretive or referential comprehension. At this level, students go beyond what is said and read for deeper meanings. They must be able to read critically and analyse carefully what they have read. Students need to be able to see relationships among ideas, for example how ideas go together and also see the implied meanings of these ideas. It is also obvious that before our students can do this, they have to first understand the ideas that are stated (literal comprehension). Interpretive or referential comprehension includes thinking processes such as drawing conclusions, making generalizations and predicting outcomes. At this level, teachers can ask more challenging questions such as asking students to do the following:

- Re-arrange the ideas or topics discussed in the text.
- Explain the author's purpose of writing the text.
- Summarize the main idea when this is not explicitly stated in the text.
- Select conclusions which can be deduced from the text they have read.

5.3. Critical reading ability

The third level, as discussed by Zintz (1978:280), is the critical reading ability. He reports that One does not believe everything he reads. If he tried to be would hopelessly confused. One relates new ideas that he bears, sees, or reads with his previous knowledge, or prejudice, and accepts or rejects the new idea. Critical reading cannot be done without knowledge. Through knowledge, the reader is able to make comparisons and judge the relevance. If the knowledge on which judgments are made
is not valid, the conclusions will not be either. The skills needed to develop critical reading ability are:

1. Determining the relevance of the material
2. Evaluating the reliability of authors
3. Differentiating fact and opinion
4. Examining assumptions
5. Checking data
6. Detecting inconsistencies
7. Drawing conclusions, based upon
   a. Gathering of adequate information
   b. Testing possible conclusions in light of the data

According to Mohamad (1999:1), the third level of comprehension is critical reading whereby ideas and information are evaluated. Critical evaluation occurs only after our students have understood the ideas and information that the writer has presented. At this level, students can be tested on the following skills:

- The ability to differentiate between facts and opinions.
- The ability to recognize persuasive statements.
- The ability to judge the accuracy of the information given in the text.

Berry (2005:2) concludes that the third level is called Applied Level (instead of Critical Level). At this level, you are attempting to elevate or raise your thinking one more “notch” or level to a more critical, analyzing level. This presumes that you have already reached the previous two levels. At this level, you are “reading between the
lines” and then examining the message from the author and attempting to apply that message to other settings.

6. Major approaches to reaching reading

Methods of teaching reading have gained special prominence but it must always be borne in mind that practice in the classroom rarely runs hand in hand with current theory. Teachers do not change their approach overnight nor would one desire this to happen. The researcher reviewed some books and articles to have much information about the history of approaches for teaching reading. He found many approaches concerning this matter, and he handles nine major approaches for teaching reading as follows:

6.1. Alphabetical Approach

Moyle (1972:92) confirms that the child, in this approach, learns to recognize letters and spell out words using letter names. The approach emphasizes recognition of words rather than the meaning conveyed by print. It seems to be helpful with spelling and left/right orientation, but letter names are not particularly helpful and are often unrelated to the sound value. The child may lose interest in reading when concentrating solely on letter recognition. Further a learning set may be established by this detailed attention to letters which may limit reading with anticipation at a later date. Likewise, Kailani and Muqattash (2008:89) state that in this method the names of the letters are taught but problems arise with irregularly spelt words and those which the child can say but which, as a beginner in the decoding or encoding skills, he cannot visualize. It is based on visual concepts, rarely used in schools but many parents still read ABC books to two-, three-, and four-year-olds in an alphabetic way: 'ay' is for 'apple', 'bee' is for 'bag, 'see' is for 'cat'.

50
6.2. Traditional phonics

This group of approaches has as its unifying factor the sounding out of the individual letters in a word and blending the sounds to make the word. It is useful in tackling words not recognized by sight when the correct word cannot be gained from contextual clues, or for checking the accuracy of the choice of word on the basis of such clues. Phonic work can be carefully structured, and systematically taught. Many children find this approach difficult unless substantial work in the development of auditory discrimination and thinking strategies involved has been undertaken. This method was criticized because the sounding of individual letters did not give the child the ability to blend them into the original word as; 'Ke-a-te' does not make 'cat' nor does 'be-uh-te' make 'but' but rather 'butter'. (Moyle, 1972:92)

Kailani and Muqattash (2008:88) outline that this method focuses on the single letter-value as the basic unit. It teaches the child the sounds which single letters and combinations of letters stand for. The use of this method helps children to read in a systematic left to right direction. But, splitting words up, may encourage habits of slow, labored reading. This method is reported by Learning Disabilities Association (1998), as it teaches word recognition through learning grapheme-phoneme (letter-sound) associations. The student learns vowels, consonants, and blends, and learns to sound out words by combining sounds and blending them into words. By associating speech sounds with letters the student learns to recognize new and unfamiliar words.

6.3. Visuo-phonics and linguistic approaches

Learning Disabilities Association (1998) argues that Multisensory approach can be used with both phonics and linguistic approaches. This method assumes that some children learn best when content is presented in several modalities. Multisensory
approaches that employ tracing, hearing, writing, and seeing are often referred to as VAKT (visual, auditory, kinesthetic, and tactile) methods. Moyle (1972:111) clarifies that these approaches are based in a recognition that the sound value given to letters sounded in isolation is generally different from the contribution the letter makes to the sound of the total word. The child learns to respond to groups of letters from the beginning. This is more realistic and unifies some of the better features for the phonic and whole word methods.

6.4. Synthetic Method

The synthetic method starts with the smallest indivisible unit – the letter or the sound – and then builds units into words. Generally, it uses the sound unit rather than the letter, this is because the problem where a letter has more than one pronunciation is avoided. (Kailani and Muqattash, 2008:88)

6.5. Whole-word and Look/say approaches

These approaches depend upon the memorization of words by their configuration. Learning is by association of words with pictures and joining words such as 'the' and 'here' by such means as flash cards. Books used in this area tend to be repetitive and in the early stages words are often chosen for the difference they present as patterns. It seems to function well in the very early stages but as all new words have to be visually memorized the learning load soon becomes too great. The child has to wait to be told any new word by the teacher and as such the approach restricts reading independence. (Moyle, 1972:111)

Look/say approach or method is also known as (Analytic/Global method). It aims at developing the learner's ability to read large units at a glance. 'Whole word', 'phrase' and 'sentence' methods are analytic in their approach to the teaching of reading in that
they begin by encouraging the kids to recognize whole words or even whole sentences, and it is only after a 'sight' vocabulary of some size has been built up that teachers encourage the children to analyse words into their component sounds and letters. Advocates of analytic methods assert that reading is a form of communication and that successful reading always includes a response to the meaning conveyed by the words. (Kailani and Muqattash, 2008:88)

6.6. Story approach

This consists in children reading stories, or summaries of stories, which have previously been read to them. In the early stages this gives a great sense of success and satisfaction in that unrecognized and difficult words can often be tackled from memory of the story which has been read. It gives the child the ability to respond to meaning for the beginning, but from a growth point of view has all the limits imposed by memorization and a lack of ability to deal with words not previously met in print. (Moyle, 1972:112)

6.7. Language-experience approaches

Teaching strategies under this heading are employed to some extent by most teachers, but form the major approach to reading in some schools. It is not a pure approach but will usually involve aspects of some other approaches. It varies from the encouragement of children to talk about themselves, their experiences and ideas, later recording them in writing; to the situation where the teacher involves groups of children in some learning activity where the need for reading and writing can be appreciated and become rewarding. In the essence it is the most natural and realistic approach and the child learns to read by using his reading. This overcomes to some extent the difficulty of motivating the child to engage in devised activities in order to
learn the sub-skills of the reading process and the problem of obtaining transfer of these skills to 'real' reading situation. (ibid:112)

Learning Disabilities Association (1998) declares that the language experience approach uses children's spoken language to develop material for reading. This approach utilizes each student's oral language level and personal experiences. Material is written by the child and teacher for reading using each child's experience. This can be done in small groups and individually. Familiarity with the content and the vocabulary facilitate reading these stories. Each child can develop a book to be read and re-read. This approach helps children know what reading is and that ideas and experiences can be conveyed in print.

6.8. Individualized reading

This is not really a pure approach but is characterized by the child's freedom to choose any book to read, at any time, by the writing of book reports and discussion with the teacher. The teacher will often add to this approach some group work in phonics. The approach fits well with the individual interests of children and emphasizes reading for meaning, but few children are able to begin learning to read without some further help. Growth will depend to some extent on regular intervention of the teacher ensures that work undertaken is apposite and interesting, and enables the child to appreciate the need for learning any particular skills or techniques. (Moyle, 1972:112)

6.9. Eclectic or mixed method approaches

It is clear now that none of the previous approaches appears to satisfy all teachers. Therefore, many teachers use mixed methods depending on the students' level and the text being taught.
7. Reading Difficulties

Reading difficulties based on known factors including deafness, defective vision, low intelligence, emotional disturbance, poor teaching, absenteeism and cerebral damage. (Frankling, 1961:2)

The causes of backwardness in reading are often complex, there are a combination of adverse factors, which are interrelated. The following brief discussion of the aetiology of backwardness in reading, possible causes will receive individual consideration but it must be remembered that causation is usually a result of two or more adverse factors. (Moyle, 1972:43)

7.1. Low Intelligence

Reading ability and intelligence are positively correlated and quite highly so in the early school years. A low intelligence level does not prevent a child from reading but it will almost certainly mean that he will start to read later than the average child; he will progress more slowly and need more careful guidance. The child of low ability therefore should not have difficulty if the instruction given is based on his own personal developmental pattern. (ibid: 44). Moreover, Pishghadam (2009:1) state that Learners vary enormously in how successful they are in learning a second language. All people acknowledge that some individuals learn a second language easily and some with more difficulty. Among so many factors contributing to second language learning success, including motivation, attitude or personality types, it seems that one important factor which accounts for success in language learning is the degree of intelligence that individuals possess.
7.2. Dyslexia

A small number of children appear to have very grave difficulty in perceiving the printed word. This condition may be further complicated by poor speech, lack of an established cerebral dominance or hyperactivity. Such children have often in the past been referred to as being word-blind but most authorities today refer to them as suffering from dyslexia or specific developmental dyslexia. (Moyle, 1972:44)

Frankling (1961:2) outlines that Dyslexia means a difficulty in learning to recognize the written symbols of language. It could be considered a sensory aphasia affecting the association areas of the visual cortex. While, Fabelo et al. (2004:5) outline that Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instructions. Secondary consequences may include problems in reading comprehension and reduced reading experiences that can impede growth of vocabulary and background knowledge. In addition, Dyslexic readers require many more exposures to a printed word over a much longer period of time before the stored representations are clear and true to the printed word.

Dyslexia, in general, as defined by Orton Dyslexia Society (1994) is a neurologically-based, often familial disorder which interferes with the acquisition of language. Varying in degrees of severity, it is manifested by difficulties in receptive and expressive language, including phonological processing, in reading, writing, spelling, handwriting and sometimes arithmetic. It is not the result of lack of
motivation, sensory impairment, inadequate instructional or environmental opportunities, but may occur together with these conditions. Although dyslexia is lifelong, individuals with dyslexia frequently respond successfully to timely and appropriate intervention. (cited in Chris Singleton, 2003:2)

7.3. Physical conditions

All learning takes place more easily when the child is in full health. Illness, poor diet and lack of sleep all have an effect upon the ability of the child to learn to read.

7.4. Visual and aural discrimination

Most children have in fact gained sufficient mastery of the perceptual processes in order to begin reading by the time they commence school. This fact has led to teachers supporting all children to be equally mature in these skills and also to reluctance to encourage growth of these skills by specific activities during the early stages of reading instruction. Those children who through lack of cerebral dominance, emotional instability or poor environmental conditions have not achieved the normal level of maturity in visual and aural skills may be unable to appreciate and memorize shapes and the orientation of letters. (Moyle, 1972:45)

7.5. Language difficulties

Weakness in any of the language arts will inevitably lead to difficulty with the reading process but it is obvious that a child who has difficulty with spoken language is at a disadvantage in learning to read from the very beginning. Lack of ability in the use of language can stem from three different sources namely, low innate ability, speech defects and a poor linguistic environment. (ibid: 46)
7.6. Motivational Factors

Motivational factors such as positive and high self-perceptions in the area of reading, student value in reading, and the enjoyment of reading, influence the understanding of text. In addition, motivational factors gain importance as predictors of reading comprehension ability as readers’ age and develop more skill. (Abedi et al., 2008:10)

7.7. Personality and emotional factors

In order to achieve adequate performance in a complex activity such as the reading process it is necessary first to have a high degree of personality integration and emotional stability. It is extremely difficult to assess the extent to which emotional attributes affect reading progress. Many children fail in reading because the instruction given and the materials used are inappropriate to their personality traits and interests. (Moyle, 1972:46)

Behavior and emotional problems can be classified into three major types of disorders: internalizing, externalizing, and atypical. We refer to a behavior or emotional problem as a disorder when the symptoms cause impairment in the child's school work. (Tridas, 2009:2)

7.8. Environmental factors

Moyle (1972:47) clarifies that environmental influences are important in a number of causative factors. The child from the home with a poor educational atmosphere may suffer linguistic deprivation. In addition, the child's home life and the type of area in which he lives may have a direct influence upon preparation for and attitudes towards work in school. In a more recent study, Tridas (2009:3) states that child's environment plays a critical role in his or her life. A mismatch of skills and
developmental expectation can lead to poor school and work performance and can exacerbate emotional and behavioral symptoms.

7.9. Factors in the school

A number of factors present within the schools which seemed unhelpful to reading progress especially if the child was already backward.

8. Reading Comprehension Difficulties for Palestinian EFL learners

The problems of Arab learners of English with English reading comprehension are well documented. Much of the focus has been on the “higher-level” areas such as syntactic processing and rhetorical structure, conceptual and cultural schemata, and learner attitude and motivation. (O’Sullivan, n.d.:3)

Mourtaga (2008:10) concludes that Arab EFL/ESL students, including the Palestinian ones, suffer from many reading problems as a result of teachers' misunderstanding of the reading process, students' lack of the linguistic competence, differences between English and Arabic, and English spelling-pronunciation irregularities. He states that "… our students find reading English a very complicated skill, and therefore, they have many problems with it. The product of the Gaza schools, therefore, is poor readers who realize this fact only when they encounter big reading assignments when they enter a university." He also classifies the reading problems into four categories as follows:

8.1. Problems related to the misunderstanding of the reading process.

Many of the EFL teachers in the Gaza Strip are always stuck to the syllabus dictated by the ministry of education and do not generate, develop, or test hypotheses. More often than not, these teachers follow a traditional bottom-up approach or the Grammar-Translation method when teaching reading. For instance, they view reading
as a one-way process and therefore, focus mainly on word identification. This is clear in many classrooms of reading where student readers are stopped from time to time to be corrected or to be asked about the meaning of individual words they have read. In addition, when student readers are asked to read loudly in class, they are asked to put their index finger on the words they are reading. This behavior might develop a way of reading that these students might follow in their whole life; a way that is slow, loud, and with sub-vocalization. However, the reading teachers need to know that if the eyes look at words one at a time, the brain deals with words in meaningful clusters. Therefore, using the index finger to refer to every word while reading aloud makes reading slow, and slow reading is bad. It is clear that everything depends on how teachers define reading, and their teaching practices will follow accordingly. It is almost the first step on the ladder that determines the other steps. If that step is not strong enough, the whole ladder may collapse. This is why, perhaps, there has been much attention to teacher education, and teacher training has become the focus of many governments especially in the Third World.

8.2. Reading Problems Related to Insufficient Linguistic Competence in General and Use of English

He also clarifies the second reading difficulty saying: "Just like driving, Arab EFL students are poor readers because they find reading materials something new and hard to deal with. While they think that all of the meaning lies in the print, they do not have the linguistic competence to utilize that. In addition, they are not trained or told how to use their schemata because their teachers, too, may think that the meaning lies only in the print. Therefore, they focus on many things at one time: phonological,
morphological, syntactic and semantic clues, so as to read fluently with comprehension. However, it is hard for the brain to attend to all these things simultaneously.” He adds, "Insufficient exposure to English is clear at schools, and in the wider community. At schools, for instance, there is always a small book of reading, and sometimes, a small story without any supplementary materials for the whole academic year. Even out of schools and universities, the sociolinguistic situation is too poor. Neither public nor private libraries exist. At home, fathers are more concerned about financing their big families than buying books, while mothers are always busy in their housekeeping. If some books are at home, they are almost in Arabic and about Islam. Then, how can we imagine developing students’ reading comprehension with such little exposure, which is not enough to build a threshold for reading?"

8.3. Problems related to the differences between Arabic and English

The spelling sound system of English is different from that of Arabic, especially in the vowel system. While English uses six vowels in writing, and about 14 in speaking, Arabic has only three. Arab EFL readers might be confused when reading words such as beat, bet, bait, pot, bat, bought, etc. The confusion, as far as I am concerned, stems out from the fact that these vowel differences which are phonemic in English are allophones in Arabic. Another reading difficulty at the vowel level is that weak vowels in English have the phonetic value [ə] and are represented in any vowel symbol in writing. Therefore, Arab EFL learners are expected to misread words like *administrater for administrator, *biginnar for beginner, *villigers for villagers, *husbund for husband, etc. Differences at the consonant level also exist. For instance, While English differentiates between two bilabial plosives [p] and [b], Arabic has
only the latter. As a result, Arab EFL students always replace [b] for [p] when they read their English texts. Another difference between Arabic and English that causes a problem is the English voiced apico-alveolar fricative [v], which has no equivalent in Arabic. Consonant clusters in English are, perhaps, the most obvious reading problem Arab EFL students face when they read English. It makes their reading very slow and ambiguous. It should be noted that this is not only the problem of Arab learners of English, but also of many of their teachers as well. It is well known that English allows up to three consonants between two vowels (in one syllable). However, Arabic allows only up to two. To overcome this problem, Arab EFL students tend to divide the English consonant clusters by inserting a vowel between them so as to facilitate pronunciation. Famous examples as: *againest, *conestitution, *transecribe, *unestressed, *worled, etc.

8.4. Problems related to the English spelling/ sound system.

Since most of the Gaza school students are oral readers; that is, they associate meaning phonetically; their reading problems have something to do with spelling. For example, students may find spelling difficult when reading the following words:

- Too, clue, shoe, where different letters represent one sound.
- Dame, mad, fall where a single letter represents different sounds.
- Shy, seal, this, then, faint, rough, station, philosopher, coach, colleague, character, where a combination of letters represents one single sound.
- Know, psychology, lamb, often, whole, paradigm, name, through, isle, where some letters have no sound at all
In the same concern, Dajani and Mclaughlin (2009:1) report that English language education in Palestine today faces serious challenges. With unmanageably large class sizes, virtually no resources, unreliable Internet access and unreasonably low salaries, there are few incentives for teachers to be motivated, energetic and creative in the classroom. Teacher dissatisfaction, combined with both a traditional methodological approach focusing on rote learning and repetition, and a school leaving exam (the Tawjihi) which has neither a listening nor a speaking component, has resulted in a local population which has generally poor communication skills in English. Likewise, Abu Shmais (2002:2) confirms reading difficulties over Palestinian EFL learners through her experience as an English teacher which has shown that Arabic-native speakers encounter many difficulties while reading English texts. According to the two subjects in this study, (two Arabic-native speakers majoring in English at An-Najah University) reading in English is difficult and very demanding specially reading literary texts. Additionally, Abu Shama (2010:29) reports that the occurrence of these reading problems during the L2 learning process may not only be due to the pressure of the patterns of the mother tongue but also to imperfect learning of the new L2 reading comprehension patterns. Therefore, if a perfect teaching method for reading comprehension is achieved by activating students' prior knowledge, the problems would never be made or would be minimized. The occurrence of problems in understanding the reading passages is merely a sign of the present inadequacy of our teaching techniques. Therefore, we should change the traditional techniques of teaching reading comprehension.

Importantly, UNRWA has modified English For Palestine Curriculum starting from 2008-2011 for Grades 1-9. The Education Department in UNRWA in the Gaza
strip confirms that there are some problematic areas in English for Palestine: It's a well-known fact that the curricula are too long and have too many activities. Moreover, they were designed for a certain type of students as the elite. So, teachers were obliged for the lack of time to focus on quantity not quality so as to be able to cover the syllabi in the due time. As a result, students do not grasp knowledge properly in their classes and when they go home most parents cannot help their children because they are not educated enough. (Education Department/UNRWA, 2010-2011:1).

*English For Palestine* 9 has some reading comprehension problematic areas, as it has irrelevant topics to the students' environment and culture, for example, *Introducing Istanbul* and *Masai People of East*. Moreover, some other topics are pure scientific as *Finding the way, our friends and the forest*. In addition, the questions related to the reading passages are mainly Wh-questions. They need to be varied. (ibid:95)

After reviewing the previous studies, and from the researcher's experience as an English teacher for eleven years, He believes that the method of teaching, the physical and emotional condition of students and the system of English language which differs from the system of the students' mother tongue language cause the difficulty of reading and reading comprehension as well. In addition, Some problems occur in the curriculum itself where there are some topics not familiar to students. They need clarification as pictures presenting the words, or videos showing the topic as in reality. Therefore, He suggests computers to be tools of motivating both teachers and students to read well and interact with the written text.
9. Suggested Solutions for the Reading Comprehension

According to Clay (2002:11) The following are steps to improving comprehension:

1. Identify where difficulty occurs
2. Identify what the difficulty is
3. Restate the difficult sentence or passage in their own words
4. Look back through the text
5. Look forward in the text for information that might help them to resolve the difficulty.
6. Students should monitor their own comprehension
   - be aware of what they do understand
   - identify what they do not understand
   - use appropriate "fix-up" strategies to resolve problems in comprehension
7. Using graphic and semantic organizers
8. Answering questions
9. Generating questions
10. Recognizing story structure (Setting, initiating events, internal reactions, goals, attempts, outcomes)
11. Summarizing
   - identify or generate main ideas
   - connect the main or central ideas
   - eliminate redundant and unnecessary information
   - remember what they read
Furthermore, Mourtaga (2008:10) suggests some solutions to improve reading comprehension:

1. Different approaches and/techniques based on the Extensive Approach to reading, along with class instructions to develop skills and strategies are enough to solve our students’ problems. It is a fact that language skills are developed through practice while comprehension is improved and developed through extensive reading. Since Arab EFL students do not have enough exposure to English, the Extensive Approach to reading might be one of the best solutions.

2. Teachers should motivate their students by creating a humanistic teaching/learning environment. Students can be informed that problems in reading might exist, but there are ways of solving them, and this might be more important than teaching the meaning of specific words, phrases, and concepts.

3. For difficulties related to consonant clusters, teachers can write down examples on the blackboard and divide them in the areas of difficulty. For instance, consonant clusters such as in ‘Chomsky’, ‘against’ or ‘constitution’, can be divided as chom-sky, again-st, cons-titution. The next step is to ask students to read repeatedly each word as if it were two. Then, students in each time can be asked to speed up their pronunciation till the two parts become one word.

4. Problems related to individual letters can be solved by using minimal pairs, nonsense pairs, and minimal sentences. For instance, to teach students how to distinguish between [p] and [b], minimal pairs such as pan/ban, pen/ben, and
Pack/back, are useful when students are asked to read them loudly and tell the difference. Nonsense words are more useful since teachers feel free to create as many words as they can to show the difference. When teaching the difference between [f] and [v], teachers can use nonsense pairs such as fat/vat, far/var, sefen/seven, etc. However, it is much more effective when these problematic sounds are taught in context such as in the following minimal sentences:

- I bought a van because my car is small.
- I bought a fan because it is hot today

In addition, Martin (1991:1) suggests some techniques to improve the reading comprehension:

- **Develop a broad background.**
  
  Broaden your background knowledge by reading newspapers, magazines and books. Become interested in world events.

- **Know the structure of paragraphs.**
  
  Good writers construct paragraphs that have a beginning, middle and end. Often, the first sentence will give an overview that helps provide a framework for adding details. Also, look for transitional words, phrases or paragraphs that change the topic.

- **Identify the type of reasoning.**
  
  Does the author use cause and effect reasoning, hypothesis, model building, induction or deduction, systems thinking?
- **Anticipate and predict.**

Really smart readers try to anticipate the author and predict future ideas and questions. If you're right, this reinforces your understanding. If you're wrong, you make adjustments quicker.

- **Look for the method of organization.**

Is the material organized chronologically, serially, logically, functionally, spatially or hierarchically?

- **Create motivation and interest.**

Preview material, ask questions, discuss ideas with classmates. The stronger your interest, the greater your comprehension.

- **Pay attention to supporting cues.**

Study pictures, graphs and headings are very important.

- **Highlight, summarize and review.**

Just reading a book once is not enough. To develop a deeper understanding, you have to highlight, summarize and review important ideas.

- **Build a good vocabulary.**

For most educated people, this is a lifetime project. The best way to improve your vocabulary is to use a dictionary regularly. You might carry around a pocket dictionary and use it to look up new words. Or, you can keep a list of words to look up at the end of the day. Concentrate on roots, prefixes and endings.

- **Use a systematic reading technique like sq3r.**

Develop a systematic reading style, like the SQR3 method and make adjustments to it, depending on priorities and purpose. The SQR3 steps include Survey, Question, Read, Recite and Review.
- **Monitor effectiveness.**

Good readers monitor their attention, concentration and effectiveness. They quickly recognize if they've missed an idea and backup to reread it.

- **Should You Vocalize Words?**

Yes, although it is faster to form words in your mind rather than on your lips or throat. Eye motion is also important. Frequent backtracking slows you down considerably.

**10. Reading in English For Palestine curriculum**

English Language Curriculum (ELC) in Palestine (1999:16) clarifies that Reading comprehension is the most important skill to be taught in school and the ability to read accurately and fluently is the most important need for the Palestinian student. The students will be trained for:

1. Information and understanding: collect data, facts, or ideas; discover relationships, concepts, or generalizations; and use knowledge generated from text.

2. Aesthetic Response: enjoy and appreciate texts, relate texts to self, and respond sensitively to texts with diverse social, historical, and cultural dimensions.

3. Critical Analysis and Evaluation: Use personal and objective criteria to form opinions or to make judgments about ideas and information in written texts. The students will read a variety of text types for the following purposes:

   - To comprehend basic facts in the text
   - To obtain information from a text and to use this information for summary, study, and other purposes
   - To discover relationships, concepts, or generalizations in written texts.
- To use knowledge generated from text in relevant real-life situations.
- To access background information necessary for proper text comprehension by using the appropriate strategies and skills.
- To read critically, that means to form opinions and make judgments about text.
- To identify the organizational pattern of text.
- To recognize the rhetorical devices used in the text.
- To enjoy and appreciate target language literature.
- To recognize special linguistic features of texts.
- To identify intention, attitude, and bias in texts.
- To respond sensitively to texts with diverse social, historical and cultural dimensions.
- To project the reader's personal experiences and knowledge of the world onto the text.

10.1. English for Palestine-Grade 9

*English for Palestine*-Grade 9 complements and extends the work in Grade 8. As such, Grade 9 maintains the continuity of the course and offers many new features to stimulate and challenge teachers and students: for example, there is a strong emphasis on developing reading skills, and using reading to expand vocabulary. As in the previous levels, the course has a double strand of communicative activities and work skills. The skill of reading, writing, listening and speaking are integrated throughout the course. There is more emphasis on combining the skills in sequences of activities. New vocabulary and grammatical structures are carefully controlled and are introduced in the context of the language skills. Writing is presented in graded activities to encourage them to write independently. The writing element of the
syllabus in grade 9 focuses on using notes to write clearly and accurately about the topic and on writing summaries. (English For Palestine 9, Teacher's Book, 2008: 4)

10.2. Components of English for Palestine Grade 9

- Student's Book - presents the new language and provides classroom activities for practice and recycling.
- Workbook - provides exercises and activities that help students to practice and consolidate what they have learned from the students' book.
- Teacher's Book - offers detailed, step-by step lesson notes and model tests.
- Teacher's audio cassette- provides all the listening activities and useful pronunciation model. (ibid: Cover page)

10.3. Reading Objectives in English for Palestine Grade 9

1. Answer factual, inferential, judgment or evaluation questions.
2. Read familiar material with correct pronunciation and intonation.
3. Recognize pronoun referents.
4. Generate questions about reading texts.
5. Summarize reading texts
6. Make predictions about reading texts.
7. Make inferences about reading texts.
8. Develop awareness of semantic fields (word mapping).
9. Develop awareness about synonyms and antonyms.
10. Identify the main idea of reading texts.
11. Identify supporting details.
12. Distinguish main idea from supporting details.
13. Recognize rhetorical markers and their functions.
14. Comprehend visual survival material.
15. Deduce meaning of unfamiliar words from context.
16. Skim for gist or general impressions of text or graphics.
17. Distinguish fact from opinion.
18. Infer mood and author's attitude or tone.
19. Understand different types of letters.
20. Scan for specific information from texts and realia.
21. Interpret information presented in diagrammatic display.
22. Relate text to personal experience, opinion, or evaluation.
23. Analyze components of text such as setting, theme, characters, etc.
24. Extract and synthesize information from different sources. (English Language Curriculum (ELC), 1999:33)

11. How to Teach Reading Skills

A reading lesson is usually divided into three stages, the pre-reading, while-reading and post-reading stage, each of which has its own particular aims and procedures.

11.1. The Pre-reading Phase

The goals of this stage are to activate or build the students' knowledge of the subject, to provide any language preparation that might be needed for coping with the passage, and, finally, to motivate the learners to want to read the text.

Before presenting the new text, teachers should have the child predict what the text is about by looking at the pictures. Teachers should guide young children to use basic logic skills while looking at the pictures to form an idea of what the text will be about. This will help develop prediction skills and will give them a set of ideas about the
lesson that they can use to help decode any unfamiliar words that they come across while reading.

11.2. The While-reading phase

The aims of the second stage are to help students to understand the specific content and to perceive the rhetorical structure of the text. This stage requires the teacher's guidance to ensure that students assume an active, questioning approach to the material.

11.3. The post-reading phase

The final stage is intended to review the content's work on bottom-up concerns such as grammar, vocabulary, and discourse features; and consolidate what has been read by relating the new information to the learner's knowledge, interests and opinions.

Section III

Computer-Based-Learning

1. Technology in the learning Process

We are at the dawn of an era in which educators have the potential to harness technology to produce a step change in student achievement. Although visionaries have been promising for years that technology would transform primary and secondary education – and despite the billions of dollars sent networking schools and equipping them with computers and other devices – the actual impact on student outcomes to date has been disappointing. Even where educators have succeeded in introducing devices and software into the classroom, they've often failed of leverage that new technology to improve student performance. Yet when technology is
strategically introduced into every step of the educational value chain, it does, in fact, have the potential to enhance every aspect of instruction and learning. (Bailey et al., 2011:2)

Hepp et al (2004:3) confirm that ICT can and should play a variety of roles inside a school. Some of the more important ones are pedagogical, cultural, social, professional and administrative. ICT, if sensibly deployed and with carefully selected software, can positively affect many aspects of school life, from a healthy questioning of present the aching practices to a gradual improvement of the quality, scope and depth of the learning environment, as well as to provide a remarkable opportunity for teachers’ development. A new society requires new skills: ICT increasingly pervade every aspect of life (work, learning, leisure, and health). Because ICT are the preeminent tools for information processing, new generations need to become competent in their use, should acquire the necessary skills, and therefore must have access to computers and networks during their school life. There is an equity issue in this argument related to the need to prioritize access to ICT resources to the more underserved population, which is being left behind on a digital divide.

Brewster et al. (2002:160) state that technology can contribute to the global development of our pupils and complies with the psychological, linguistic, cognitive, social and cultural objectives of most language teaching programs.

- **Psychological objectives:**

Children find it fun, motivating and stimulating. It provides variety. It appeals to children's sophisticated tastes. It caters for children with different learning styles. In addition, it can be used to reward pupils for work they have done.
- **Linguistic objectives:**

It combines sound and vision and provides a full context for language so children see language in use making it more accessible and memorable. Besides, it shows all factors of communication, including non-verbal communication. Moreover, it can develop all skills and introduces or revises new words and phrases.

- **Cognitive Objectives:**

It develops the student's curiosity and provides up-to-date information and heightens children's powers of observation and awareness of visual and audio clues as aids to meaning. Also, it enables children to maximize their abilities to infer from context. In addition, it develops motor skills, information and research skills as well as independent learning.

- **Social objectives:**

A class working together on a video of an animated story or a video extract is a share social experience. Students working together on a computer program will develop collaborative skills as they take turns using the keyboard and help each other complete a task.

- **Cultural Objectives:**

It takes the student outside the classroom into the real or fantasy world and it helps bridge the culture gap by providing background cultural information. In addition, it helps bridge the credibility – children can see what it's really like in an English-speaking country.

The new technologies are offering great possibilities regarding education, due to the hardware and software development. One of the main objectives of modern education is the permanent improvement of the teaching and learning processes by using the
available multimedia technologies. The multimedia technologies offer a connection between the audio-visual effects in order to develop complex and suggestive courses and presentation. The evolution of the information and communication technologies has also lead to the development of e-learning technologies. Due to the Internet, the web product generating tools, the audio and video recording, there have been elaborated online courses and educational software. By virtual learning we understand e-learning and educational software, and it is considered to be a very efficient and useful way of learning. This kind of education allows the student to choose what, when, where and how much to learn, situations that are according to the new paradigm of education. It is important to understand the e-learning and educational software concepts and to show their objectives. E-learning contains traditional methods and techniques and by using the information and communication technologies will assist the individual in achieving knowledge and skills in certain fields. It is an accessible way to information and knowledge, and offers new and efficient methods of teaching, learning, permanent education and knowledge evaluation. E-learning technologies may be complementary or an alternative to the traditional education methods. E-learning allows organizing the on-line learning process by subjects or themes, while traditional education is generally organized in groups by age. (Cojocariu and Stanciu, 2009:2)

Utilizing technology in socially constructed ways provides for a new approach to learning in which the students can take a more active and constructive role and one in which learning is made through collaboration with others. (Arnold, 2006:11)

Obviously, computers are considered as the most important technological tool. Web-based-learning and other technologies can be effective through computers.
2. Computer Assisted Language Learning (CALL)

Computer-based instruction has been challenging traditional teaching and learning processes. The role of these technologies in language learning and teaching is called Computer Assisted Language Learning (CALL). CALL is a language learning and teaching approach in which the computer is used as a tool for presentation, assisting students, and evaluating learning material, and has an interactional element. (Ates et al., 2006:1)

Computers play an increasingly large part in our professional and personal lives. Modern computers with multimedia capabilities can provide an interactive learning experience. (Hassell and Dacre, 2003:1). Similarly, Mustafa (n. d.:1) states that The computer has become one of the most central components of our modern culture. One of the most pervasive aspects of computing is multimedia. The term multimedia means a system which allows the presentation of additional computer interface output beyond the traditional text only output. According to Abu Naba'h et al. (2009:1), there is no doubt that just as the computer has established itself firmly in the world of business and communication technology, it has also succeeded in acquiring a fundamental role in the educational process. This role is becoming more powerful as computers become cheaper, smaller in size, more adaptable and easier to handle. Computers are becoming more appealing to teachers because of their huge capabilities and extensive effectiveness. The idea of using computers for teaching purposes in subjects like modern languages arouses mixed feelings and meets with a variety of reactions. The fact that computers are used in the teaching of other subjects and are put to a great many applications in society makes one suspect that no field lies completely outside their scope and that they might indeed be of some use. To many,
the prospect of using computers is not without appeal; it is the kind of challenge which one feels drawn to respond to. At the same time the technology frightens us; we are afraid that it may come to dominate us, we have qualms about dehumanization in a subject which is concerned above all with human communication, and we may even be afraid of losing our jobs. It is also known that language teaching does not escape the waves of fashion; we remember the errors of the past, the theories and inventions which failed to come up to expectations.

Recently, teachers’ teaching task is growing more and more different from that of the traditional teaching. Teachers are not only instructors but also assistants to students’ learning. Now teachers should try to inspire students’ potentials, and give them chance of creative and critical thinking. The role of instructors in this modern environment of CALL has become active, creative and innovative. (Wang, 2008)

Laborda (2007) points out that computers and language teaching have walked hand to hand for a long time and contributed as teaching tools in the language and second language classroom.

In recent years, the use of technological aids, especially those relate to computers, has increasingly become a common feature of the classroom. There is no doubt that computer-based instruction will occupy a more central role in the second language classroom in the future. However, as we eagerly explore the potential that this new technology has to offer to language learning, we should not lose sight of the fact that it is the teacher, not the technology, who determines the quality of the learning that takes place in the classroom.
3. History of Computers in the classroom

The integration of computers in education has been discussed widely and much attention has been devoted to the role of computers in the classroom. Computers were first implemented in education as early as the 1960s but the use of computers was very limited. The first generation of personal computers was built in 1980s. From this time onwards, the development of computers in education was rapid. The second generation of personal computers was created in the early 1990s, and was linked to the existing communications infrastructure. This generation of computers allowed people to access text, sound and images from CD-ROMs. The next generation of computers emerged at the end of the 1990s. The invention of third computer generation was based on the existing transmission network of telephony, cable and broadcasting. The developments of computers continues today, and the role of computers in education is assumed to be that of an instructional tool for delivering information that can stimulate teaching and learning. (Abu Bakar, 2005:24)

There are three stages of computer assisted language learning (CALL) identifiable in recent years. According to Kern and Warschauer (2000:12), the change of stages are affected by the shift of language teaching theories from a structural perspective to a communicative perspective. Recently, attention has been given to more interactive computer use in classrooms. The three main stages discussed by Warschauer and Healey (1998:11) are behaviorist CALL, communicative CALL and integrative CALL.

- **Behaviorist CALL**, is based on behaviorist learning theory and focuses on repetitive language drill. In this stage, the computer is viewed as a mechanical tutor that allows independent learning.
- **Communicative CALL**, emerged when educators felt that the drilling approach didn’t allow for enough authentic communication. This stage focused on the uses of form rather than on the forms themselves. The emphasis is on learning as a creative process of discovery, expression and development.

- **Interactive CALL**, focuses on social or socio-cognitive view of language learning. This stage emphasizes the use of language in a more authentic context that encourages students to construct meaning using computers. The development from one stage to the next stage doesn’t mean the rejection of the previous stage. Rather, the earlier stages are integrated into the new development of the next new stage. (Abu Bakar, 2005:28)

4. **Advantages of Computer Assisted Language Learning (CALL)**

Computer-assisted Language Instruction use has been increased recently due to its importance. Barr and Gillespie, 2003; Gruba, 2006; Nikolova, 2002; Taraban, 2004; Torlakovic & Deugo, 2004; Vilmi, 2003; Al-seghayer, 2001; Meskil & Mosoop, 2003; Fernandez, 2000; Wang & Beasley, 2002; indicate various advantages of Computer-assisted Language summarized as follows:

- The computer adds variety to the language learning experience.

- The computer individualizes learning. The learner is not dependent on other members of a class, but can choose the pace at which he or she progresses, control the degree of difficulty such as; by leaving out elements which are too easy or too difficult), decide whether and how often to repeat an exercise, and so forth.
In CALL exercises, the computer can give immediate feedback for each answer.

Many aspects of work with the computer have an interactive element which is missing in books, tapes, television, and so on.

CALL helps students to learn at their own pace.

Using the computer can save teachers’ time and work, with routine marking, for example, that can then be used for more creative aspects of language teaching.

CALL is a helpful environment for student-computer interaction.

Interaction via computer facilitates language acquisition.

CALL provides interactive computer activities for language learning which helps learners to interact in a communicative way.

Students are motivated to use the computer for all types of activity.

By using the computer for the presentation, explanation, and application of grammatical structures, more classroom time could be dedicated to real communication that focuses on expressing meaning and using appropriate grammatical structures to express that meaning.

Taylor et al. (2004:4) in their study show a comparison between learning with technology and without technology. The study indicates that students in a technology rich educational environment learned considerably more than students learning without technology. The students used technology for presenting information and for getting resources for assignments.
5. Disadvantages of Computer Assisted Language Learning (CALL)

Gunduz (2005:202) concludes that although computers in language classes have an important role in language learning process, there are some disadvantages of CALL. CALL requires computers and software as well as other equipment all of which are expensive. Once computer laboratories are established, it is not possible to re-equip them for several years. There are many limitations of equipment and facilities, and many teachers may not be able to do what they want to do. Computers are not very good at teaching themselves, and the software does not run the lesson for the teacher. The teacher can adapt, improve and compensate for shortcomings in the software. It can take longer to learn a piece of CALL software than handle a textbook, because s/he has to work through it, rather than just skimming through it. The teacher must feel comfortable in the computer lab and with the medium in order to be able to use it effectively. In addition, it is important to use the appropriate program for the students' level. If it is not correct for their level, the activity cannot be prevented from becoming a chaos of uncertainty. No matter how simple computers and software are, students need to learn a great deal to use them. Some students can never really adjust to using computers. They are never comfortable with them so these students often make mistakes. On some occasions the computer programs used with learners or demonstrated to teachers can be overtaken by a power cut, or mechanical failure. Therefore, teachers should be trained in the use of computers. Some other disadvantages can be listed as following:

- Learners who do not have prior experience in using the keyboard may waste a lot of valuable time identifying in order to print their responses;
Working with computers normally means that the learners work in isolation. This obviously does not help in developing normal communication between the learners, which is a crucial aim in any language lesson. Suggestions about organizing pair work around the computer have been impressive only in theory, but in practice learners tend, for convenience, to revert to their mother tongue in discussing their strategies and responses;

- Computers are not suitable to all the activities that go on in the classroom;
- Computers cannot cope with the unexpected happenings and ambiguity;
- Computers cannot conduct open ended dialogues and cannot give feedback to open ended questions;
- The time and effort required to develop CALL programs could be considerable, and thus their cost and effectiveness becomes questionable. It requires competence in the target subject area, pedagogical skills and computing experience;
- It is more tiring to read from a screen than from a printed text; or to scroll the screen than turn over the page. (Lai and Kritsonis, 2006:4; Jung, 2005:60; and Jayachandran, 2007:2)

6. CALL and reading skills

There are three main ways in which computers are useful in helping language learners develop reading skills.

a) Incidental reading. Most of the CALL programs, whether oriented towards reading or not, involve the learner in reading text for the successful completion of the activity.
b) **Reading comprehension.** Traditional question and answer CALL programs are used for reading comprehension as well as grammar and vocabulary development.

c) **Text manipulation.** There are a number of ways in which computers can manipulate continuous text which involve the learner in close study of the content and structure of the text. An example might be shadow reading which provides students with authentic texts. Additionally, sentence structure, speed reading and cloze-reading are some of the alternative ways of developing reading skills. (Gunduz, 2005:201)

In addition, Lee (2006:72) concludes that the current approaches to foreign language reading are directed towards the learning of reading skills and strategies. Specific skills, such as intensive and extensive reading, skimming and scanning, and speed reading are necessary for effective reading. The computer, by its attributes, can play an important and extensive role in improving the reading skills. In other words, the computer can be easily applied to the area of teaching and learning reading skills, due to its advantages, such as, free choice of tasks from a large quantity of texts and exercises, immediate feedback, visual clues and sound effects, random access, the 'Help' system, record-keeping, self-pacing or interactivity. These make the computer a suitable tool for carrying out specific skill practice and activities required in reading, although there are some limitations with regard to CALL activities as the limited amount of text on the screen, the use of ready-to-use programs, etc. Again, the problems can be solved when CALL in reading activities is seen as one component of a lesson, rather than the lesson itself, and when methodological solutions can be applied to software. For example, other media such as, the OHP and written materials can be used in a CALL lesson as aids to compensate for the limitations of the computer. Teachers and students can discuss the topic of their lesson before and after
the computer-work. In terms of current CALL reading programs, CALL reading activities can generally be categorized as follows: familiar activities or some extensions of them already in use in printed or other materials; and newer or more innovative activities.

7. Using computers in a reading class

Using computers in the language classroom for reading may support the development of reading skills among students because reading materials from the internet, for example, provide a variety of current, authentic texts compared to potentially dated reading material sourced from textbooks. (Abu Bakar, 2005:43)

Kim (2008:243) concludes that the computer was considered to be fully controlled by and totally dependent on the teacher. Thus, the common use of computers in classrooms was as a tutor or a teaching machine. For instance, computers were used for drill-and-practice purposes or for presenting materials or texts to individual students, which allowed them to practice certain skills at their own pace. Computers in the classroom expanded their functions to provide diverse formats of feedback on students’ performance, to accommodate their choices, and to monitor their learning. These self-learning and individualization features appeared to be conducive to student-centered teaching. With diverse approaches to the use of the computer and its advanced techniques, the capability of the computer has been expanded beyond many teachers’ imagination and expectations. The introduction of the internet and the use of multimedia provided both ESL/EFL teachers and students with virtually boundless uses. Not limited to the role of the teachers’ instructional tool, the use of multimedia and the internet provides students with learning tools to experience authentic learning materials and explore abundant L2 resources. In light of language teaching and
learning pedagogy, the emergence of multimedia and the internet offered a tool to students in that it can expose them to authentic materials and authentic interactive experiences. Students are able to experience diverse perspectives as well as explore authentic materials through easy access, such as online newspapers and magazines. Through meaningful activities, computers can enable students to engage with materials in authentic environments and to integrate various language skills and usage. Compared to direct models or teacher-centered teaching, the use of computers in a student-centered approach involves active participation of students in their learning process. The integration of CALL in language classrooms involves various issues of language teaching, such as pedagogical approaches, language skills, learning styles, students’ target language proficiency levels, and motivation. There are some fundamental concerns regarding the integration of CALL in language classrooms, such as whether teachers perceive that computers support their integration of meaningful and authentic communication into language-teaching curriculum or whether teachers envision CALL as a student-centered teaching practice in a constructivist paradigm.

8. Multimedia aids for comprehension

The text comprehension can be facilitated by multimedia aids such as pictures, animations and other visual or auditory cues. Though they are independent of the presentation mode of the text, multimedia aids support the process of text comprehension. Three types of the aids can be distinguished, first of them being aids for selecting information, second, aids for building internal connections, and third, aids for building external connections. Due to the first type of aids, the reader’s attention is drawn to certain aspects of the target information which is then processed.
It subsequently results in the creation of a propositional representation of information. The next type of aids, aids for building internal connections, help to organise ideas contained in the text into a coherent structure by providing the reader with clues concerning internal connections among the units of presented information. In this process, propositional representations are set in a coherent structure based on cognitive schemata. The last type of listed aids, aids for building external connections, helps to find connections between the ideas presented in the text and an existing mental model. As a result, the mental model based on the propositional representations can be constructed and extended. The aids for text comprehension can be presented not only in textual form, but also in visual or auditory form, or in their combination. Additional visual information can aid text comprehension, because it is generally an analogous representation of the information contained in the text. Thus, the connection between the visual information and the mental model can be directly established, which can bolster the process of text comprehension. There is, however, a difference between learning from the text and learning from pictures, as the information is provided in different ways. In the text, knowledge is presented in symbolic structures of a language and is processed sentence by sentence, that is, sequentially. Information conveyed by pictures, on the other hand, is presented in “visuo-spacial structure”, thus analogy can be made directly, based on common structural properties of visual representations. To put it bluntly, text comprehension entails the construction of propositional representations without which the construction of a mental model would not be possible. The comprehension of an image operates only on the establishing of the direct connection between the picture and the corresponding mental model. Being less complicated, and thus a faster
process, the comprehension of images seems to greatly aid the comprehension of the corresponding text. (Nadera, 2001:12)

9. CALL Methodology

Gunduz (2005:200) states that computers are not very good at teaching themselves. How effective computers are in the language classroom depends on the way the teacher and students use them. Computers allow the user to carry out tasks which are impossible in other media such as providing feedback automatically on certain kinds of exercises or editing a piece of writing by deleting, moving and inserting text. Students can do some exercises on their own and have them marked by the computer. Multiple-choice and total deletion programs provide examples of this. Students can carry out exploratory work which is not assessed by the computer but which allows them to see the results of their decisions. The methodology used in CALL classes is similar to that which is used in non-CALL classes, but there are some points that have to be distinguished. The main characteristics of the methodology for CALL are:

1-The use of a variety of interaction patterns in class: Students can work individually, in pairs, and groups, or as a whole class in CALL laboratories.

2-Information-transfer and information-and opinion-gap tasks:
   
a) Information-transfer activities In CALL generally activities involve transferring information from one medium to another; that is, from one student to another, or from one group to another group. Students listen to a tape-recording of a story and then sequence the events of the story, or match sentences spoken with the characters in a story, or load a text written by another group of students into a word-processor. The networked computers provide the optimum conditions for information-transfer activities.
b) Information-gap activities CALL lessons frequently involve an information-gap, with one student, or group of students needing information from others in the class to complete an activity. Sometimes the computer itself has the information hidden. The programs which involve total or partial deletion are examples of activities based on such an information gap.

c) Opinion-gap or problem solving activities A number of CALL lessons are based on opinion-gap activities. The students have different opinions concerning a problem-solving scenario, such as the cheapest way of allocating resources in a spreadsheet, or a simulation. Alternatively, the difference of opinion may be over the best ending to a short story written on a word-processor. Assigning different roles to students can lead to creativity.

3-Fluency and accuracy practice. One of the characteristics of many CALL programs is that the students have to pronounce 200 type answers that the computer expects because it can only accept the answers it has been programmed to accept. This limitation is very useful in practice because it provides motivation for the students to use the language as accurately as possible.

4-Computer-work, pre-computer work and post-computer work There are three stages in CALL activities: a) Pre-computer work before students make use of the machines; b) Work done at the computer; c) Post-computer work done away from the computer.
10. Video-based lessons

Educational videos can be displayed on computer screen as the computer is considered as an interesting machine for students. Richards (2002:362) states that video-based lessons can be highly stimulating, and provide a rich resource for language learning. It is the teacher, not the video, who can make any video based lesson a fruitful language learning experience. It is the teacher who chooses the video; design tasks and activities that facilitate active learning; prepares students for the previewing, viewing, and post-viewing activities, raises students' awareness of certain language points; and integrates the video with other aspects of the curriculum. In the same concern, Lever-Duffy et al. (2003:365) state that video has been a component of instruction in classrooms for almost a hundred years. Thomas Edison created the first films entitled The Minute Men. Videos make impossible experiences possible for their viewers and provide stimulation through our dominant senses. Well-constructed videos help learners make sense of the abstract while providing sensory summaries of the material presented. Although videos are sometimes criticized as providing too passive a learning experience, well-planned lessons can change them into active leaning stimuli. In addition, most educators would defend their inherent value in teaching and learning. Additionally, Jonassen et al. (1999:5) reports that educational videos can help learners more easily understand and remember content in comparison with expository materials. Moreover, Brewster et al. (2002:204) clarify that children do not see videos as language learning devices and are very reluctant to have an extract interrupted or broken down by teachers. Children need to see a whole video sequence extract shown straight through first so that they can follow and understand the global meaning. After that the teacher may go back over the sequence or extract and exploit it in order to focus on particular aspects of language and content. If a sequence is carefully selected it allows you to maintain interest and suspense and
encourage children to predict what happens next. The effectiveness of communication and instruction can vary with the richness of the communication medium chosen. The mediums that offer the greatest number and variety of verbal and non-verbal cues are considered “richer” and more likely to have impact upon the receiver. Video offers a display range of verbal and non-verbal behaviors which may make the material more meaningful to students. (Heimann & Pittenger, 2000:1)

Choi (n.d:7) in his study which was conducted in Korea to investigate the effects of video and group discussion in problem-based video instruction on learner perceptions of learning and knowledge transfer. The findings of this study show that students who saw real-life situations through a video format expressed higher confidence in their ability to transfer the learning to similar and new contexts than students who saw them through a text format. In other words, group discussion was not an influential factor that can affect students’ perceptions of knowledge transfer. In this study, some students reported that video creates empathetic or vicarious experience with the real-life situations while a text format is usually dry and uninteresting, so they can better understand and remember the situation when they see, and hear it. They mentioned that these advantages of video helped them to build confidence in the knowledge transfer.

10.1. Video as a Technological Tool for Developing Reading Skills.

Video has long been used in the classroom as an important tool for teaching. In recent years combining video with IT – information technology (computer-based streaming audio and video) – is being developed. It allows to transport virtually the target language environment into the classroom so that live or prerecorded news, music, sports from all over the world can be viewed on students’ computers in real time. Video has one more advantage that makes its usable not only for developing speaking
and listening skills but also for stimulating the development of reading and writing. Video has a great motivational potential. It stimulates students’ communication which follows viewing, but it is not necessarily oral communication only. It is admitted by all specialists writing about the use of video in the language classroom that viewing video fragments stimulates learners’ desire of talking about what they have seen. (Tarnopolsky and Degtiariova, 2003:3). Due to the importance of educational video which helps students understand and then interact with the text, the researcher adds a designed related video to each reading text. This makes the text easier to be understood.

Section IV

Attitudes

An attitude is an idea charged with emotion, which predisposes a class of actions to a particular class of social actions. There are three main components attached to attitudes. First, a cognitive component, that is the idea which is generally some category used by humans in thinking, whereby categories are inferred from consistencies in responses to discriminably different stimuli. Second, an affective component, that is the emotion, which charges the ideas. Third, a behavioural component associated with a predisposition to action. (Triandis, 1971:6). In the same concern, Eagly & Chaiken (1993:4) defines the attitude as a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor.
1. Attitudes and Achievement

Several studies have clarified that there is a strong relationship between attitudes and achievement. Foong (1994:47) affirms that the development of positive attitudes towards school subject is essential. Students with a positive attitude towards a subject are more likely to continue their learning in the area, both formally and informally, after the direct influence of the teacher has eroded. Similarly, Marjoribanks (1987) highlights the fact that in psychological models of educational performances, academic achievement is typically related to measures of ability and attitudes.

2. Attitudes and Motivation

McDonough (1983:142) reports that motivation of the students is one of the most basic factors influencing their success or failure in learning the language. Al-Tamimi (2009:30) adds another factor which is learners’ attitudes. This is because an ESL/EFL learner's motivation in language learning is affected by his/her attitudes towards learning the language. The relation between motivation and attitudes has been considered a prime concern in language learning research. In addition, only when paired up with motivation proper do attitudinal tendencies relate to the levels of student engagement in language learning, and to attainment”. Therefore, a better understanding of students' motivation and attitudes may assist ESL/EFL curriculum and instruction designers to devise language teaching programs that generate the attitudes and motivation most conducive to the production of more successful ESL/EFL learners.
3. Students' attitudes towards computer-based learning and the role of teachers

Computers are profit tools for individual and student-centred learning, so, it is essential to determine student attitudes toward the use of computers, because student attitudes have contributed to our understanding of why computers have enhanced achievement and performance and motivation. Computer attitudes are important because of the long-documented relationship between computer attitudes and motivation and performance. (Usun et al. 2004:3)

There is a bad need for students to develop their computer skills so as to be able to interact effectively with computers. Obviously teachers' computer skills are very important to be upgraded through regular professional development courses.

Loveless et al. (cited in Abu Bakar 2005:33) stress that it is the teachers' responsibility to improve and update the students' computers skills. However, it is important to acknowledge that for teachers to do so, they themselves need to be upgraded in advance.

Unfortunately, different teachers are unable to upgrade the students' computer skills when they themselves are not equipped or trained with the necessary computer skills needed in the classroom. Because change in the computer world is rapid, the training should be ongoing to ensure that teachers have updated skills to deal with rapid development of computer-based teaching approaches. Yet training should not be concentrated only on computer skills but teachers should also be exposed to different kinds of computer-based teaching approaches. Students can benefit even further from teachers exposure to different ways of approaching teaching and learning with computers. In addition, the effectiveness of computers used in the lesson can be
influenced by the teacher's attitude towards the way a language class should be conducted. (Abu Bakar, 2005:37)

Whilst teacher involvement is vital, students' attitudes towards the learning environment must also be taken into account. The change of learning environment and teaching approach can influence students' attitudes and learning concepts as well as their expectations regarding their own learning. In terms of using computers in the classroom context, students might have several ways of accepting a change in learning environment. Like teachers, the way in which students accept the new teaching and learning environment incorporating computers can affect the students' use and perception of computers in the classroom context. (ibid:43)

Computer-based learning (CBL) is a method, which uses computer in learning media, strengthening students' motivation and education process. It gives opportunities to both students and teachers to learn by their speed and combine active learning with computer technology. (Akcay, 2006:2)
Chapter II (B)

Previous Studies

Introduction

This section investigates the findings of previous studies relevant to the topic of the current study. The studies are classified thematically according to what they investigate. This section consists of two domains:

The first domain investigates studies which confirmed the effectiveness Computer-based learning on developing reading comprehension.

The second domain includes studies which clarified students' attitudes towards integrating computers in education.

First: Studies related to the effect of Computer Based Learning on developing reading comprehension

Abu Seileek (2011)

This study investigated the effect of the gloss presentation in different locations in the reading text (in the margin, at the bottom of the computer screen, in a pop-up window, or after glossed word) and texts with no glosses. It also sought to find the effect of gloss type on the participants’ achievement. It aimed to answer the following three research questions:

1. Does the presence of glosses affect learners’ performance on text memory and vocabulary assessments?
2. Does the presentation of the gloss in different locations (in the margin, at the bottom of the screen, in a pop-up window, or after glossed word) in the reading text affect learners’ performance on text memory and vocabulary acquisition tests?

3. What is the effect of gloss type (a synonym of just one word or vs. a full definition of 2–7 words) on the participants’ performance?

Seventy-eight second semester undergraduate students participated in this study. They were enrolled in a general English language course, an obligatory course to all students of the College of Arts at Al al-Bayt University which is situated in the northern region in Jordan. The course aimed at providing students with basic language skills, including training in reading skills which aim at broadening cross-cultural understanding and promoting linguistic self-learning skills. At school, they had used the computer for nine years and studied English for twelve years. The research design consisted of four treatment groups and a control group from an intact class, so all were taught by one instructor and according to the same syllabus. The participants were assigned randomly to one of five groups: the control group (no gloss), the first treatment group (glosses in the margin), the second treatment group (glosses at the bottom), the third treatment group (glosses at the bottom), and the fourth treatment group (glosses in a pop-up window). The results showed that reading passages with hypermedia annotations significantly benefited passage comprehension and vocabulary (compared to reading passages with no annotations).

Chen et al (2011)

The purpose of the present study was to evaluate the effectiveness of the design of using Quick Response (QR) codes to provide students direct access to pre-designed digital materials and the use of scaffolded questioning in promoting students’ reading
comprehension. The experiment was conducted in a class entitled “Advanced Business English and Communications” in a public university in southern Taiwan. A total of 77 students (including 8 sophomores, 14 juniors, 9 seniors, and 46 graduate students) participated in the experiment. A quasi-experiment was conducted to evaluate the effectiveness of direct access to the digital materials prepared by the instructor using QR codes and that of scaffolded questioning in improving students’ reading comprehension. The results of the study showed that scaffolded questioning significantly benefits students’ reading comprehension, especially when the article is difficult. Overall, students’ responses to the learning experience survey showed that most students felt positive toward the system developed in this study in terms of enhancing their reading comprehension. They were impressed by the feasibility of accessing digital resources directly from the printed content. The survey showed that most students agreed that the integrated print-and-digital-material- based learning system benefits English reading comprehension.

Park and Kim (2011)

This study investigated adult English language learners’ reading-strategy use when they read online texts in hypermedia learning environments. The learners joined the online Independent English Study Group (IESG) and worked both individually and collaboratively. This qualitative case study addressed the following two overarching research questions: 1) What reading strategies do college-level ESL learners use for online L2 text? 2) How do college-level ESL learners use hypertext and hypermedia while reading online L2 texts and completing reading tasks? The seven strategies were (a) using hypermedia, (b) using computer applications and accessories, (c) dialoguing, (d) setting up reading purposes and planning, (e) previewing and
determining what to read, (f) connecting prior knowledge and experiences with texts and tasks, and (g) inferring. The first two strategies were unique to online readings; the five remaining strategies apply to both online readings and paper-based text readings. In the summer of 2008, the co-researchers created an online English study group named Independent English Study Group (IESG) for ESL students at an urban research university in the southeastern part of the United States. Ten English language learners (ELLs) from low-intermediate to high-intermediate levels who were enrolled in the English Language Institute joined IESG between the summer of 2008 and the fall of 2009. Three of the ten students actively participated in reading activities. This case study focused on three participants from November 2008 to April 2009. The researchers observed the participants in order to collect data. The findings also revealed that “hybrid” online reading emphasized participants’ various reaction patterns and preferences in their hypermedia learning environments. In addition, reading online confirmed that students can respond to the text effectively.

Chen et al (2010)

This study aimed at developing an online Tag-based Collaborative Reading Learning (TACO) system designed to both improve English reading comprehension and aid teachers in accurately evaluating English literacy. To enhance student reading comprehension and assist teachers in tracing and evaluating student literacy effectively, this paper developed a tag-based reading learning approach and scoring mechanism. The researchers tested their system’s ability to both improve reading comprehension and aid teachers in accurately assessing literacy by conducting a three-month trial with 56 participating Taiwanese high school students from February
to May 2009. During this period, post-testing results showed a significant improvement in reading scores among participants in our tag-based system, and survey feedback from teachers suggests an improved capacity for literacy assessment. This study used both quantitative and qualitative methods of data analysis. The qualitative analysis was obtained from all students, by asking students to fill out a questionnaire to help better understand their learning behavior, system usage, and satisfaction with the system. The quantitative analysis consisted of the tag statistical characteristics, expert validity survey, and learning performance assessment. The results of this study showed clear improvement of the reading comprehension skills of participating EFL learners through computer based learning.

Ertem (2010)

This quantitative research examined the differences in struggling readers’ comprehension of storybooks according to the medium of presentation. Each student was randomly assigned with one of three conditions: (1) computer presentation of storybooks with animation; (2) computer presentation of storybooks without animation; and (3) traditional print storybooks. The following research question was addressed in this research: * Do fourth-grade struggling readers differ on reading comprehension as measured by retelling when they read the same storybooks presented in electronic format with and without animation and in a traditional print format?*. The subjects were 77 fourth-grade students from five elementary schools in the Alachua, Florida school district. Of the 89 students were eligible to be considered for this study and 77 students returned signed permission letters from their parents. The subjects’ ages ranged from 9-11, with a mean of 9.96 years. Forty-eight participants were female, and 29 were male. The subjects were selected among fourth-
grade students who were reading below at least one or two years from current grade level and not meeting Sunshine State Standard [SSS] as measured by Florida Comprehensive Assessment Test [FCAT] in 2007. Comprehension was measured by using retelling. Analysis of variance (ANOVA) was used to test research question at the .05 level of significance. The results of statistical analysis indicated that there was significant difference in the students' comprehension scores. When the student controlled the animation functions of electronic storybooks, the animated illustrations were shown to result in significantly higher improvement of comprehension scores, both in terms of the students' ability to retrieve information and to make inferences from the stories. The results of the research also indicated that electronic storybooks can improve reading comprehension and can be beneficial for struggling readers.

Johnson et al (2010)

This study examined the effects on early reading skills of three different methods of presenting material with computer-assisted instruction (CAI): (1) learner-controlled picture menu, which allowed the student to choose activities, (2) linear sequencer, which progresses the students through lessons at a pre-specified pace, and (3) mastery-based adaptive sequencer, which progresses students through lessons based on whether or not the student has mastered the given skill. Preschool- and kindergarten-aged children (n = 183) were randomly assigned to one of the three CAI groups and spent 40 min a week, for 13 weeks, using the software program in a computer lab. An additional control group of students attending typical preschool or kindergarten received no CAI. All participants were recruited from the Salt Lake City and Provo, Utah areas. Participants in the experimental condition were recruited through fliers posted at libraries and recreation centers, as well as through advertising
in the local media. Registered students were broken down into three different groups, each of which was assigned a particular type of CAI: learner-controlled picture menu, linear sequencer, and adaptive, mastery-based sequencer. Initially, 178 students enrolled in the program and were assigned to an instructional method. A total of 129 students completed the 14-week classroom session at the Waterford Institute Community Center (in Salt Lake City) or the Bonneville Community Center (in Provo), with 33 in the picture menu group, 58 in the linear sequencer group, and 38 in the mastery sequencer group. Controls were pre-tested and post-tested at the same time as instructional groups but did not spend time on the computer. The results suggested that the use of a sequencer is a very important element in presenting computerized reading content for young children. Thus computerized reading was positive in activating students' reading comprehension.

Yang (2010)

This study suggests a design of an online reciprocal teaching and learning system to support teachers and students in college remedial reading instruction. Three research questions were addressed in this study: (1) How do under-prepared college students develop their reading processes in the RT system? (2) What are the problems and solutions that under-prepared college students have in using the multiple strategies of RT in the system? (3) What is under-prepared college students’ progress in remedial instruction that incorporates the RT system? A sample of 129 college students who learn English as a Foreign Language (EFL) voluntarily signed up to participate in a remedial reading instruction in a university of science and technology in central Taiwan. They were encouraged to use multiple strategies such as predicting, clarifying, questioning, and summarizing, which were supported by the functionalities
of dialogue box, chat room, discussion forum, and annotation tool in the system. In this study, it was observed that students employed the multiple strategies to enhance their reading comprehension, as revealed by the students’ reading processes recorded in the system. The results confirmed that the use of the online reciprocal teaching and learning system enhanced students and teachers' reading instruction.

**Gibson (2009)**

This study examined the use of a computer software reading program named Read Naturally (RN) to determine its effectiveness across several reading sub-skills. Specifically, the study examined if the RN software can be used to increase the ORF and comprehension of urban first-grade students identified as at-risk for reading failure. An additional focus was to determine if the ORF and comprehension skills generalized to untaught, standardized reading assessments. The research questions were: 1) What effect will the Read Naturally computer software program have on the oral reading fluency of urban, first-grade students at risk for reading failure? 2) What effect will the Read Naturally computer software program have on the number of comprehension questions answered correctly by the participants? 3) What effect will the Read Naturally computer software program have on the oral re-tell of the participants? 4) What effect will the Read Naturally computer software program have on the ORF of generalization passages (that means, Aimsweb ORF progress monitoring measures)? 5) What effect will the intervention have on the reading scores of the three Woodcock-Johnson reading sub-tests as administered pre and post the intervention? 6) What effect will the intervention have on the pretest and posttest scores on the Dynamic Indicator of Basic Early Literacy Skills (DIBLES) (ORF) Oral
Reading Fluency benchmark assessment? 7) How will teachers rate the effects of the intervention on the participants ORF and comprehension? 8) Will the participants respond favorably to the Read Naturally program, as measured by a questionnaire administered at end of the study? The participants attended elementary schools in an urban school district. They all resided in a Midwestern urban school district and were from low socioeconomic households. The participants ranged in age from 6 to 8 years old and were enrolled in a first-grade classroom. This study included 8 students in two separate schools. The researcher used Questionnaires and observation tools so as to collect data. The results of the intervention demonstrated the effectiveness of the Read Naturally program on the OFR and comprehension of the participants on treatment probes. These findings supported research on the use of repeated reading strategies, but extend the research in several ways. First, the results suggested the computer assisted reading programs are a viable means to supplement classroom instruction. Second, they suggest that generalization might be promoted by increasing fluency goal criteria on practice passage reading. Finally, the results suggested that computer based instruction enhanced repeated reading strategies.

Gotesman and Goldfus (2009)

The aim of this study was to determine whether assistive technology (AT), specifically text-to-speech software, can be used to minimize the negative impact of students' disabilities and maximize the potential of their learning strengths namely: reading abilities. The research was conducted between October 2006 and June 2008. Fourteen students at the Levinsky College of Education in Tel Aviv participated in this research. The students had been assessed as students with learning disabilities.
The design of the research was one of pre-test intervention and post-test design. The independent variable was computer based reading software and the dependent variables were reading comprehension skills, attitude toward reading and AT. The teaching and learning process combined traditional, frontal teaching with individual student practice. The researchers used a questionnaire in order to collect data about the students' feedback about the computer and its effect on reading. It was concluded that, The students' feedback was positive. 96% of the students who completed the feedback questionnaire were satisfied with the performance of TextAloud. They found the use of this software more user-friendly and more effective than the use of cassettes/CDs they had previously used in order to listen to the texts. All the students admitted that the use of AT improved their reading ability in English. It was clear that the use of text-to-speech software has great potential for improving not only the reading level of the students but also in providing additional benefits, namely, confidence to grapple with the texts and a more positive self-esteem.

Karemaker et al(2009)

The researchers investigated if the whole-word multimedia software ‘ORT(Oxford Reading Tree) for Clicker’ facilitates developing literacy skills in Year 1 children that are struggling with learning to read. Developing literacy skills and attitudes towards learning to read were assessed in a group of 17 struggling beginner readers aged 5–6 years. ORT for Clicker is a multimedia software program, designed to promote whole-word recognition skills. This series of on-screen talking storybooks was produced by Crick Software and Oxford University Press and is based on the Oxford Reading Tree (ORT) scheme that was used in a large number of primary schools across the UK. The study was conducted in two UK primary schools over a five week
duration in which participating children were assessed on key measures of literacy skill in the week preceding (pre-test measure) and following (post-test measure) each intervention. The researchers used pre- and post-intervention in this experimental research. Three classroom teachers at the UK educational level Year 1, key-stage 1, from two primary schools that varied in socio-economic status, were asked to identify children they considered to be struggling readers compared to class peers. Twenty-two children were identified all of whom had informed parental consent to participate in the study. The experimenter administered the pre- and post-intervention measures of literacy skill to each child individually, in a quiet area free from distraction. The results suggested that whole-word multimedia software is a useful classroom aid for supporting early literacy skills in children who are struggling with learning to read. Moreover, poor readers found multimedia software more enjoyable than traditional reading books.

Korat (2009)

The current research investigated the effectiveness of a considerate electronic book (e-book) which was developed by the authors and which aimed at supporting the Israeli kindergarten children (N = 40; age 5:2–6:3) compared to first grade children’s (N = 50; age 6:3–7:4) language (vocabulary and story comprehension) and word reading development. The children in each age group were randomly assigned to two groups: an intervention group which read the e-book five times and a control group which was afforded the regular school program. The research assumed that: (1) the children from both age groups would benefit from the activity with the e-book compared to the control group; (2) first graders would exhibit greater progress than kindergarten children in vocabulary learning and word reading; (3) first graders would
demonstrate higher story comprehension, especially in the story production task. Pre- and post-tests included vocabulary and word reading measures. Post-tests included story comprehension and production. The results showed that Children who read the e-book exhibited significant progress in word meaning and word reading compared to the control group. Kindergarten children progressed in word reading more significantly than first graders across treatment groups. This could be explained by the ceiling effect of the first graders’ word reading level which did not leave much room for progress in this skill compared to the kindergarten children. Kindergarten children exhibited a good level of story comprehension, similar to first graders, although their story production was lower.

Lan et al. (2009)

This study attempted to implement a cooperative reading environment for EFL early reading using a mobile-device-supported computer-assisted reciprocal early English reading (CAREER) system, and to evaluate its effect on the early reading skills and learning behaviors of elementary EFL learners. The design rationale of CAREER was based on the three essential components of effective reading instructions: balanced reading structure, immediate and specific feedback, and reciprocal learning scenario.

Experiment participants comprised 52 Grade four students attending two classes (each class has 26 students; 14 boys and 12 girls) at an elementary school in Taipei, Taiwan. Each class was randomly assigned to experimental or control group. The students were then administered early reading skills tests (Oral Reading Fluency and Retell Fluency) taken from the text. This study adopted a mixed research approach (the concurrent triangulation approach) and collected both qualitative and quantitative data. Two observation checklists, learning-related and learning-unrelated checklists,
were employed to observe and record learner behaviors during specific learning activities. The research concluded that the proposed mobile reading system, the CAREER system, reduced the problems encountered by students in a conventional cooperative learning environment and provided cooperating students with support via mobile technology. In addition to the necessary learning support, the CAREER system provided learners with immediate and specific feedback. Moreover, it can encourage individual EFL learners to be accountable for their learning. Thus, the CAREER system could provide elementary EFL learners and teachers with an effective learning and teaching environment.

Liu et al. (2009)

The purpose of this research was to investigate the effects of a computer-assisted concept mapping learning strategy on college learners’ English reading comprehension. The research questions were: (1) what was the influence of the computer-assisted concept mapping learning strategy on different learners’ English reading comprehension? (2) did the computer-assisted concept mapping learning strategy affect learners’ use of other English reading strategies? One hundred ninety-two freshmen who took Freshmen English in four classes were chosen to be the subjects. The researchers used some instruments as , reading material , reading tests , Reading strategy application questionnaire and Concept mapping software program.  
The experiment lasted for ten weeks, and every class period was two hours a week. Before the experimental process was carried out, the subjects were given a pre “reading test” and completed a pre “reading strategy application questionnaire”; four classes of students, a total of 192 intermediate English proficiency level freshmen, participated collectively in the pre-test during the first week so that information about
the subjects’ starting English ability and reading strategy application could be collected. The researchers chose subjects from two classes as the experimental group (N = 94), and students from the other two classes as the control group (N = 98). For the experimental classes, the instructor adopted computer-assisted concept mapping reading strategy instruction in teaching. As for the control group, the instructor used traditional instruction such as, vocabulary and grammar teaching) in class. In both experimental and control groups, students whose scores were above the average grades in the English reading comprehension pre-test were defined as good readers, while the others were defined as poor readers (experimental groups M = 54.72; control group M = 56.54). Through two-way ANOVA analysis, it was found that the computer-assisted concept mapping learning strategy had greater reading benefit for the low-level group than for the high-level group. In addition, the results of independent sample t-test analysis indicated that the computer assisted concept mapping learning strategy enhanced learners’ use of other English reading strategies—listing, enforcing, and reviewing.

**Owston et al. (2009)**

This study examined computer game development as a pedagogical activity to motivate and engage students in curriculum-related literacy activities. The research investigated four questions: (1) Can computer game development as a pedagogical activity lead to improved learning of basic literacy skills? (2) What new digital literacy skills do students acquire as a result of this activity? (3) What is the impact of game development on student classroom engagement? (4) How do teachers adopt and shape the practice of student game development in the classroom? The study was
conducted in the grade 4 classrooms of nine public elementary schools in south-central Ontario, Canada. The schools were located in middle or lower-middle income suburban neighborhoods. On the annual province-wide language proficiency test taken at the end of the previous year in grade 3, an average of 68% of these students met the provincial standard for reading and 70% met the standard for writing. Given that the comparable province-wide rates were 62% and 64%, respectively, as a group the students in the study scored moderately above average in measured language proficiency. Both groups studied the same curriculum unit over a 10 week period, however, in addition the experimental group developed computer games related to the unit using a game development shell. Analysis of the qualitative data, which included field notes and transcripts of teacher interviews, began with the coding of these data with codes derived from the four research questions. An analysis of pre- and post-unit scores on two standardized literacy test batteries revealed that the experimental students performed significantly better on one of the subtests, a measure of logical sentence construction (p = .002). Field notes and teacher interview data indicated that game development helped improve student content retention, ability to compare and contrast information presented, utilize more and different kinds of research materials including digital resources, editing skills, and develop an insight into questioning skills.

Whitaker (2009)

The purpose of this study was to determine the effects of a computer-assisted program (Read Naturally) on reading comprehension on second grade students. The research questions were: 1) What effect will the Read Naturally computer software program
have on the ability of second-grade students with reading risk to answer comprehension questions from treatment passages? 2) What effect will the Read Naturally computer software program have on the ability of second-grade students with reading risk to answer comprehension questions from non-treatment or generalization passages? 3) What effect will the Read Naturally computer software program have on the ability of second-grade students with reading risk to retell a previously read passage? 4) What effect will the Read Naturally computer software program have on the ability of second-grade students with reading risk to retell a non-treatment or generalization passage? 5) Will the participants improve their reading scores on four Woodcock-Johnson reading sub-test as measured by pre and post-intervention? 6) How will teachers and parents rate the effects of the intervention on the students' comprehension? This study involved six participants who were enrolled in a general education second-grade classroom in West Elementary public School. The school is located in Hilliard, Ohio which is a suburban community. All participants performed below grade level expectations in reading and/or reading comprehension based on formal reading assessments and teacher evaluation. Two participants received reading intervention thirty minutes daily from Title I services, which involved small group reading instruction from a reading tutor. The small group consisted of four students at the same reading level. Two participants received ELL (English Language Learners) intervention for thirty minutes daily. The last two participants did not receive any type of reading intervention beyond the regular classroom curriculum. The researcher collected data via questionnaires. The materials used in this study consisted of assessment materials, the Read Naturally (RN) software, and teaching procedure materials. Results showed that the Read Naturally
computer software program was successful in improving second-grade students with reading risk on reading comprehension and retell. It is a software program that is effective, affordable, easy to set-up and easy for parents and teachers to implement with struggling readers.

Wood (2009)

This paper reported an extended analysis of the study reported in [Wood, C. (2005). Beginning readers’ use of ‘talking books’ software can affect their reading strategies. Journal of Research in Reading, 28, 170–182.], in which five and six-year-old children received either six sessions using specially designed talking books or six sessions of one-to-one tuition with an adult using the paper-based versions of the same books. This analysis focused on the nature of the children’s interactions with either the adult or the computer in an attempt to explore how these different resources impacted on the children’s literacy interactions, and whether different styles of literacy interaction observed within each group were associated with gains in phonological awareness or changes in reading strategy. Four styles of literacy interaction were identified and there was a significant association between these styles and membership of one of the two experimental conditions in the study. 80 children participated in the study; 40 five-year-olds and 40 six-year-olds. These two age groups were split into two groups of twenty. Twenty of the five-year-old children and 20 of the six-year-old children participated in the ‘talking books’ intervention, while the remaining children comprised the comparison group, who received one-to-one reading support from an adult. All the children were recruited from a single primary school in the UK (in the UK children begin to attend school and receive formal tuition
in reading in the year that they are five-years-old). The researchers collected data through implementing pre and post tests. Additionally, they used observation tool. Interactional style was also seen to impact positively on phonological awareness development for lower ability children who used the talking books. In contrast, interactional style affected changes in reading strategy amongst children in the adult tutor condition. Finally, there was also an influence of interactional style (a computer program) on spontaneous dialogic reading by the children overall but this effect originated from the children in the adult tutor group.

Yang et al. (2009)
This study aimed at designing a computer system for helping EFL college students developmental maps of referential identification and resolution in reading. Referential resolution, in this study, was defined as a reading strategy applied by a reader to accurately interpret references in texts. It occurred when the reader identifies persons and objects in different parts of a text pointing to the same entity. The online practice of referential identification and resolution used three texts to examine the participants’ reading comprehension. The research questions were addressed as follows: (1) How is the system developed to support students in referential identification and resolution? (2) How do students present their mental maps of referential identification and resolution in the system? (3) How do students progress in their referential identification and resolutions in the system? A total of 90 junior and senior college students were recruited from two reading classes in a technological university in central Taiwan. The present study was conducted from April 24th, 2006 to June 10th, 2006. The 90 college students were asked to do the online practice of referential
identification and resolution. The online system recorded the participants’ reading behavior and performance. Results of this study showed that the more-proficient EFL readers were able to identify and resolve most of the references to form a coherent mental map from different parts of a text. The less-proficient readers commonly resolved references by relying on grammatical rules instead of semantic contextual clues. They often referred references to incorrect objects.

**Ecalle et al. (2008)**

This study examined the effects of a computer-assisted learning (CAL) program in which syllabic units were highlighted inside words in comparison with a CAL program in which the words were not segmented, as one requiring whole word recognition. It presented the effects of audio-visual training based on the matching of phonological syllabic units and orthographic syllabic units on literacy skills in poor readers at the beginning of learning to read. A traditional pre-test, training phase, post-test design was used with a randomized control trial design. Two groups of children (experimental and control) received two different computer-assisted types of training. The post-tests were administered over three sessions to examine the expected persistent effect in the experimental group. Twenty-eight poor readers in first grade were selected from a large population of 90 children attending 4 primary schools in an urban area. All children were French-speaking. They had normal or corrected-to-normal vision and no neurological deficits or overt physical handicaps. For the selection, a standardized test of word reading was administered to the 90 children and only one-third was retained. Data were collected through conducting a pre and post tests. The researcher used the experimental research design. The results of this study
showed that Computer-assisted instruction can be used to improve the learning experience and the performance of children with reading and writing difficulties.

**Huang et al. (2008)**

This study investigated EFL learners’ online reading strategies and the effects of strategy use on comprehension. To fulfill the purposes of this study, a Web-based reading program, English Reading Online, was created. This program had both student and teacher interfaces. Within the student interface, students could access texts according to their level of proficiency and use reading support functions while reading online. The teacher interface allowed teachers to track students’ reading strategy use as a group as well as on an individual basis. The reading program itself served as a data collection tool to gather information on students’ strategy use in addition to providing a supportive reading environment for EFL readers. Thirty applied English majors were drawn from a sophomore English class of 37 students at a university of technology in northern Taiwan. They were divided into a high group and a low group based on their proficiency levels, were asked to read four authentic online texts; two were appropriate to the students’ level of proficiency, and two were more difficult. Four meetings, each of which lasted for 2 h, were allocated for students to read the four articles online. Prior to the formal meetings, students attended a two-hour orientation to familiarize themselves with the functions of English reading online and to read an article (on the topic of food) for piloting purposes. Students were instructed to read through the text and were encouraged to freely explore the strategy functions in their process of reading. However, they could still decide whether or not to use the reading aids. Results from data analysis showed that the use of support strategies dominated the strategy use and contributed to most
of the comprehension gains, but an exclusive dependence on support strategies did not successfully predict the increase in scores on main ideas and details when the students were reading more challenging texts. On the whole, the use of global strategies significantly contributed to better comprehension, especially for low proficiency students.

**VanWyk and Louw (2008)**

This paper addressed the controversial issues of improving the reading skills of young learners through technology-assisted reading programmes. Moreover, The researchers tried to answer the critical questions of whether computer-assisted reading programmes should be embraced or avoided. They also had looked at the possible benefits of such an intervention apart from the improvement of reading skills. The study took place at an Afrikaans medium primary school in middle to lower income socio-economic environment. Participants were 31 learners from grade 2 to grade 7. Data of the findings in this paper were collected over a period of seven months and reflected the reading results of learners who followed a combination of a computer-based reading programme, visual accuracy and visual memory, computer exercises as well as the application of specific paper-based activities. Groups were small, with continuous personal intervention and communication from the facilitator with each learner. This paper also qualitatively reflected on the additional benefits or negative experiences of learners who participated in the electronic reading programme. The qualitative data were accumulated from interviews with learners and teachers involved. The efficacy of the reading programme was evaluated through continuous assessment of learners’ performance on different aspects of reading, including reading speed, reading comprehension, spelling and language. The reading results obtained
were compared with the initial reading assessment before implementing the programme. The overall experience of learners who participated in this programme provided valuable information in evaluating the reading programme as a whole. Results obtained from this study indicated that improvement in reading speed, comprehension and spelling was unique to every learner individually. Clearly, Computer-based reading programs were effective and fairly quick in addressing the reading problems of young learners. The benefits beyond the improvement of reading skills obtained as a result of the programme encompassed many areas of the learners’ development, such as social learning, collaborative learning, finer perceptual motor skills, confidence and a general improvement in marks in other subjects.

Arnold (2006)

This study examined the integration of technology in enhancing the response of readers and described the ways in which a teacher can facilitate those responses across contexts. It focused on examining how students in a fifth grade classroom responded to texts both in face-to-face and in on-line relationships. How the students responded to their reading and to each other in the different environments is explored. The research questions were:

1. In what ways does the teacher facilitate student responses:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?

2. How do the students respond to texts and to each other:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?
c. In the physical computer environment?
d. Across the multiple contexts?
The research site for this study was the fifth-grade classroom of Mr. Tyler Springs who was teaching in an elementary school in southwestern Ohio. This building is the only elementary school for this small, rural district. The classroom had a total of 20 students directly before the study began. Data collection methods were employed as Observations, interviews, field notes, and a collection of all written documents including the Web-based responses for analysis were all utilized to gather data. An Excel spreadsheet was developed to organize the types of data collected and to document the dates on which they were collected. The researcher found that the students in this on-line, computer mediated environment led the conversation, posing questions and responding to each other without teacher intervention. In addition, results showed that computer mediated environment enrich the responses of readers to common readings.

Dreyer & Nel (2003)

This paper outlined the format and structure of a strategic reading instruction component of an English for Professional Purposes course offered within a technology-enhanced environment. A quasi-experimental non-randomized control group design was used. All first-year English as a Second Language (ESL) students (n=131) taking the English for Professional Purposes course participated in this study. The participants included speakers of Afrikaans and Setswana majoring in Communication Studies. Within the experimental and control groups, the students were divided into two additional groups, namely successful and unsuccessful or “at risk” for failure. The students were divided into these two groups based on their
scores for reading comprehension tests in English, Communication Studies and the TOEFL. All those students who obtained percentages below 55% were categorized as “at risk,” whereas the students who obtained percentages above 55% were categorized as “successful”. The researcher used a questionnaire in the current study. The TOEFL test was administered to determine the English proficiency of the students. The questionnaires were completed in scheduled contact session periods within the first 2 weeks of the second semester of 2002. All questionnaires were completed under testing conditions. The TOEFL test was completed under testing conditions as specified by Educational Testing Services. All background information on the students was obtained from the university academic administration. The present findings suggested that students benefit from strategic reading instruction offered in a technology-enhanced learning environment.

Holleran (2003)

Learners use various strategies to read and process nonfiction text. This study explored the use of underlining, highlighting, and taking notes within the text in both paper and computer environments. This research was specifically interested in whether the use of the strategies and medium affected student comprehension and retention; whether there were significant differences with respect to class, gender, and self reported computer use on the student’s comprehension and retention; and whether there was a relationship between a participant’s self-reported computer ability, perceived control, and computer awareness with the use of online strategies. The research main questions were: 1) To what extent does the use of the selected strategies (that means, underlining, highlighting, and writing notes within the text) and medium (that means, computer and paper) affect student comprehension and retention? 2) Are
there significant differences with respect to class (as freshman, sophomore, junior, senior), gender, and self-reported computer use on the student’s comprehension and retention? 3) To what extent does a participant’s self-reported computer ability, perceived control, and computer awareness play a role in using online strategies? The participants for this study were 152 undergraduate students attending Ohio Dominican University, a small liberal arts institution of higher education in Columbus, Ohio. Participants were solicited from regularly scheduled courses, consisted of 48 males and 104 females, represented a variety of majors, and ranged in age from 17 to 60. A quasi-experimental, within-subjects design is used with eight classes randomly assigned to one of four groups. The researcher used an online questionnaire concerning the types of strategies that they would normally use to process written nonfiction material to be completed by the participants. Additionally, he used pre and post tests in order to collect data. The results showed that there was a significant correlation among the computer ability, computer awareness, and perceived control variables, as well as between the comprehension and retention measures.

Second: Studies related to students' attitudes towards integrating computers in education

Philip et al. (2011)

The purpose of this study was to investigate the effects of Computer-Assisted Instruction (CAI) on students’ attitude and achievement in matrices and transformations between form four students who received instruction using CAI module or conventional instruction methods. The study addressed the following questions: 1. What are the effects of the CAI module on students’ achievement in
matrices and transformations? 2. Is there any significant difference in the achievement on matrices and transformations between subjects exposed to CAI module and those not? 3. What are the effects of the CAI module on students’ attitudes towards Mathematics course? 4. Is there any significant difference in attitudes towards lessons on matrices and transformations between subjects exposed to CAI module and those not? Six classes selected at random with 205 students participated in the study in Kenya. The pretest – posttest control group experimental research design was used. Results indicated higher achievement and positive attitudes with CAI treatment groups. Making connections between the goals of Mathematics education and CAI offers a valuable means for improving mathematical knowledge and skills and hence performance in Mathematics.

Mbah (2010)

This research aimed at investigating the impact of information and communication technology (ICT) on students’ study habits. The research was conducted with two main purposes; Firstly, to investigate students’ familiarity and attitude towards ICTs, and secondly, to examine the possible relationship between students’ use of ICTs and study habits. The following research questions were examined: 1) Do students use ICTs to support their studies? 2) What are the students’ attitudes towards ICTs? 3) Does gender impact on the use of ICTs? 4. Does ICT usage impact students’ study habits? The sampling technique used here was the proportionate stratified random sampling technique and the sample consisted of 100 CST/Biology students for the 2009/2010 academic year, out of 186 students in the department of CST/Biology, faculty of education, University of Buea, Cameroon. The direct delivery method was
used to administer the questionnaires so as to have a high return rate of questionnaires. The results revealed that students have a positive attitude towards ICTs as such use them to facilitate learning, although male students are more favourable toward ICT usage and likely to find that ICT’s help them at their studies. As such students constantly change their study habits based on the type of ICT they use to ease studies.

**Mede (2010)**

The present study investigated the possible effects of instruction on four concrete graphic organizers (GOs) on students’ application of those visual displays in a text, and examined their attitudes towards reading in an EFL classroom. Graphic organizers (GOs) are visual or graphic displays that depict the relationships between facts, terms and ideas within a learning task. The following questions were addressed in this study: 1) Does instruction on graphic organizers (GOs) help L2 learners apply them to their own reading? 2) Does instruction on graphic organizers (GOs) affect L2 learners’ attitudes towards EFL reading? 54 intermediate students (33 females and 21 males) enrolled in a one-year English course (30 hours per week) offered by a Foreign Language Department at private university in Istanbul, Turkey participated in the present study. The program included 6 hours of reading and 3 hours of English for Specific Purposes (ESP) courses every week during which the participants were exposed to different reading texts and comprehension activities. The data for the study were collected through a questionnaire and a focus group interview administered before and after instruction on four concrete GOs. The results of the present study revealed that instruction of GOs aid L2 learners’ application of those visual displays
in a text, which also have a positive influence on their attitudes towards reading in English.

**Woody et al. (2010)**

The researchers described student use and comfort with computers, preference, and satisfaction for e-books and printed textbooks as a function of previous e-book experience. They hypothesized that those students who had previously chosen to use e-books would report greater use comfort with computers as well as greater preference for and satisfaction with e-books as compared to traditional textbooks. Additionally, for those who had previously used e-books, the researchers assessed students’ use of special features in both e-books and print books. Participants were 91 students (45 males and 46 females) who participated in a larger study to fulfill a General Psychology course requirement at a medium-sized regional university. The researchers selected these students from the larger sample because they indicated that they had previously had an option of using an e-book for a college course. The mean age was 19.1 (SD ¼ .98); 54 students were freshmen, and 37 were not. Participants completed a demographics questionnaire and stated whether they had ever had an e-book available and, if available, whether they had chosen an e-book. Results showed that some students prefer reading from e-books and others prefer special features in print books. In addition, the findings revealed positive attitudes towards reading from computer screen.
Adebowale et al. (2009)

Research has been conducted to study students’ attitude towards the computer (and its use in education), their computer self efficacy and computer anxiety separately. This study was specifically targeted at determining if socio-demographic variables like gender, age and field of study had any effect on these computer parameters among secondary school students. It also explored the possibility of being able to predict students’ computer characteristics from computer efficacy, computer anxiety and demographic variables. 600 students were selected by proportionate sampling from the Senior Secondary class III [SS III] of six secondary schools equipped with 40 micro-computer-fitted laboratories by the Nigerian [Lagos state] government. The instrument for the study consisted of two types of questionnaires, one titled “Questionnaire on the computer attitude” was used to obtain a measure of students’ computer attitude while another titled “Questionnaire on students computer self efficacy and computer anxiety” was used to measure their computer self efficacy and computer anxiety. The questionnaires were administered by their ICT teachers under the supervision of the researchers. The results showed that gender had no significant influence on any of the three parameters but age seems to affect computer attitude and computer anxiety. Students in the vocational and commercial fields of study had better attitude towards the computer than those in the sciences and arts. In terms of predicting students computer attitudes, fields of study, computer self efficacy, gender and very low levels of computer anxiety were found to be the significant predictors of computer attitude. It's clear that students showed positive attitudes towards integrating computers in education in general.
Burgess (2009)

The purpose of this research was to examine possible outcomes of developmental students’ critical thinking and motivation to read when the online learning community, WebCT, was implemented. The researcher implemented WebCT tools, such as discussion board and chat, over a four-month period into the instruction to enhance critical thinking and motivation to read in her Developmental Studies in Reading II classroom. A mixed-method approach for intervention evaluation was employed, and improvements were noted in both reading engagement and critical thinking skills by using these online tools. Participants involved in this study include one section of Developmental Reading at a community college in Southeast Texas during the spring 2007 academic semester. There were initially 20 students total: 12 males and 8 females. However, 2 males dropped the course, leaving the total at 18. There were no ESL or Learning Disability students in the class. Traditional class time was held on Mondays and computer lab time to work with WebCT tools was held on Wednesdays. The division of time provided a balance where students could gradually get their feet wet with the online learning tools without feeling pressure to jump right in. Both qualitative and quantitative methods were used to categorize the research. A survey and a questionnaire was used. It was concluded that this research presented anecdotal evidence that WebCT tools, chat, and discussion board aid in students’ critical thinking skills and reading engagement. Motivation to use the chat tool sparked a willingness to know more and to read more. It is likely that motivation and learning are “mutually causal—those who are more motivated to learn more, and those who learn more become more motivated”
Eswaran (2008)

This study aimed at investigating the usage of computer in ESL classroom, English language teachers’ and students’ attitude towards using computer to learn English. Apart from that, the purpose of this study was to investigate students’ motivation towards learning English through the use of computer in classroom. The result of this study is expected to assist the implementation and growth of successful computer curricula at school levels. This research aimed to address the following research questions: 1) What are teachers’ attitudes towards using computers in ESL classrooms? 2) What are students’ attitudes on the use of computers in ESL classrooms? 3) Does the use of computers in classroom motivate students to learn English? The respondents in this study were six English language teachers and thirty form two students from one of the rural school in Kota Tinggi district in Malaysia. The methodology used in this study is two sets of questionnaire. The data in this study have been analyzed using SPSS 12.0 software (Statistical Packages for Social Science) and presented in the form of frequency and percentage. The findings of this study illustrated that most of the teachers and students have a positive attitude towards the use of computer in an ESL classroom. Also, this study proved that students have high motivation when computers are used in an ESL classroom. Through this study, it could be concluded that the use of computer in an ESL classroom should be encouraged because it helps to motivate students and generate a positive attitude towards English language learning.
Fančovičová and Prokop (2008)
The researchers examined effects of variations in ICT (Information and communication technology) facilities in Slovak elementary schools on students’ attitudes toward ICT use. In addition, they studied differences of selected computer activities both at home and in schools. A total of eleven elementary schools from different parts of Slovakia were asked to collaborate on the research. 214 secondary students (105 boys, 109 girls) aged 10 – 14 yrs from four different Slovak elementary schools participated in the Attitudes Toward ICT Questionnaire. In order to examine factors influencing students’ attitudes toward ICT, each student completed a questionnaire which consisted of 35 items. Questions were carefully divided into three attitude dimensions (cognitive, behavioural and affective). Each item was scored by participants using Likert-type scale ranged from 1 (strongly disagree) to 5 (strongly agree). Both positive and negative items were used in the test, while negative items were scored in the reverse order. Also, students were asked to provide information such as gender, their most favourite school subject, ownership of home computer and number of hours they spend using computers. Results indicated that the students' attitudes toward ICT were positive.

Ilter (2009)
The purpose of this study was to be of help for those who lack motivation and introduce the effect of technology for a fruitful foreign language teaching process. It aims to modify the role of technology on motivation in the language classrooms and to review the students' ideas on how to use technological equipment effectively. This study can also be useful for EFL teachers to discover the role of the technology in
their teaching process. This descriptive study was based on a questionnaire which was prepared on purpose. The groups were selected among Akdeniz University Preparatory Classes in the academic year 2007-2008. The questionnaire was composed of 15 questions about motivation and technology use in EFL classrooms. The questionnaire was administered to a representative group and then an item analysis was done. It was examined by three leading experts in this field. Next, it was administered to 350 students. The students were selected from two fields of study randomly; Social Sciences and Natural Sciences. For this purpose; a questionnaire was administered to a group of students at Akdeniz University Preparatory Classes in 2007-2008 academic year. As a result it was found out that technology was a dynamic and challenging motivating factor in EFL classrooms. In conclusion, it can be said that the use of technology in EFL classrooms provides meaningful and interesting process in language learning and students can be more motivated with this technological development in EFL classrooms.

Zaid (2008)

Being a quasi-experimental study, this study explored the effectiveness of organized email exchanges and online reading utilizing web-quests on developing reading and writing of college students. In addition, it investigated the effectiveness of organized emailing and web-questing on college students’ attitudes towards learning English in a Saudi university. A typical university classroom of IV-level students enrolled in the English department constitutes a representative population. Sampling was purposeful: thirty male students were selected on the basis of their basic computer skills (as measured by a computer skills questionnaire) to participate in the experimental group.
Other participants of the same level were randomly assigned to the control group. This is a qualitative/quantitative study of the effectiveness of Internet-based learning and instruction. The study utilized a model grounded in the Web-Quest theory and involved online reading and e-mailing for developing reading and writing skills in EFL students. The experimental design used in this study is of the type: Pretest-Posttest experimental Group Design. Findings indicated that the model is effective in ameliorating reading and writing of college students, especially when integrated with collaborative learning, all in a problem-solving inquiry based learning environment. Findings also showed improving the students' attitudes towards English upon utilizing this collaborative, enquiry-based learning model.

**Ariffin et al. (2007)**

The study was conducted to examine the status of computer use and attitudes among secondary school students. It also identified the relationships among the variables and the predictors of computer attitudes. External variables (such as computer experience and frequency of use), perceived usefulness and confidence were included as potential antecedents of attitudes toward computer. This study was mainly motivated by the fact that attitudes of school students toward computers was still not widely explored in the context of Malaysian schools, even though quite a number of schools were already using computers regularly. A total number of 293 secondary school students in Kedah, Malaysia at the age of 16-17, participated in this study. The information used for this study was gathered through a questionnaire, which comprised of three different sections: (i) Background Information (including experience in using computer and frequency of use); (ii) Perceived usefulness; (iii) Confidence, and (iv)
Attitudes toward computers. The results indicated that students had moderate level of confidence and attitude, but high level of perception toward computer usefulness. This indicated that the students have positive awareness of the importance of computer in doing their current work and also for their future advancement.

Simsek (2007)

The purpose of this paper was to investigate students’ attitudes towards the use of information and communication technologies (ICTs) in a reading skills course offered at Middle East Technical University in the Department of Foreign Language Education (FLE) in Ankara. The 30 students who took part in this study were enrolled in the Reading Skills I course. Regarding reading as the process of reconstructing meaning from the printed patterns by activating background knowledge and considering context variables, the course aims at making students competent in various reading skills. In brief, the ultimate goal of this course was to enable students to read and interpret unfamiliar, authentic texts accurately and efficiently, focusing on awareness of the relations between vocabulary, structure and meaning. The other courses offered by the department of FLE were given through face-to-face instruction in the classrooms and the Internet environment was not used specifically for teaching purposes but for making announcements about assignments, readings, grading, etc. Thus, the participants, in this study did not have any experience of an online course, but nearly half of them were familiar with the Internet facilities. This study was based on both quantitative data, which were collected through a three-page questionnaire and qualitative data, which were obtained via interviews with the students. The findings indicated that despite the difficulties they faced, the students
were satisfied overall with the application of ICTs in their reading course and developed positive attitudes towards online courses.

Lim (2006)

This study examined the impact of Computer Assisted Language Learning (CALL) on Korean TAFE (Technical and Further Education) college students in an English as a Foreign Language (EFL) reading classroom in terms of their perceptions of learning environment and their reading performance. The study compared CALL and traditional reading classes over one semester by measuring students’ reading performance. A group of 74 first year English major students were divided evenly into two classes. Both groups were taught by the same teacher and covered the same topics in their weekly two-hour reading lessons. A reading comprehension test was given at the beginning and the end of the semester to measure the students’ performance. A written survey was also administered at the end of the semester. Classroom observations and group interviews with students supplemented the data obtained from the surveys. Analysis of Covariance (ANCOVA) was used for the performance test to explore the differences between the two classes while statistically controlling for the pre-test (covariate). The questionnaires were analyzed by a principle component factor analysis, a repeated-measure ANOVA and a discriminate analysis whereas the interviews with students were analyzed by a content analysis. Students’ performances in the pre-test and the post-test were not significantly different between the two classes. However, the students in the CALL-based English class were more positive in their perceptions of their learning environment than were those in the traditional English class. This study showed that computer technology had a positive impact on
students’ perceptions of their learning environment, especially in relation to learning materials and tasks, and with regard to interaction and collaboration with the tutor and other students.

Pektas and Erkip (2006)
The success of efforts to integrate technology with design education is largely affected by the attitudes of students toward technology. This paper presents the findings of a research on the attitudes of design students toward the use of computers in design and its correlates. Computer Aided Design (CAD) tools are the most widely used computer applications in design. An instrument was developed and applied for the first time to relate computer attitude to design field through CAD. Interior architecture undergraduates of Bilkent University participated in the survey. A total of 62 senior students participated in the survey (31 males and 31 females). All of the subjects' responses were complete and used in the evaluation. A questionnaire that contained four categories of variables was used in this study. These four categories were defined as (1) general attitude toward computers, (2) attitude toward the use of computers in design, (3) perception of instructors’ attitude toward the use of computers in design and (4) general perception of instructors’ reliability. As a result, students’ attitudes toward the use of computers in design were found to be positive. A significant gender difference in attitudes toward computers was observed with males having more positive attitudes than females. The results also revealed that students’ attitude toward computer usage in design was highly related to their general attitude toward computers.
Yushau (2006)

This study examined the influence of blended e-learning on students' attitude towards mathematics and computers. The subjects of this study were 70 randomly selected students of the second pre-calculus course at the Prep Year Math program at King Fahd University of Petroleum & Minerals, Dhahran Saudi Arabia. These students are fresh from high school where the mode of teaching and the language of instruction are completely different. A one semester experiment was designed to conduct the experiment and collect data for this study. Data were collected at the beginning (pre-program) and at the end (post-program) of the experimental semester. The pre-questionnaires was administered during the first week of the semester, and the post-questionnaire was given to the students in the last week of the semester. Computer Attitude Scale (CAS) developed by Loyd and Gressard (1984) was used to measure students’ attitudes. The Scale is one such measure of attitude towards computers which has been used extensively with college students and professional educators. CAS consists of four separate subscales of different dimensions, these are: computer anxiety, which assesses the fear of computers; computer confidence, which assesses the confidence in the ability of dealing with computers; computer liking, which assesses the enjoyment of dealing with computers; and computer usefulness, which assesses the perception of the proliferation of computers on future jobs. The result indicated that the subjects had positive attitude towards learning via computer.
Abdul Razak and Eswaran (2005)

The purpose of this study was to investigate teachers’ and students’ attitude towards the use of computer in an ESL classroom. The study attempted to achieve the following objectives: 1) To investigate teachers’ attitude towards the use of computers in ESL classrooms. 2) To find out students’ attitude on the use of computers in ESL classrooms. 3) To examine whether the use of the computers in an ESL classroom can motivate students to learn English. This study was conducted in one of the rural schools in Kota Tinggi in Malaysia. A total of 30 students and 6 teachers were involved in the survey. The qualitative method of data collection was through the use of a survey questionnaire. The finding of this study proved that both students and teachers had a positive attitude towards learning English through the use of computer in classrooms. They believed that the use of computer in an ESL classroom made the lesson interesting, exciting and effective. Besides, it can be seen that students were highly motivated when computers are used to teach English language. Among the reasons were the features of the computer and courseware itself. Both teachers and students felt that using computers made their English lesson interesting and at the same time students could improve their computer and language skills.

Isman and Dabaj (2004)

The study examined the attitudes of students’ toward Internet that is a part of technology in order to clarify the role of computer and Internet at students’ life. The population under investigation included graduate and postgraduate students in Fall 2002-2003 school year in Eastern Mediterranean University at Northern Cyprus. One hundred seventy three students were selected randomly as the sample of the study.
The researcher used a questionnaire which was designed for analyzing students’ attitudes towards Internet. Survey was designed according to the outlines of “Tendency Towards Internet”. There were 30 items in this instrument, 7 related to personal information, and 23 items related to Internet attitudes including a five-point Likert-scale: (from 5=strongly disagree to 1=strongly agree). Quantitative research methods (frequencies, t-test, and ANOVA) were used in order to investigate the research problem. The results clarified the students' positive tendency and attitudes towards the importance of computer and internet in the educational process.


This research study examined the affective, behavioural and cognitive attitudes of 52 Year 10 students from an Adelaide Public Secondary School towards a specific type of online e-learning, that of Online Web-Assisted Learning(OWAL). Fifty-two Year 10 students from a low socio-economic district of Adelaide, South Australia were chosen for the study. The students were grouped into two cohorts of 26. Each cohort was allocated an 80-minute session involving three phases. Data were collected through a questionnaire to examine differences in attitudes between paper assisted learning and OWAL, of differences in attitudes towards OWAL between males and females, the correlation between Internet use and positive OWAL attitudes, and the ‘publishing elements’ that students find most appealing in OWAL. The questionnaire used in this study consisted of five-point Likert-type attitude scales. The items for the questionnaire were grouped into four sections: Section 1 gathered student personal details and ICT experiences; Section 2 gathered data on students’ behavioural attitudes towards OWAL; Section 3 gathered data on the affective attitudes of students; and Section 4 examined the students’ cognitive attitudes. Results showed a
strong positive tendency by students towards OWAL. It appeared that students prefer OWAL because they could get most of the diagrams required for school projects more readily from an Internet site than from a text book, they found the graphics on a Web site more appealing, and students believe they could find additional information more easily from the Internet. Seventy-six percent of the students believed that OWAL would replace books in schools in the future and 52 per cent of the students enjoyed the fact that OWAL has animations.

Usun (2004)

The first aim of this study was to determine undergraduate students’ attitudes toward the use of computers in education. A questionnaire as survey was administered to 156 undergraduate students in two departments - the Department of Educational Sciences, and the Computer and Educational Technologies - at Canakkale Onsekiz Mart University in Turkey during the fall 2003 semester. The questions in the questionnaire were divided into two sections; the first part consisted of questions concerning personal information and, the second part of the questionnaire included attributions on the use of computers in education and consisted of 23 items. A second aim of the study was to determine whether there were differences in attitude between the two groups on the use of computers in education. Of the 156 students, 90 were from the Department of Educational Sciences and 66 were from the Department of Computer and Educational Technologies. The results showed that the students are aware that the computer is an individual and self-paced learning tool that allows them to work privately, and that they want to drill and practice in an enjoyable environment on their
own. In addition, they indicated that the undergraduate students strongly agree that computers individualize learning.

**Hong et al. (2003)**

This study investigated the success of a technology and Internet-enriched teaching and learning environment in molding positive attitudes among students toward using the Internet for learning at a university in Malaysia. Students were provided with computers facilities, required to complete two compulsory generic courses in information technology, and the lecturers actively encouraged the use of information technology, in particular, the Internet in the teaching and learning processes. The sample of this study consisted of 88 second-year undergraduate students randomly selected from all the second year students enrolled in the five faculties (Faculty of Cognitive Sciences and Human Development, Faculty of Medicine and Health Sciences, Faculty of Resource Sciences and Technology, Faculty of Engineering, and Faculty of Information Technology) at Universiti Malaysia Sarawak. This study aimed to answer the following questions: 1) What were the students' attitudes toward using the information technologies, in particular, the Internet in their learning tasks? 2) What were the relationships between students' basic skills and knowledge in the Internet obtained through these generic courses and their attitudes toward using the Internet for learning? 3) Did the learning environment in Universiti Malaysia Sarawak have a positive impact on the students' perceptions of using the Internet as a learning tool? The research instrument in this study was a questionnaire. Results from the study indicated that students had positive attitudes toward using the Internet as a learning tool, adequate basic knowledge of the Internet, and viewed the learning
environment as supportive of using the Internet for learning. Students with better basic Internet skills and who viewed the learning environment as promoting the use of the Internet favored using the Internet for learning.

**Christensen (2002)**

This study aimed at examining teachers' and students' attitudes towards integrating computer in education. Sixty teachers in a suburban, public elementary school in north Texas received needs-based instruction in the integration of computers into classroom learning activities during the school year. The education consisted of two days of intensive training at the beginning of the school year with follow-up training throughout the year (approximately once every six weeks). Two similar public elementary schools in the same school district were used as comparison groups. Educators at these schools received the normal district-level technology inservice training, but not the needs-based technology integration education delivered at the treatment school. The treatment elementary school provided education for approximately 900 PK–5 students at the time of the study. The population was 82% minority: 65% Hispanic, 10% African American, and 7% from other ethnic groups. The researcher used questionnaires to examine teachers' attitudes and students' attitudes. Results of the study showed that technology integration in education appeared to strongly influence teachers’ and students' attitudes toward the use of computers. They also indicated that greater positive perception of Computer Importance among the students in a classroom also fosters higher Computer Anxiety in their teachers.
Kilic (2001)

The aim of the study was to analyze the effect of using telecommunication technologies on (students') pre-service teachers’ attitudes toward computers and their attitudes toward communicating on computers. This research study was conducted in Indiana University in the fall semester of 1998-99 academic-years. A survey was administered at the beginning and at the end of the semester to observe if there was a change in the students’ attitudes toward computers and their attitudes toward communicating on computers. All the items in the survey were Likert type items with six categories: Strongly Disagree, Disagree, Barely Disagree, Barely Agree, Agree, and Strongly Agree. These categories were coded 1, 2, 3, 4, 5, and 6 respectively. Negatively worded items were reversed. The researcher constructed two subscales from those items. Quantitative data were collected by pretest and posttest administered to both groups at the beginning and end of the semester. The results showed that the students’ attitudes were positive about computers and communicating on computers. This research study also demonstrated that pre-service teachers participated in this study has a high attitude toward computers and toward communicating on computers which might indicate that they might use such technologies in their professional life.

Wingenbach (1999)

The purpose of this study was to investigate relationships between agriculture students’ academic achievement in a computer applications course and exam delivery method. A secondary purpose was to explore relationships between agriculture students’ academic achievement and their learning styles, computer anxiety levels,
attitudes towards computers, attitudes towards electronic examinations, and gender.

The following research questions guided this study: 1. What were students’ academic achievements, as measured by quiz and midterm scores, computer anxiety levels, attitudes towards computers, and attitudes towards paperless computer examinations? 2. What relationships existed between agriculture students’ academic achievement and exam delivery method (paper and pencil versus electronic format) or gender? 3. What was the association between agriculture students’ academic achievement and learning style as measured by the Group Embedded Figures Test (GEFT)? 4. Did relationships exist between students’ academic achievement and their attitudes towards paperless computer exams, computer anxiety scores, attitudes towards computers, or gender? Data were collected in two rounds, using original computer attitude scale (round one in week one) and a modified version (round two in week eight). There are three sections in this scale: 1) computer anxiety, 2) attitudes toward computers, and 3) demographics. The study used descriptive survey methodology and a correlational design. The results showed that students’ attitudes towards computers, computing anxiety levels, attitudes towards electronic exams were positive.

Selwyn (1996)

There is a strong need for both educators and researchers to be aware of students' attitudes toward using and interacting with computers in 16-19 education (year levels 12-14) – but as yet little work has been carried out in this area. This article therefore described the development of an instrument of measuring the attitudes toward computers of student aged 16-19 years. Initial item selection produced a pilot scale consisting of 49 items which was administered to 266 students. Subsequent factor analysis revealed four structurally independent attitude constructs and justified
retention of 21 of the original items. The revised scale was then administered to 87 year 12-14 students for formal validation. There is a scale to measure the attitudes of students in the U.K. aged between 16-19 towards computers has been developed. The scale consists of four factor scale will be of use to educators and researchers in the 16-19 educational setting. Those teaching post-compulsory education can use the scale to identify the disposition of students aged 16-19 towards computers before using IT with them – thus suggesting appropriate and suitable strategies for curricular integration. The scale would also be of use as a post-course outcome measure of the effectiveness of computer instruction. Researchers can use the scale as a comparative measure of attitudes toward IT in different sectors of 16-19 education, as well as revealing the extent of inequalities in attitude between students according to gender, race and socio-economic status. Results showed that students have positive attitudes towards integrating computers in the learning process.

Vorhees (1993)

This study addressed the problem that middle school students lack motivation toward recreational reading and do not view reading as a worthwhile use of their leisure time. Activities were integrated into a middle school computer reading program to improve students' attitudes toward reading. The workplace was a middle school in a suburban area of the northeast (USA) for grades 6-8. The school's student population was nearly 950 with a teaching staff of over 90 in number, along with three administrators and three guidance counselors. A target group of 75 students in sixth and seventh grades grouped homogeneous in remedial average and enrichment classes participated in the study. The program focused on four key activities for increasing recreational reading in school: sustained silent reading, journal writing,
computer activities and reading incentives. The researcher used a questionnaire that consisted of 100 multiple choice questions, besides a survey which was designed to provide the researcher with information regarding students' use of leisure time, feelings about reading, amount of time spent on outside reading, in addition to the writer's observation log for recording class participation during journal writings. The results indicated that computers enhanced reading activities and motivates students to read but are not substitutes for an enthusiastic teacher or parent who models good reading behavior.

**Summary of the findings of previous studies**

Having reviewed the previous studies, the researcher's background has been enriched especially on revealing the technology effects on developing students' educational and reading skills and improving their attitudes and motivation to learn in general and to read in particular.

The first section concerning computer with all its facilities on developing reading comprehension confirms the effectiveness of the computer on developing reading in general and reading comprehension skills. Apparently, all the studies indicated that the computer with all its software programs as multimedia and online programs enhance students' reading competency, literacy and other reading difficulties.

The second section of the previous studies concerning computers' effect on students' attitudes towards integrating technology in an EFL classroom. The result of these studies show that the use of technology in EFL classrooms provides meaningful
and interesting process in the language learning and students can be more motivated with this technological development in EFL Classrooms. Moreover, the results indicate that the integration of technology in classrooms enhances the response of readers and describes the ways in which a teacher can facilitate those responses across contexts.

Apparently, The computer, with its hypermedia, multimedia, and hyperlink capabilities, is more prevalent in today’s classrooms than ever before. Future research should explore additional learning strategies in computer environments. As computers become a more obvious part of the learning process and students become more and more comfortable with and in control of computer technology, instruction and learning must adjust to take full advantage.

This study includes more tools than the previous studies included, the researcher used four tools in this study in order to reach accurate results. This study also uses Microsoft PowerPoint and the Microsoft Word besides related videos in designing the computerized program but most the previous studies used the internet.
Chapter III

Methodology
III
Methodology

Introduction
The purpose of the current study was to examine the effect of a computerized program on developing ninth graders' reading comprehension and their attitudes towards reading in Palestine.

Discussions in this chapter are divided into eight major areas: a) type of research design, b) population and sampling procedures, c) instrumentation, d) validity of the instruments, e) reliability of the instruments, f) pilot study, g) data collection procedures, and h) statistical analysis.

1. Type of Research Design
The study attempted the experimental approach. Two groups were assigned as the participants of the study; the experimental group, and the control group. The research includes three variables; the first variable is a computerized program. The second variable is reading comprehension skills. The third variable is students' attitudes towards reading. The experimental group was taught the reading comprehension texts via computer, while the control group was taught via the traditional method. The experiment lasted for eight weeks.

2. Sampling procedures
The sample of the study consisted of (60) students distributed into two groups; one experimental group consists of (30) students and one control group includes (30) students. The groups were a purposive sample from Deir El Balah Prep. "B" Boys' School for Refugees in Deir Al Balah city in the Gaza strip which is run by UNRWA where the researcher works as a teacher of English Language. Table (1) shows the distribution of the sample.
Table (1)
The distribution of the sample according to the groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>count</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

The students in both groups were equivalent in the economic, cultural and social level. They were equivalent in their general achievement in accordance with the statistical treatment of their results in the first term of the school year (2010-2011). In this year, all classes were equivalent in their achievement as they were distributed according to their achievement in equivalent classes. They were equivalent in their English language achievement in accordance with the statistical treatment of their results in the final-first term exam of the school year (2010-2011). Age variable of the sample was also controlled before the experimental application. They were 15 years old. In addition, the previous learning in the reading comprehension skills and the previous attitudes towards reading were controlled too.

3. Instrumentation

To achieve the aims of the study, the researcher used four tools: He constructed a questionnaire of the reading comprehension skills in order to choose the most important skills for ninth graders. After that, the researcher prepared a pre-post achievement test depending on the most important skills. Moreover, he designed a students' attitude scale towards reading. In addition, he designed a computer program trying to help students understand the text and interact with it.
3.1. A questionnaire of reading comprehension skills:

The researcher included the general aims of the reading comprehension skills for the ninth graders which were prepared by the English Language Curriculum (1999) as a questionnaire for teachers to choose the most important reading skills for ninth graders. The items of the questionnaire are twenty-four reading comprehension skills.

Appendix (1)

3.1.1 The aim of the questionnaire

This questionnaire aimed at measuring the degree of importance of the reading comprehension skills for the ninth graders to be developed in the suggested program and to be used in building the achievement test.

3.1.2 The source of constructing the questionnaire

The researcher used the aims of the reading comprehension skills as a reading comprehension skills questionnaire for teachers to decide the most important reading comprehension skills for the ninth graders.

3.1.3 Description of the questionnaire

A questionnaire of 24 items was used in this study in order to rate the degree of importance of the reading comprehension skills. Respondents were asked to rate each item of the reading comprehension skills as follows: (3) = very important, (2) = important, (1) = slightly important.

3.1.4 Validity of the questionnaire

- The Referee Validity

To test the validity of the questionnaire, the researcher administered this tool to a group of specialists to be refereed; including professors of teaching methodology,
supervisors of English language and highly qualified and long experienced ninth grade teachers (Appendix 7) taking their valuable notes into consideration. Once the panel of referees agreed that the questionnaire was a valid instrument.

3.1.5 The application of the questionnaire

The questionnaire was applied on (6) English Language supervisors and (19) expert teachers to rate the degree of importance of the reading comprehension skills for the ninth graders. After that, relative weight was calculated and the most important skills were chosen which got more than (90%) (Appendix 2). The result of this questionnaire showed that there were (6) important skills out of the (24) reading comprehension skills. (see chart 1)

(Chart 1)

The most important skills

<table>
<thead>
<tr>
<th>No.</th>
<th>Skills</th>
<th>Relative weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Make predictions about reading text.</td>
<td>92.00</td>
</tr>
<tr>
<td>2</td>
<td>Skim for gist or general impression of text or graphics.</td>
<td>94.67</td>
</tr>
<tr>
<td>3</td>
<td>Scan for specific information from texts and realia (ads, menus,</td>
<td>93.33</td>
</tr>
<tr>
<td></td>
<td>schedule, calendar, travel information and tickets.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Develop awareness about synonyms and antonyms.</td>
<td>93.33</td>
</tr>
<tr>
<td>5</td>
<td>Deduce meaning of unfamiliar words from context.</td>
<td>92.00</td>
</tr>
<tr>
<td>6</td>
<td>Relate text to personal experience, opinion or evaluation.</td>
<td>92.00</td>
</tr>
</tbody>
</table>
3.2. Achievement test

A pre-post achievement test was prepared by the researcher to measure the students' achievement in reading comprehension skills. It was used as a pre test, applied before the experiment and as a post test, applied after the experiment. (Appendix 3)

3.2.1 The general aims of the test:

The test aimed at measuring the effect of a computerized program on the students' reading comprehension skills in English language. It was built according to the criteria of the test specification. The reading comprehension skills under investigation were prediction, skimming, scanning, develop awareness of synonyms and antonyms, deduce meaning of unfamiliar words from context and relating the text to personal experience, opinion or evaluation. The objectives of the test were to examine the students' ability to:

1- make predictions about reading text.
2- skim for gist or general impression of text or graphics.
3- scan for specific information from texts and realia (ads, menus, schedule, calendar, travel information and tickets).
4- develop awareness about synonyms and antonyms.
5- deduce meaning of unfamiliar words from context
6- relate text to personal experience, opinion or evaluation.

The total number of the test items was twenty items. The items were equal in weight. They are listed in the table of specification. Table (2)
The table of specification was designed according to the general objectives of the content, the content analysis, the weight of each skill and the objectives of the test. *English for Palestine 9 syllabus* consists of (14) units and (2) two revision units. Each unit consists of (6) lessons; two listening lessons, two language lessons, one reading lesson and one speaking lesson. The test items for each skill accord with the general objectives of the skill and its nature. According to the syllabus, reading is taught in the form of comprehension, structures are taught in the form of application so there is a consistency between the items of the test and the cognitive levels of Bloom’s Taxonomy.

### 3.2.2. The Source of Constructing the Test:

The researcher depended on some resources to construct the test such as: his own experience as a teacher of English for more than eleven years, the review of literature, supervisors and expert teachers' opinions, the results of the analysis of the reading comprehension lessons in the textbook and the result of degree of importance questionnaire.
3.2.3. The items of the test:

One reading comprehension passage was used in the test. The passage was selected from grade nine Students' Book 2010 (*English For Palestine 9*), which is taught in the Palestinian schools in the Gaza Strip and the West Bank. The passage talks about the *Importance of Plant Life*. It was selected from the reading text in Unit 9, Lesson 3&4 page 54. The text has 180 words. Students didn’t study this text and they didn’t have prior knowledge or feedback about it. The items used in each question were equal in weight. These questions were constructed according to the table of specification which was designed according to the general objectives of teaching reading comprehension skills and the relative weight of the skills in the Degree of Importance Questionnaire. The concentration was on the skills which took more than 90% in the relative weight. Three marks were distributed equally for each question. The same test was carried out after the (8) week intervention. Results of the pre and post test were recorded, statistically analyzed and compared. The items of the test are distributed as follows:

**Question 1** is a multiple-choice exercise in which students choose the right answer from (a – b – c). It consists of two items. (Prediction)

**Question 2** is a Wh-question where students answer the questions by writing the right answer. It includes three items. (Skimming)

**Question 3** is a multiple-choice exercise in which students choose the right answer from (a – b – c). The question has three items. (scanning)

**Question 4** is to extract the right synonym or antonym from the text. It consists of three synonyms and three antonyms. (developing awareness of synonyms and antonyms)

**Question 5** is a multiple-choice exercise in which students choose the right meaning for each word from (a – b – c). The question includes three items.(deduce meaning of unfamiliar words from context)
Question 6 is a True (T) or False (F) exercise in which students tick (T) next to the right answer and (F) next to the wrong answer. The question has of three items.

3.2.4 Instructions of the Test (for students)

The instructions were given to students by their teacher (the researcher). He had to tell the students that the test was designed for research purposes and it had nothing to do with their marks.

3.2.5. The pilot study:

The test was applied on a random sample of (30) students; from Deir El Balah Prep. "B" Boys' School. The results were recorded and statistically analyzed to measure its validity and reliability. The items of the test were modified in the light of the statistic results.

3.2.5.1 The validity of the test:

Al Agha (1996: 118) states that valid test is the test that measures what it is designed to measure. The study used the referee validity and the internal consistency validity.

(A) The referee validity

The test was introduced to a jury of specialists in English language and methodology in Gaza universities, Ministry of Education and experienced supervisors and teachers in UNRWA and the governmental schools. The items of the test were modified according to their recommendations.

(B) The internal consistency validity

Al Agha (1996: 121) asserts that the internal consistency validity indicates the correlation of the degree of each item with the total average of the test. It also
indicates the correlation of the average of each skill with the total average. This validity was calculated by using Pearson Formula.

According to Table (3), the correlation coefficient of each item within its question is significant at levels (0.01) and (0.05). According to the following tables, it can be concluded that the test is highly consistent and valid as a tool for the study.

Table (3)

<table>
<thead>
<tr>
<th>No.</th>
<th>Pearson Correlation</th>
<th>Sig. value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.834</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>2</td>
<td>0.932</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>3</td>
<td>0.882</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>4</td>
<td>0.773</td>
<td>0.000</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td>5</td>
<td>0.715</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>6</td>
<td>0.862</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>7</td>
<td>0.712</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>8</td>
<td>0.707</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>9</td>
<td>0.808</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>10</td>
<td>0.794</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>11</td>
<td>0.889</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>12</td>
<td>0.817</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>13</td>
<td>0.457</td>
<td>0.011</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td>14</td>
<td>0.552</td>
<td>0.002</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>15</td>
<td>0.738</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>16</td>
<td>0.561</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
</tbody>
</table>

$r$ table value at df (28) and sig. level (0.05) = 0.361

$r$ table value at df (28) and sig. level (0.01) = 0.463

According to Table (3), the coefficient correlation of each item is significant at (0.01) and (0.05) it can be concluded that the test is highly consistent and valid to be used as a tool of the study.
3.2.5.2. Reliability of the test:

Mackey & Gass stated that reliability is the degree to which there is consistency of scores students would receive on alternate forms of the same test. In other words, the test is reliable when it gives the same results if it is reapplied in the same conditions. The reliability of the test was measured by the Spilt-half and Kud-Richardson (K-R20) Techniques. (Mackey & Gass, 2005: 364)

1-by using Split half:

Table (4)

Correlation between two parts (even X odd) and modified by Spearman brown:

<table>
<thead>
<tr>
<th>SPILT–HALF TECHNIQUE</th>
<th>TEST</th>
<th>TOTAL</th>
<th>CORRELATION</th>
<th>MODIFIED COEFFICIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Comprehension skills test</td>
<td>16</td>
<td>0.923</td>
<td>0.960</td>
<td></td>
</tr>
</tbody>
</table>

From table (5) we can make sure the test have a good reliability.

From Tables (4) and (5), the test is proved to be reliable. The Spilt-half coefficient is (0.960), that indicates that the test reliable to be used in the study.

2- Kud-Richardson (K-R20)

(K-R20) depends on calculating the percentages of correct answers of the test items, and also on the variance of every item.

Table (5)

(K_R20) Coefficient for the Questions of the Test

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>(K_R20) coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>0.951</td>
</tr>
</tbody>
</table>
- **Difficulty Coefficient:**

That means that the percentage of the felling student to the total student who answered the test, we can calculate this from the following equation:

\[
\text{Difficulty Coefficient} = \frac{\text{No. of felling student}}{\text{the total student who answered the test}} \times 100
\]

Table (6) shows the difficulty coefficient for each items of the test:

**Table (6)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Difficulty coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.69</td>
</tr>
<tr>
<td>2</td>
<td>0.69</td>
</tr>
<tr>
<td>3</td>
<td>0.44</td>
</tr>
<tr>
<td>4</td>
<td>0.63</td>
</tr>
<tr>
<td>5</td>
<td>0.38</td>
</tr>
<tr>
<td>6</td>
<td>0.69</td>
</tr>
<tr>
<td>7</td>
<td>0.44</td>
</tr>
<tr>
<td>8</td>
<td>0.56</td>
</tr>
<tr>
<td>9</td>
<td>0.56</td>
</tr>
<tr>
<td>10</td>
<td>0.56</td>
</tr>
<tr>
<td>11</td>
<td>0.31</td>
</tr>
<tr>
<td>12</td>
<td>0.38</td>
</tr>
<tr>
<td>13</td>
<td>0.69</td>
</tr>
<tr>
<td>14</td>
<td>0.44</td>
</tr>
<tr>
<td>15</td>
<td>0.56</td>
</tr>
<tr>
<td>16</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Total difficulty coefficient</strong></td>
<td><strong>0.53</strong></td>
</tr>
</tbody>
</table>

Table (6) shows that the difficulty coefficient wobble between (0.31 – 0.69) with total average (0.53), that means each item is acceptable or in the normal limit of difficulties according to the view point of assessment and evaluation specialist.
- **Discrimination coefficient:**

That means that the test is able to differentiate between the high achiever students and the low achievers.

\[
\text{Discrimination Coefficient} = \frac{\text{No. of the correct items of the high achievers}}{\text{No. of high achievers}} - \frac{\text{No. of the correct items of low achievers}}{\text{No. of low achievers}}
\]

Table (7) shows the discrimination coefficient for each items of the test:

<table>
<thead>
<tr>
<th>No.</th>
<th>Discrimination coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.38</td>
</tr>
<tr>
<td>2</td>
<td>0.63</td>
</tr>
<tr>
<td>3</td>
<td>0.38</td>
</tr>
<tr>
<td>4</td>
<td>0.50</td>
</tr>
<tr>
<td>5</td>
<td>0.75</td>
</tr>
<tr>
<td>6</td>
<td>0.38</td>
</tr>
<tr>
<td>7</td>
<td>0.38</td>
</tr>
<tr>
<td>8</td>
<td>0.63</td>
</tr>
<tr>
<td>9</td>
<td>0.38</td>
</tr>
<tr>
<td>10</td>
<td>0.38</td>
</tr>
<tr>
<td>11</td>
<td>0.63</td>
</tr>
<tr>
<td>12</td>
<td>0.50</td>
</tr>
<tr>
<td>13</td>
<td>0.63</td>
</tr>
<tr>
<td>14</td>
<td>0.38</td>
</tr>
<tr>
<td>15</td>
<td>0.38</td>
</tr>
<tr>
<td>16</td>
<td>0.25</td>
</tr>
</tbody>
</table>

| Total Discrimination coefficient | 0.47 |

Table (7) shows that the discrimination coefficient wobble between (0.25 – 0.75) with total average (0.47), that means each item is acceptable or in the normal limit of discrimination according to the view point of assessment and evaluation specialist.
3.3. Attitudes scale:

An attitude scale was prepared by the researcher in this study in order to get data and information about the students' attitude towards reading. This scale was used before and after the experiment for the control and the experimental group. Appendix (4)

3.3.1. The aim of the scale:

The attitude scale aimed at measuring the effect of a computerized program on developing students' attitudes towards reading.

3.3.2. Steps of constructing the scale

The researcher constructed this scale depending on:


2- Analyzing previous related studies about attitudes towards reading and attitudes towards computerized programs.

3- Consulting specialized professors about attitudes in general.

4- The scale includes positive and negative sentences.

5- At first, the scale consisted of 48 sentences distributed in four domains. Then, the scale sentences were presented to the referee committee in order to decide the suitability of the number of the items for ninth graders, the language used in the scale, the extent to which the items of scale represents the aims of it.

6- At last, the scale was refereed and revised well. It consists of (36) items distributed in four domains. Each domain has (9) items.
7- The researcher carried out a pilot study for this scale on a group of (30) students to assess the scale validity and reliability.

3.3.3 Description of the scale:

The scale consists of four domains (Table 8). The same scale was carried out before the experiment and after the eight-week intervention. Results of the pre and post scale were recorded, statistically analyzed and compared. A Likert Type Scoring Format was used in this scale (see table 9). Students were asked to indicate the extent of their agreement with each statement, on a five-point scale from strongly agree to strongly disagree.

Table 8
The attitudes' scale domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>Items No.</th>
<th>Positive sentences</th>
<th>Negative sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Attitudes towards the value and importance of reading</td>
<td>9</td>
<td>1,2,6,7,8,9</td>
<td>3,4,5</td>
</tr>
<tr>
<td>2- Attitudes towards enjoying reading</td>
<td>9</td>
<td>2,4,6,7</td>
<td>1,3,5,8,9</td>
</tr>
<tr>
<td>3- Attitudes towards learning reading via computer</td>
<td>9</td>
<td>1,2,4,7,8,9</td>
<td>3,5,6</td>
</tr>
<tr>
<td>4- Attitudes towards the reading teacher</td>
<td>9</td>
<td>1,2,5,8,9</td>
<td>3,4,6,7</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>21</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 9
Likert Scale

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>agree</th>
<th>I don’t know</th>
<th>Strongly disagree</th>
<th>disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive sentences</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Negative sentences</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
3.3.4. Instructions of the scale (for students)

The instructions were given to students by their teacher (the researcher). The scale was translated into Arabic in order to get students understand the items of the scale.

3.3.5 Pilot study:

The scale was applied on a random pilot sample of (30) Ninth graders’ from Deir El Balah Prep. "B" Boys' School in order to assess Validity and Reliability of the scale. The results were recorded and statistically analyzed to measure the scale validity and reliability.

.3.5.1. The validity of the scale:

Valid scale is the scale that measures what it is designed to measure. The study used the referee validity and the internal consistency validity.

(A) The referee validity

The test was introduced to a jury of specialists in English language and methodology and Psychology university professors in Gaza universities, Ministry of Education and experienced supervisors and teachers in UNRWA schools. The items of the attitude scale were modified according to their recommendations. Appendix (7)

(B) The internal consistency validity

The internal consistency validity clarifies the correlation of the degree of each item with the total average of the scale. It also indicates the correlation of the average of each domain with the total average. This validity was calculated by using Pearson Formula.

According to the tables (11),(12), (13) and (14) the coefficient correlation of each item within its scope is significant at levels (0.01) and (0.05).
Table (10) shows the correlation coefficient of each domain with the whole scale. According to the following tables, it can be concluded that the scale is highly consistent and valid as a tool for the study.

Table (10)

Correlation coefficient for each sentence in the first domain:
Attitudes towards the value and importance of reading

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Pearson Correlation</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I believe that reading develops the mind perceptions more than any other means.</td>
<td>0.626</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>2</td>
<td>I think that reading helps in developing the ability of right thinking.</td>
<td>0.646</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>3</td>
<td>I can acquire much cognition and experiences without reading.</td>
<td>0.826</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>4</td>
<td>I wish we could lessen some reading topics from the syllabus.</td>
<td>0.882</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>5</td>
<td>I think that reading extra texts is time consuming.</td>
<td>0.692</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>6</td>
<td>I think that reading is a basic factor in forming the human culture.</td>
<td>0.735</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>7</td>
<td>We have to continue reading even if we have wide experience.</td>
<td>0.836</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>8</td>
<td>I wish we could increase reading classes in the school schedule.</td>
<td>0.876</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>9</td>
<td>I think that reading is important to every student.</td>
<td>0.800</td>
<td>sig. at 0.01</td>
</tr>
</tbody>
</table>

$r_{table} value at df (28) and sig. level (0.05) = 0.361$

$r_{table} value at df (28) and sig. level (0.01) = 0.463$
### Table (11)
**Correlation coefficient for each sentence in the second domain:**

**Attitudes towards enjoying reading**

<table>
<thead>
<tr>
<th>No.</th>
<th>item</th>
<th>Pearson Correlation</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I think that very much reading causes boredom.</td>
<td>0.769</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>2</td>
<td>I prefer reading classes to other classes</td>
<td>0.851</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>3</td>
<td>I feel that the time of reading classes is very long and boring.</td>
<td>0.899</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>4</td>
<td>I allocate time for free reading.</td>
<td>0.839</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>5</td>
<td>I keep away from participating in the reading school activities.</td>
<td>0.862</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>6</td>
<td>I think that we should have a library at home.</td>
<td>0.845</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>7</td>
<td>I take care of reading extra reading texts.</td>
<td>0.854</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>8</td>
<td>I feel happy when we miss a reading class.</td>
<td>0.905</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>9</td>
<td>I feel annoyed when doing any reading task</td>
<td>0.868</td>
<td>sig. at 0.01</td>
</tr>
</tbody>
</table>

\[
r \text{ table value at df (28) and sig. level (0.05) } = 0.361
\]

\[
r \text{ table value at df (28) and sig. level (0.01) } = 0.463
\]

### Table (12)
**Correlation coefficient for each sentence in the third domain:**

**Attitudes towards learning reading via computer**

<table>
<thead>
<tr>
<th>NO.</th>
<th>item</th>
<th>Pearson Correlation</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I think that reading via computer increases my comprehension.</td>
<td>0.713</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>2</td>
<td>I enjoy reading texts via computer.</td>
<td>0.701</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>3</td>
<td>I think that reading via computer causes less concentration.</td>
<td>0.838</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>4</td>
<td>I wait impatiently for the computerized reading classes.</td>
<td>0.821</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>5</td>
<td>I believe that reading via computer weakens my reading skills.</td>
<td>0.822</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>6</td>
<td>I think that reading via computer is time-consuming.</td>
<td>0.842</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>No.</td>
<td>item</td>
<td>Pearson Correlation</td>
<td>Sig. level</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------</td>
<td>---------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>7</td>
<td>I think that reading via computer helps me to be self-dependent.</td>
<td>0.849</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>8</td>
<td>I feel that reading via computer increases my thinking skills.</td>
<td>0.904</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>9</td>
<td>I think that reading via computer increases my ability to understand abstract concepts</td>
<td>0.894</td>
<td>sig. at 0.01</td>
</tr>
</tbody>
</table>

**Table (13)**

Correlation coefficient for each sentence in the fourth domain:

Attitudes towards the reading teacher

<table>
<thead>
<tr>
<th>No.</th>
<th>item</th>
<th>Pearson Correlation</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I think that the reading teacher increases my interest for reading.</td>
<td>0.926</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>2</td>
<td>I believe that the reading teacher's questions stimulate thinking.</td>
<td>0.791</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>3</td>
<td>I feel annoyed when I see the reading teacher.</td>
<td>0.887</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>4</td>
<td>I stay away from participating in the reading class because of the reading teacher.</td>
<td>0.901</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>5</td>
<td>The reading teacher encourages us to express our opinions.</td>
<td>0.794</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>6</td>
<td>I feel bored when the reading teacher presents any topic.</td>
<td>0.948</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>7</td>
<td>I feel that the reading teacher looks after some students and ignore others.</td>
<td>0.868</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>8</td>
<td>I feel that the teaching aids that are used by the teacher of reading stimulate my attention.</td>
<td>0.922</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td>9</td>
<td>The teacher of reading advises us to read more additional reading passages</td>
<td>0.855</td>
<td>sig. at 0.01</td>
</tr>
</tbody>
</table>

The results of tables (10,11,12,13) show that the value of these items were suitable and highly consistent and valid for conducting this study.
The researcher also examined the correlation between the four domains with the total degree of the scale, and the four domains with others as shown in table (14).

Table (14)

Pearson Correlation coefficient for every domain from the scale with the total degree of the scale and the domains with others domains

<table>
<thead>
<tr>
<th>Domains</th>
<th>SUMB</th>
<th>Attitudes towards the value and importance of reading</th>
<th>Attitudes towards enjoying reading</th>
<th>Attitudes towards learning reading via computer</th>
<th>Attitudes towards the reading teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and importance of reading</td>
<td>0.983</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards enjoying reading</td>
<td>0.971</td>
<td>0.931</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards learning reading via computer</td>
<td>0.985</td>
<td>0.966</td>
<td>0.936</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>0.987</td>
<td>0.964</td>
<td>0.941</td>
<td>0.966</td>
<td>1</td>
</tr>
</tbody>
</table>

$r$ table value at df (28) and sig. level (0.05) = 0.361

$r$ table value at df (28) and sig. level (0.01) = 0.463

As shown in the table (14), there is correlation between the domains and the total degree and each domain with the other domains at sig. level (0.01) that shows a high internal consistency of the scale which reinforces the validity of the scale.

3.3.5.2. Reliability:

The scale is reliable when it gives the same results if it is reapplied in the same conditions. The researcher used the pilot study to assess the reliability of the scale which was measured by Alpha Cronbck and split-half methods.
The researcher calculated the correlation between the first and the second half of each domain of the scale and the whole of the scale. Then, the researcher used Spearman Brown Formula to modify the length of the scale to find out the reliability coefficient as shown in table (15).

(Table 15)

**Correlation coefficient between the two halves of each domain before modification and the reliability after modification**

<table>
<thead>
<tr>
<th>Domains</th>
<th>No. of items</th>
<th>Correlation between two parts</th>
<th>Reliability coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and importance of reading</td>
<td>*9</td>
<td>0.931</td>
<td>0.933</td>
</tr>
<tr>
<td>Attitudes towards enjoying reading</td>
<td>*9</td>
<td>0.952</td>
<td>0.960</td>
</tr>
<tr>
<td>Attitudes towards learning reading via computer</td>
<td>*9</td>
<td>0.937</td>
<td>0.939</td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>*9</td>
<td>0.957</td>
<td>0.964</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>0.976</td>
<td>0.988</td>
</tr>
</tbody>
</table>

* The researcher used Gutman coefficient for unequal halves.

Table (15) shows that the reliability coefficient by using split-half after modification more than (0.988) and this indicates that the scale is reliable and the research is satisfied to apply it on the sample of the study.

A total sample of 30 students participated in testing the reliability of the scale, Alpha formula was used to determine the reliability of the scale as shown in table (16).

(Table 16)

**Alpha Correlation Coefficient of the Scale Reliability**

<table>
<thead>
<tr>
<th>Domains</th>
<th>Number of Items</th>
<th>Alpha kronbach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and importance of reading</td>
<td>9</td>
<td>0.915</td>
</tr>
<tr>
<td>Attitudes towards enjoying reading</td>
<td>9</td>
<td>0.953</td>
</tr>
<tr>
<td>Attitudes towards learning reading via computer</td>
<td>9</td>
<td>0.940</td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>9</td>
<td>0.963</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>0.986</td>
</tr>
</tbody>
</table>

The results of table (16) show that the ranges of reliability of the four domains were above (0.986), this result indicates that the scale was suitable for conducting such study. The reliability of the scale was measured by Alpha Cronback and the split-half methods.
3.4. The suggested computer program:

3.4.1 Aims of the computer program:

The general aim of the program is to improve the students reading comprehension skills and develop their attitudes towards reading.

3.4.2 Objectives of the computer program:

1- make predictions about reading text.
2- develop awareness about synonyms and antonyms.
3- deduce meaning of unfamiliar words from context.
4- skim for gist or general impression of text or graphics.
5- scan for specific information from texts and realia (ads, menus, schedule, calendar, travel information and tickets).
6- relate text to personal experience, opinion or evaluation.

3.4.3 The design of the program

The researcher used some software programs in designing the program as: Microsoft PowerPoint, Internet explorer and Microsoft Word and Ulead Video Maker as well. Pictures, sounds, movements and real videos are used in the design in order to activate the students' interest, attitudes, attention and understanding of the text. In addition, the researcher adds related activities to each lesson so as to improve the reading comprehension skills. Appendix (5)

3.4.4 Content of the computerized program

The program includes all the reading comprehension lessons in English for Palestine 9, Second Term as from Unit 9 to Unit 15, Chart (2). The content of the suggested program was chosen, organized and modified according to the difficulties that students face when reading a text. Also, the opinions and suggestions of a group of specialists; including professors of teaching methodology, supervisors of English language in addition to highly qualified and experienced English and technology
When designing the program, the researcher took into account the abilities and level of the students.

**Chart (2)
The content of the computerized program**

<table>
<thead>
<tr>
<th>No.</th>
<th>Unit</th>
<th>The Text Title</th>
<th>Activities</th>
<th>Content of the computerized lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unit 9, Lesson 3-4, page 54</td>
<td><em>Our friends, the forests</em></td>
<td>Prediction, skimming, scanning synonyms and antonyms, deducing meaning and relation to students' experience and evaluation.</td>
<td>- Pictures for the highlighted words - A related video for the text.</td>
</tr>
<tr>
<td>2</td>
<td>Unit 10, Lesson 3-4, page 60</td>
<td><em>Quiz: Could you look after your home and family?</em></td>
<td>Prediction, skimming, scanning synonyms and antonyms, deducing meaning and relation to students' experience and evaluation.</td>
<td>- Pictures for the highlighted words - A match game for the quiz and its answers.</td>
</tr>
<tr>
<td>3</td>
<td>Unit 11, Lesson 3-4, page 66</td>
<td><em>Reaching out to others</em></td>
<td>Prediction, skimming, scanning synonyms and antonyms, deducing meaning and relation to students' experience and evaluation.</td>
<td>- Pictures for the highlighted words - A related video for the text.</td>
</tr>
<tr>
<td>4</td>
<td>Unit 12, Lesson 3-4, page 72</td>
<td><em>The United Nations at work</em></td>
<td>Prediction, skimming, scanning synonyms and antonyms, deducing meaning and relation to students' experience and evaluation.</td>
<td>- Pictures for the highlighted words - A related video for the text.</td>
</tr>
<tr>
<td>5</td>
<td>Unit 13, Lesson 3-4, page 78</td>
<td><em>Help, World!</em></td>
<td>Prediction, skimming, scanning synonyms and antonyms, deducing meaning and relation to students' experience and evaluation.</td>
<td>- Pictures for the highlighted words</td>
</tr>
<tr>
<td>6</td>
<td>Unit 14, Lesson 3-4, page 84</td>
<td><em>An email from China</em></td>
<td>Prediction, skimming, scanning synonyms and antonyms, deducing meaning and relation to students' experience and evaluation.</td>
<td>- Pictures for the highlighted words - A related video for the text. - The email is introduced through the internet explorer to be checked by students as a web-quest lesson.</td>
</tr>
<tr>
<td>7</td>
<td>Unit 15, Lesson 3-4, page 90</td>
<td><em>Science Magazine Talks to...</em></td>
<td>Prediction, skimming, scanning synonyms and antonyms, deducing meaning and relation to students' experience and evaluation.</td>
<td>- Pictures for the highlighted words - A related video for the text.</td>
</tr>
</tbody>
</table>
3.4.5. Validity of the program

The researcher presented the program to a group of specialists; including professors of teaching methodology and technology, supervisors of English language in addition to highly qualified and experienced English and technology teachers in order to referee the program. The researcher modified the program according to their precious advice and comments.

Additionally, the researcher implemented One reading text on a pilot study which consists of (30) students. This step was to investigate if there was any technological problem, unclear instruction or the suitability of the technological environment. Moreover, to observe the students' motivation to read while using computers and their response to the comprehension questions.

3.4.6 Program implementation plan:

Two school periods every week were assigned for each reading lesson. Each lesson needed 45 minutes. The program was implemented in the second semester of the scholastic year 2010-2011 as from 3rd March to 3rd May 2011. The researcher teacher didn’t teach the first reading text (our friends, the forests). He delayed teaching this lesson till the end of the experiment because this text was used as a pre-post test.

3.4.7 Program evaluation

Evaluation is defined as a systematic process of determining the extent to which instructional objectives are achieved by pupils. (Nunan 1995:184) In this study, it is an activity designed to judge the merits of the program. It is an integral part of any educational program. It is used to assess the effectiveness of the program in terms of the benefits to the students. It is the process of collecting outcomes to determine if the program was effective. The researcher used two types of evaluation:
3.4.7.1 Formative Evaluation:

Formative evaluation is a method of judging the worth of a program while the program activities are forming or happening. Formative evaluation focuses on the process (Bhola 1990). It helps the researcher to find out if the objectives were achieved in the formative stages of the experiment. It also helped the researcher to collect data to assess how to make the program better. The researcher conducted some activities after every lesson in order to assess students' development in the reading comprehension skills through the experiment.

3.4.7.2 Summative Evaluation

Summative evaluation is a method of judging the worth of a program at the end of the program activities. The focus is on the outcome (Bhola 1990). In this study, it was used at the end of the program. It aimed at examining the effectiveness of the computerized program on the development of the students' reading comprehension skills. The post-test was used for this purpose.
4. Controlling the variables

To assure the results accuracy and avoid any marginal interference, the researcher tried to control the following variables before the study:

1- Age
2- General achievement
3- English general achievement
4- Previous learning in the English reading comprehension skills
5- Previous attitudes towards reading

4.1. Age variable

The researcher recorded the students' ages from the school's files at the beginning of the school year (2010-2011). The mean and the standard deviation were calculated for each group, and then T-test was used to measure the statistical differences. Table (17) shows the comparison between the two groups of the sample concerning the age variable.

Table (17)

T-test results of controlling age variable

<table>
<thead>
<tr>
<th>scope</th>
<th>group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Sig. value</th>
<th>sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>experimental</td>
<td>30</td>
<td>14.558</td>
<td>0.188</td>
<td>0.202</td>
<td>0.840</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>14.568</td>
<td>0.195</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“t” table value at (58) d.f. at (0.05) sig. level equal 2.00
“t” table value at (58) d.f. at (0.01) sig. level equal 2.66

Results of the comparison indicate that both the experimental and the control groups are equivalent in the age variable and there are no statistically significant differences at (0.01) and (0.05) levels between the experimental and the control groups.
4.2. General achievement variable:

T-test was used to measure the statistical differences between the groups due to their general achievement. The students' results in the first term test of the school year (2010-2011) were recorded and analyzed.

Table (18)

<table>
<thead>
<tr>
<th>scope</th>
<th>group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Sig. value</th>
<th>sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>general achievement</td>
<td>experimental</td>
<td>30</td>
<td>765.700</td>
<td>173.389</td>
<td>0.166</td>
<td>0.869</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>758.733</td>
<td>151.080</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (18) indicates that there are no statistical differences at (0.01) and (0.05) between the experimental and the control group due to the general achievement variable.

4.3. English general achievement variable:

T-test was used to measure the statistical significant differences between the groups due to their English general achievement. The sample subjects' results in the first term test of the school year (2010-2011) were recorded and analyzed.

Table (19)

<table>
<thead>
<tr>
<th>scope</th>
<th>group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Sig. value</th>
<th>sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>English achievement</td>
<td>experimental</td>
<td>30</td>
<td>81.900</td>
<td>8.503</td>
<td>1.545</td>
<td>0.128</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>78.633</td>
<td>7.859</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (19) shows that there are no statistically differences at (0.01) and (0.05) between the experimental and the control due to the English general achievement variable.
4.4. Reading comprehension skills variable

To make sure that the sample students are equivalent in their previous learning of reading comprehension skills. The researcher applied the pre-achievement test. The results of the test were recorded and statistically analyzed using T-test.

Table (20) shows the mean and the standard deviation of each group in English previous learning in the reading comprehension skills.

### Table (20)

#### T-test results of controlling previous learning of the reading comprehension skills

<table>
<thead>
<tr>
<th>Questions</th>
<th>group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Sig. value</th>
<th>sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction</td>
<td>experimental</td>
<td>30</td>
<td>2.000</td>
<td>1.067</td>
<td>1.720</td>
<td>0.091</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.500</td>
<td>1.182</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skimming</td>
<td>experimental</td>
<td>30</td>
<td>1.567</td>
<td>0.858</td>
<td>0.886</td>
<td>0.379</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.367</td>
<td>0.890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>scanning</td>
<td>experimental</td>
<td>30</td>
<td>1.033</td>
<td>1.033</td>
<td>0.511</td>
<td>0.611</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.167</td>
<td>0.986</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>synonyms and antonyms</td>
<td>experimental</td>
<td>30</td>
<td>1.150</td>
<td>0.811</td>
<td>0.999</td>
<td>0.322</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>0.933</td>
<td>0.868</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deduce meaning of unfamiliar words from context</td>
<td>experimental</td>
<td>30</td>
<td>1.200</td>
<td>0.961</td>
<td>0.272</td>
<td>0.787</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.133</td>
<td>0.937</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>relate text to personal experience</td>
<td>experimental</td>
<td>30</td>
<td>1.133</td>
<td>0.819</td>
<td>0.424</td>
<td>0.673</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.033</td>
<td>0.999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total test score</strong></td>
<td>experimental</td>
<td>30</td>
<td>8.083</td>
<td>2.323</td>
<td>1.274</td>
<td>0.208</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>7.133</td>
<td>3.358</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tables (20) shows that the (t) computed value is less than the (t) table value in the total degree of the test. This indicates that there are no statistically significant differences at (0.01) and (0.05) level between the experimental and the control groups concerning the previous learning in the reading comprehension skills.
4.5. Previous attitudes towards reading

To make sure that the sample students are equivalent in their previous attitudes towards reading, the researcher applied the pre-attitude scale. The results were recorded and statistically analyzed using T-test.

Table (21) shows the mean and the standard deviation of each group in previous attitudes towards reading.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Sig. Value</th>
<th>Sig. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and importance of reading</td>
<td>Experimental</td>
<td>30</td>
<td>18.233</td>
<td>2.648</td>
<td>0.117</td>
<td>0.907</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>18.133</td>
<td>3.839</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards enjoying reading</td>
<td>Experimental</td>
<td>30</td>
<td>16.400</td>
<td>3.450</td>
<td>1.196</td>
<td>0.237</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>15.433</td>
<td>2.775</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards learning reading via computer</td>
<td>Experimental</td>
<td>30</td>
<td>16.100</td>
<td>2.820</td>
<td>1.080</td>
<td>0.285</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>17.000</td>
<td>3.591</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>Experimental</td>
<td>30</td>
<td>16.067</td>
<td>2.912</td>
<td>0.820</td>
<td>0.416</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>15.433</td>
<td>3.070</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Scale score</td>
<td>Experimental</td>
<td>30</td>
<td>66.800</td>
<td>6.504</td>
<td>0.361</td>
<td>0.719</td>
<td>not sig.</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>66.000</td>
<td>10.249</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (21) indicates that the (t) computed value is less than the (t) table value in the total degree of the scale. This means that there are no statistically significant differences at (0.01) and (0.05) level between the experimental and the control groups concerning the previous attitudes towards reading.
5. Study Procedures

*The study is progressing according to the following steps:*

1- Reviewing literature and previous studies related to computer programs and their effect on reading comprehension skills. In addition, the researcher reviewed previous studies related to computer programs and their effect on students' attitudes towards reading.

2- Deciding on the problematic reading texts for Ninth graders by consulting specialists, including professors of teaching methodology, supervisors of English language and experienced teachers.

3- Deciding on the instruments of the study: A checklist of reading comprehension skills to decide the degree of suitability to eighth graders, a questionnaire to decide the degree of importance of the reading comprehension skills, an achievement test (Pre& post-test) depending on the most important reading comprehension skills, an attitude scale to examine the students' attitudes towards reading before and after the experiment and a suggested computer program for developing the reading comprehension skills.

4- Using the reading comprehension skills checklist which suits the ninth graders.

5- Designing a questionnaire of the reading comprehension skills depending on the previous checklist and then introducing this questionnaire to specialists, including professors of teaching methodology, supervisors of English language and experienced teachers to decide the most important skills for the ninth graders.

6- Applying the questionnaire and recording the results to be used in building the achievement test.
7- Designing the suggested computer program to develop the reading comprehension skills and the students' attitudes towards reading through:
   a- Identifying the objectives of the suggested computer program.
   b- Preparing the computerized lessons using the Microsoft PowerPoint, the internet explorer, the Microsoft word and related designed videos for each reading text.
   c- Deciding suitable strategies and activities of teaching reading via computer.
   d- Managing time "lessons and activities ".
   e- Evaluating the program.
   f- Preparing the Teachers' Guide.
   g- Consulting the specialists about the suggested computer program including technology and methodology professors and experienced teachers in order to referee the program.

8- Preparing the achievement test (pre and post-test) depending on the result of the questionnaire of the most important skills for ninth graders.

9- Preparing the attitude scale (pre and post) towards reading after reviewing the literature and consulting specialists.

10- Checking the validity and the reliability of the test and the scale through the following:
   a- Consulting the specialists.
   b- Applying the test and the scale on a pilot sample who have the same characteristics of the study sample and the results are recorded.
   c- Finding out the internal consistency coefficient using "Pearson formula".
   d- Estimating the reliability using Alpha "Cronbach formula".
   e- Identifying the difficulties and the discriminations of the test.
   f- Assessing the effect size using Eta square.
11- Choosing the sample of the study that includes the experimental group and the control one.

12- Applying the pre-test and the pre-attitude scale on the sample of the study and computing the results.

13- Implementing the experiment using the suggested computer program according to the plan and the teacher' guide on the experimental group while the control one was taught by the traditional method.

14- Applying the post-test and the post-attitude scale on the sample of the study after 8 weeks of applying the experiment.

15- Analyzing and interpreting the results.

6. Statistical Analysis

The questionnaire responses and the pre and post treatment essay tests were collected, computed, and analyzed by using Statistical Package for Social Science (SPSS). The significance level used was 0.05. The following statistical styles were used:

1. Spearman correlation: to determine the internal consistency validity of the test.

2. Alpha Cronbach technique and Split-half technique: to measure the reliability of the attitude scale items.

3. Split-half technique and Kud-Richardson (K-R20): to test the reliability of the test items.

5. T. Test independent samples: to control the interferential variables and to measure the statistical differences in means between the two groups due to the study variables. Afana (2000)

6. Effect size level by using T value, Eta square, and Cohen's d: to check the effect volume (extent) of the evident significant differences between the two groups and within the experimental group. Afana (2000)
Chapter IV

Data Analysis
Chapter IV
Results: Data Analysis

Introduction

The study aimed at examining the effect of a Suggested Computerized Program on Ninth graders' English reading comprehension skills and the students' attitudes towards reading. The researcher used four tools in order to collect data: a reading comprehension skills questionnaire, an achievement test, an attitude scale and the suggested computerized program. This chapter tackles the procedures, the findings and results of the study regarding the research questions and hypotheses.

The researcher used different statistic forms using the statistical program (SPSS) to show the final collected data results. Tables were also used to clarify and present these data with analysis and interpretation.

The result of the study

1- The first question is stated as follows:

1- What is the suggested computerized programme which may develop ninth graders' reading comprehension and their attitudes towards reading?

To answer this question, the researcher prepared a computerized program in order to develop students' reading comprehension and their attitudes towards reading. The program includes:

1- Teacher's Guide:

The teacher's guide provides information of the procedures that teachers can use when applying this suggested computerized programme. This guide contains detailed unit plan notes of how to use the program effectively. The objectives of each lesson are
clearly identified and the answers for the Program's activities are provided. Appendix (6)

**2- Students' Book (the suggested computerized program)**

The program includes all the reading comprehension lessons in *English for Palestine 9*, Second Term as from Unit 9 to Unit 15, Chart (2). The researcher used some software programs in designing the program as: Microsoft PowerPoint, Internet explorer and Microsoft Word. He adds pictures for each highlighted word in the text in addition to related videos for each lesson. As well as, he designed the text in unit 14 (Email from China) as a web-quest so as to get students live the experience and interact with the text. Appendix (5)

**Teaching Aids:**

Several teaching aids were used in the program design as pictures, sounds, different effects as movements, real experience (web-quest) and related videos are used in the design in order to activate the students' interest, attitudes, attention and interaction with the text. In addition, the researcher added related activities to each lesson so as to improve the reading comprehension skills and their attitudes towards reading.

**Evaluation tools**

The researcher used two tools to evaluate the program: the pre and post achievement test, and, the pre and post attitude scale in order to determine their interest of reading from computer. Appendixes (3) and (4)
2- The First hypothesis is stated as follows:

1. There are no statistically significant differences at $(\alpha \leq 0.05)$ in the total average score of the post-test between the experimental group and the control group.

To examine this hypothesis, means and standard deviation of the experimental and the control groups' results on the post-test of reading comprehension skills were computed. The researcher used Independent Samples T-test to measure the significant differences. To interpret this hypothesis, the researcher used T.test independent sample results of differences between experimental and control group in the post test.

**Table (22)**

**T.test independent sample results of differences between the experimental and the control group in the post test.**

<table>
<thead>
<tr>
<th>Skill</th>
<th>GROUP</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Sig. value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction</td>
<td>experimental</td>
<td>30</td>
<td>2.650</td>
<td>0.852</td>
<td>2.669</td>
<td>0.010</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.850</td>
<td>1.403</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skimming</td>
<td>experimental</td>
<td>30</td>
<td>2.567</td>
<td>0.626</td>
<td>3.147</td>
<td>0.003</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.933</td>
<td>0.907</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scanning</td>
<td>experimental</td>
<td>30</td>
<td>2.067</td>
<td>0.868</td>
<td>3.828</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.233</td>
<td>0.817</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synonyms and antonyms</td>
<td>experimental</td>
<td>30</td>
<td>1.533</td>
<td>0.629</td>
<td>2.587</td>
<td>0.012</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.000</td>
<td>0.938</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deduce meaning from context</td>
<td>experimental</td>
<td>30</td>
<td>1.700</td>
<td>0.877</td>
<td>4.021</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>0.850</td>
<td>0.756</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relate text to personal experience</td>
<td>experimental</td>
<td>30</td>
<td>1.667</td>
<td>0.959</td>
<td>2.819</td>
<td>0.007</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>1.000</td>
<td>0.871</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score of the test</td>
<td>experimental</td>
<td>30</td>
<td>12.183</td>
<td>2.503</td>
<td>5.604</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>7.867</td>
<td>3.396</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“$t$” table value at (58) d f. at (0.05) sig. level equal 2.00
“$t$” table value at (58) d f. at (0.01) sig. level equal 2.66

The results in table (22) indicate that the ($t$) computed value was greater in all the skills and in the total score of the post test than the ($t$) table value in the post test. This
means that there are significant differences at (α= 0.01) and (0.05) between the experimental group and the control one favouring the experimental group. There was also a significant difference between the means of both groups in favour of the experimental group. Whereas the mean of the control group was (7.867) in relation to the total score of the test and the mean of the experimental group was (12.183). That means that the Computerized program is effective to develop the reading comprehension skills.

To calculate the effect size the researcher used Eta square "η²" by using the following equation (Affana, 2000, 42):

\[ \eta^2 = \frac{t^2}{t^2 + df} \]

Also the researcher calculated "d" value by using the following equation:

\[ d = \frac{2t}{\sqrt{df}} \]

<table>
<thead>
<tr>
<th>Test</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
</tr>
<tr>
<td>( \eta^2 )</td>
<td>0.01</td>
</tr>
<tr>
<td>( d )</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Table (23) the table references to determine the level of effect size (\( \eta^2 \)) and (d)
Table (24)

"t" value, eta square "\( \eta^2 \)" and "d" for each skill and the total score

<table>
<thead>
<tr>
<th>Skill</th>
<th>t value</th>
<th>( \eta^2 )</th>
<th>d</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction</td>
<td>2.669</td>
<td>0.109</td>
<td>0.701</td>
<td>Medium</td>
</tr>
<tr>
<td>Skimming</td>
<td>3.147</td>
<td>0.146</td>
<td>0.826</td>
<td>Large</td>
</tr>
<tr>
<td>Scanning</td>
<td>3.828</td>
<td>0.202</td>
<td>1.005</td>
<td>Large</td>
</tr>
<tr>
<td>Synonyms and antonyms</td>
<td>2.587</td>
<td>0.103</td>
<td>0.679</td>
<td>Large</td>
</tr>
<tr>
<td>Deduce meaning from context</td>
<td>4.021</td>
<td>0.218</td>
<td>1.056</td>
<td>Large</td>
</tr>
<tr>
<td>Relate text to personal experience</td>
<td>2.819</td>
<td>0.120</td>
<td>0.740</td>
<td>Medium</td>
</tr>
<tr>
<td>Total score of the test</td>
<td>5.604</td>
<td>0.351</td>
<td>1.472</td>
<td>Large</td>
</tr>
</tbody>
</table>

Table (24) shows that there is a large effect size for each skill and the total score of each skill.

Implementing the effect size equation, the researcher found that the effect size of four skills namely: synonyms and antonyms, Deduce meaning from context, skimming and scanning is large. This could be attributed to the pictures shown within the computerized programme as these pictures are clear and completely related to the vocabulary. In addition, Students can deduce the meaning of words from the context especially after watching related videos about the lessons.

It's noticed from table (24) that the effect size of the skills: predicting and relating the text to experience is medium, but it is close to being large because the total score of all the skills is large. This may be attributed to the fact that these skills are high-order thinking skills.

It's concluded that this finding agrees with many previous studies as: Abu Seileek (2011), Philip et al (2011), Chen (2010) and Holleran (2003) which confirmed that the use of technology facilities as computers develops students' reading skills.
3- The Second hypothesis is stated as follows:

2- There are no statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the post attitude scale between the experimental group and the control group.

To examine this hypothesis, means and standard deviation of the experimental and the control groups' results on the post-attitude scale towards of reading were computed. The researcher used Independent Samples T-test to measure the significant differences. To interpret this hypothesis, the researcher used T.test independent sample results of differences between experimental and control group in the post attitude scale.

<table>
<thead>
<tr>
<th>Domain</th>
<th>GROUP</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>$t$</th>
<th>Sig. value</th>
<th>sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and importance of reading</td>
<td>experimental</td>
<td>30</td>
<td>38.900</td>
<td>2.695</td>
<td>20.083</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>21.567</td>
<td>3.884</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards enjoying reading</td>
<td>experimental</td>
<td>30</td>
<td>38.167</td>
<td>3.302</td>
<td>17.539</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>21.633</td>
<td>3.970</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards learning reading via computer</td>
<td>experimental</td>
<td>30</td>
<td>38.267</td>
<td>2.612</td>
<td>20.422</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>20.600</td>
<td>3.953</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>experimental</td>
<td>30</td>
<td>40.067</td>
<td>2.532</td>
<td>20.946</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>20.200</td>
<td>4.536</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score of the scale</td>
<td>experimental</td>
<td>30</td>
<td>155.400</td>
<td>6.021</td>
<td>34.167</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>30</td>
<td>84.000</td>
<td>9.734</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“$t$” table value at (58) d f. at (0.05) sig. level equal 2.00
“$t$” table value at (58) d f. at (0.01) sig. level equal 2.66

The findings in table (25) show that the ($t$) computed value was larger in all domains and in the total score of the attitude scale than the ($t$) table value in the post attitude
scale. This means that there are significant differences at (α= 0.01) and (0.05) between the experimental group and the control one favouring the experimental group. There was also a significant difference between the means of both groups in favour of the experimental group. Whereas the mean of the control group was (84.000) in relation to the total score of the test and the mean of the experimental group was (155.400). That means that the Computerized program was able to improve the students' attitudes towards reading.

Table (26)

The Effect Size of the computerized program on the experimental group post-attitude scale towards reading.

<table>
<thead>
<tr>
<th>Domain</th>
<th>t value</th>
<th>$\eta^2$</th>
<th>d</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and importance of reading</td>
<td>20.083</td>
<td>0.874</td>
<td>5.274</td>
<td>Large</td>
</tr>
<tr>
<td>Attitudes towards enjoying reading</td>
<td>17.539</td>
<td>0.841</td>
<td>4.606</td>
<td>Large</td>
</tr>
<tr>
<td>Attitudes towards learning reading via computer</td>
<td>20.422</td>
<td>0.878</td>
<td>5.363</td>
<td>Large</td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>20.946</td>
<td>0.883</td>
<td>5.501</td>
<td>Large</td>
</tr>
<tr>
<td>Total score of the scale</td>
<td>34.167</td>
<td>0.953</td>
<td>8.973</td>
<td>Large</td>
</tr>
</tbody>
</table>

Table (25) shows that there is a large effect size for each domain and the total score of each domain.

Obviously, the effect size of the attitude scale in each domain and in the total score of the scale is large. This could be because of the technological environment in which students are involved. Moreover, students work on their own computers alone as they could read the text more than once and they could search for the answers of the assigned questions.

It's observed that this finding agrees with some previous studies as: Mbah (2010), Ilter ( 2009 ), Eswaran (2008), Simsek (2007), Abdul Razak and Eswaran (2005), Usun (2004) and Hong ET AL (2003) which confirmed the technological environments improves students' attitudes to learning in general and reading from screens in particular.
4- The third hypothesis is stated as follows:

3. There are no statistically significant differences at \((\alpha \leq 0.05)\) in the total average score of the high-achievers' post-test between the experimental group and the control group.

To examine this hypothesis, means and standard deviation of the experimental and the control groups' results on the post-test of reading comprehension skills were computed. The researcher used MannWhitneTest to measure the significant differences. To interpret this hypothesis, the researcher used MannWhitneTest and Z Value results of the total average score of the high-achievers' post-test between the experimental and the control group.

Table (27)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Mann Whitney U</th>
<th>Z</th>
<th>Sig. value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>11.000</td>
<td>88.000</td>
<td>12.000</td>
<td>2.582</td>
<td>0.010</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>6.000</td>
<td>48.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skimming</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>11.063</td>
<td>88.500</td>
<td>11.500</td>
<td>2.450</td>
<td>0.014</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>5.938</td>
<td>47.500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scanning</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>11.938</td>
<td>95.500</td>
<td>4.500</td>
<td>3.037</td>
<td>0.002</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>5.063</td>
<td>40.500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synonyms &amp; antonyms</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>10.750</td>
<td>86.000</td>
<td>14.000</td>
<td>1.973</td>
<td>0.048</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>6.250</td>
<td>50.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deduce meaning from context</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>12.500</td>
<td>100.000</td>
<td>0.000</td>
<td>3.520</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>4.500</td>
<td>36.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relate text to personal experience</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>11.625</td>
<td>93.000</td>
<td>7.000</td>
<td>2.761</td>
<td>0.006</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>5.375</td>
<td>43.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score of the test</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>12.500</td>
<td>100.000</td>
<td>0.000</td>
<td>3.388</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>4.500</td>
<td>36.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The findings in table (27) show that the (Z) computed value (3.388) was greater in the total score of the high-achievers' post test than the (Z) table value (1.96).
This means that there are statistical significant differences of scores (0.01) and (0.05) between the high-achievers' post-test between the experimental and the control group in relation to the total score of the test in favour of the experimental high-achievers. In addition, there was a significant difference between the means of the high-achievers in the control group and the experimental group in favour of high-achievers of the experimental group. Whereas the mean of the control group was (4.500) in relation to the total score of the test and the mean of the experimental group was (12.500). That confirms the effectiveness of the computerized program on developing the reading comprehension skills.

To calculate the effect size the researcher used Eta square "$\eta^2$" and "Z" value by using the following formula: (Afana, 2000)

$$\eta^2 = \frac{Z^2}{Z^2 + 4}$$

Table (28)

"Z" value and Eta square "$\eta^2$" for each skill and the total score of the test

<table>
<thead>
<tr>
<th>Skill</th>
<th>Z</th>
<th>$Z^2$</th>
<th>$Z^2 + 4$</th>
<th>$\eta^2$</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction</td>
<td>2.582</td>
<td>6.667</td>
<td>10.667</td>
<td>0.625</td>
<td>large</td>
</tr>
<tr>
<td>Skimming</td>
<td>2.450</td>
<td>6.004</td>
<td>10.004</td>
<td>0.600</td>
<td>large</td>
</tr>
<tr>
<td>Scanning</td>
<td>3.037</td>
<td>9.223</td>
<td>13.223</td>
<td>0.697</td>
<td>large</td>
</tr>
<tr>
<td>Synonyms and antonyms</td>
<td>1.973</td>
<td>3.894</td>
<td>7.894</td>
<td>0.493</td>
<td>large</td>
</tr>
<tr>
<td>Deduce meaning from context</td>
<td>3.520</td>
<td>12.387</td>
<td>16.387</td>
<td>0.756</td>
<td>large</td>
</tr>
<tr>
<td>Relate text to personal experience</td>
<td>2.761</td>
<td>7.622</td>
<td>11.622</td>
<td>0.656</td>
<td>large</td>
</tr>
<tr>
<td>Total score of the test</td>
<td>3.388</td>
<td>11.480</td>
<td>15.480</td>
<td>0.742</td>
<td>large</td>
</tr>
</tbody>
</table>

Table (28) shows that there is a large effect size for each skill and the total score of test. This may be attributed to the following:
✓ Designing several activities that suit the high-achievers and enable them to work effectively.
✓ Providing the high-achievers to read or re-read the text whenever they need.
✓ Providing competitions between groups improved high-achievers' ability to interact with the text effectively.

None of the studies investigated the role of computers on the development of the high-achievers reading comprehension, but they handled the role of this technology on the students' reading comprehension in general. This is clear in the studies of: Gibson (2009), Korat (2009), Liu et al (2009) and Lopez (2009) which confirmed the role of computer technology on the development of reading in general and reading comprehension in particular.
5- The fourth hypothesis is stated as follows:

4. There are no statistically significant differences at \( (\alpha \leq 0.05) \) in the total average score of the high-achievers' post-attitude scale between the experimental group and the control group.

To examine this hypothesis, means and standard deviation of the experimental and the control groups' results on the post-attitude scale towards reading were computed. The researcher used MannWhitne Test to measure the significant differences. To interpret this hypothesis, the researcher used MannWhitneTest and Z Value results of the total average score of the high-achievers' post-attitude scale between the experimental and the control group.

**Table (29)**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Mann Whitney U</th>
<th>Z</th>
<th>Sig. value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and importance of reading</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>12.50</td>
<td>100</td>
<td>0.00</td>
<td>3.386</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>4.50</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards enjoying reading</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>12.50</td>
<td>100</td>
<td>0.00</td>
<td>3.368</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>4.50</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards learning reading via computer</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>12.50</td>
<td>100</td>
<td>0.00</td>
<td>3.371</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>4.50</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>12.50</td>
<td>100</td>
<td>0.00</td>
<td>3.386</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>4.50</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score of the scale</td>
<td>Experimental High-achievers</td>
<td>8</td>
<td>12.50</td>
<td>100</td>
<td>0.00</td>
<td>3.363</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control High-achievers</td>
<td>8</td>
<td>4.50</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in table (29) show that the (Z) computed value (3.363) was greater in the total score of the high-achievers' post attitude scale than the (Z) table value.
(1.96). This means that there are statistical significant differences of scores (0.01) and (0.05) between the high-achievers' post attitude scale between the experimental and the control group in relation to the total score of the scale in favour of the experimental high-achievers. In addition, there was a significant difference between the means of the high-achievers in the control group and the experimental group in favour of high-achievers of the experimental group. Whereas the mean of the control group was (4.50) in relation to the total score of the scale and the mean of the experimental group was (12.50). This clarifies the effectiveness of the computerized program on developing the students' attitudes towards reading.

To calculate the effect size the researcher used Eta square \( \eta^2 \) by using the following formula:

\[
\eta^2 = \frac{Z^2}{Z^2 + 4}
\]

<table>
<thead>
<tr>
<th>Domain</th>
<th>Z</th>
<th>( Z^2 )</th>
<th>( Z^2 + 4 )</th>
<th>( \eta^2 )</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and importance of reading</td>
<td>3.386</td>
<td>11.465</td>
<td>15.465</td>
<td>0.741</td>
<td>large</td>
</tr>
<tr>
<td>Attitudes towards enjoying reading</td>
<td>3.368</td>
<td>11.343</td>
<td>15.343</td>
<td>0.739</td>
<td>large</td>
</tr>
<tr>
<td>Attitudes towards learning reading via computer</td>
<td>3.371</td>
<td>11.364</td>
<td>15.364</td>
<td>0.740</td>
<td>large</td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>3.386</td>
<td>11.465</td>
<td>15.465</td>
<td>0.741</td>
<td>large</td>
</tr>
<tr>
<td>Total score of the scale</td>
<td>3.363</td>
<td>11.310</td>
<td>15.310</td>
<td>0.739</td>
<td>large</td>
</tr>
</tbody>
</table>

Table (30) shows that there is a large effect size for each domain and the total score of scale.

Applying the effect size, the researcher interprets the result that the program improves the high-achievers' attitudes towards reading to the interesting design of the
program that enables the high-achievers to be more motivated and active in the reading class compared with the traditional reading class.

No study investigated the role of computers on the development of the high-achievers attitudes towards reading and computer, but they clarified the role of computers on the students' motivation and attitudes towards learning in general and reading in particular. This is observed in the studies of: Karemaker (2009), Lan et al (2009), Kilic (2001), Selwyn (1996) and Vorhees (1993) which confirmed the role of computer technology on improving students' attitudes towards learning and motivation to read.
6- The fifth hypothesis is stated as follows:

5. There are no statistically significant differences at \((\alpha \leq 0.05)\) in the total average score of the low-achievers' post-test between the experimental group and the control group.

To examine this hypothesis, means and standard deviation of the experimental and the control groups' results on the post-test of reading comprehension skills were computed. The researcher used MannWhitneyTest to measure the significant differences. To interpret this hypothesis, the researcher used MannWhitneyTest and \(Z\) Value results of the total average score of the low-achievers' post-test between the experimental and the control group.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Mann Whitney U</th>
<th>Z</th>
<th>Sig. value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>11.000</td>
<td>88.000</td>
<td>12.000</td>
<td>2.582</td>
<td>0.010</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td></td>
<td>Control Low-achievers</td>
<td>8</td>
<td>6.000</td>
<td>48.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skimming</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>11.625</td>
<td>93.000</td>
<td>7.000</td>
<td>2.723</td>
<td>0.006</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control low-achievers</td>
<td>8</td>
<td>5.375</td>
<td>43.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scanning</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>12.000</td>
<td>96.000</td>
<td>4.000</td>
<td>3.062</td>
<td>0.002</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control low-achievers</td>
<td>8</td>
<td>5.000</td>
<td>40.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synonyms and antonyms</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>11.500</td>
<td>92.000</td>
<td>8.000</td>
<td>2.576</td>
<td>0.010</td>
<td>sig. at 0.05</td>
</tr>
<tr>
<td></td>
<td>Control low-achievers</td>
<td>8</td>
<td>5.500</td>
<td>44.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deduce meaning from context</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>11.500</td>
<td>92.000</td>
<td>8.000</td>
<td>2.683</td>
<td>0.007</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control Low-achievers</td>
<td>8</td>
<td>5.500</td>
<td>44.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relate text to personal experience</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>11.938</td>
<td>95.500</td>
<td>4.500</td>
<td>3.037</td>
<td>0.002</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control Low-achievers</td>
<td>8</td>
<td>5.063</td>
<td>40.500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score of the test</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>12.500</td>
<td>100.000</td>
<td>0.000</td>
<td>3.376</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control Low-achievers</td>
<td>8</td>
<td>4.500</td>
<td>36.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The findings in table (31) clarifies that the \((Z)\) computed value (3.376) was greater in the total score of the low-achievers' post test than the \((Z)\) table value (1.96). This means that there are statistical significant differences of scores (0.01) and (0.05) between the low-achievers' post-test between the experimental and the control group in relation to the total score of the test in favour of the experimental low-achievers. In addition, there was a significant difference between the means of the low-achievers in the control group and the experimental group in favour of low-achievers of the experimental group. Whereas the mean of the control group was (4.500) in relation to the total score of the test and the mean of the experimental group was (12.500). That indicates that the computerized program was able to develop the reading comprehension skills of low achievers.

To calculate the effect size the researcher used Eta square "\(\eta^2\)" and "\(Z\)" value by using the following formula:

\[
Z^2 + 4 \eta^2
\]

<table>
<thead>
<tr>
<th>Skill</th>
<th>(Z)</th>
<th>(Z^2)</th>
<th>(Z^2 + 4)</th>
<th>(\eta^2)</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction</td>
<td>2.582</td>
<td>6.667</td>
<td>10.667</td>
<td>0.625</td>
<td>large</td>
</tr>
<tr>
<td>Skimming</td>
<td>2.723</td>
<td>7.417</td>
<td>11.417</td>
<td>0.650</td>
<td>large</td>
</tr>
<tr>
<td>Scanning</td>
<td>3.062</td>
<td>9.378</td>
<td>13.378</td>
<td>0.701</td>
<td>large</td>
</tr>
<tr>
<td>Synonyms and antonyms</td>
<td>2.576</td>
<td>6.636</td>
<td>10.636</td>
<td>0.624</td>
<td>large</td>
</tr>
<tr>
<td>Deduce meaning from context</td>
<td>2.683</td>
<td>7.200</td>
<td>11.200</td>
<td>0.643</td>
<td>large</td>
</tr>
<tr>
<td>Relate text to personal experience</td>
<td>3.037</td>
<td>9.223</td>
<td>13.223</td>
<td>0.697</td>
<td>large</td>
</tr>
<tr>
<td><strong>Total score of the test</strong></td>
<td>3.376</td>
<td>11.395</td>
<td>15.395</td>
<td>0.740</td>
<td>large</td>
</tr>
</tbody>
</table>
Table (32) shows that there is a large effect size for each skill and the total score of test. That indicates that the computerized program has a large effect on the low-achievers of the experimental group in total score of each skill and the total score of the test. This may be attributed to:

- The suitability of many activities for the low-achievers' level which provides them with immediate feedback.
- The clarity of the pictures in presenting the vocabulary.
- The clarity of the videos where each video includes different types of effects as pictures, sentences describing pictures and actions in addition to the music included in each video that gets students use their perspectives to think effectively.
- Providing solutions to the reading difficulties.

The researcher didn’t find any study investigating the role of computers on the development of the low-achievers reading comprehension, but they discussed the role of this technology on the students' reading comprehension in general. This is observed in the studies of: Whitaker (2009), VanWyk and Louw (2008) and Mioduser et al (2000) which confirmed the role of computer technology on the development of reading in general and reading comprehension in particular.
7- The sixth hypothesis is stated as follows:

6. There are no statistically significant differences at \((\alpha \leq 0.05)\) in the total average score of the low-achievers' post-attitude scale between the experimental group and the control group.

To examine this hypothesis, means and standard deviation of the experimental and the control groups' results of the low-achievers' post-attitude scale towards reading were computed. The researcher used MannWhitney Test to measure the significant differences. To interpret this hypothesis, the researcher used MannWhitney Test and Z Value results of the total average score of the low-achievers' post-attitude scale between the experimental and the control group.

Table (33)

U and Z value to examine the differences between the low-achievers' post-attitude scale between the experimental group and the control group

<table>
<thead>
<tr>
<th>Domain</th>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Mann Whitney U</th>
<th>Z</th>
<th>Sig. value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and importance of reading</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>13.50</td>
<td>108.0</td>
<td>0.00</td>
<td>3.470</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control Low-achievers</td>
<td>9</td>
<td>5.00</td>
<td>45.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards enjoying reading</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>13.50</td>
<td>108.0</td>
<td>0.00</td>
<td>3.470</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control Low-achievers</td>
<td>9</td>
<td>5.00</td>
<td>45.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards learning reading via computer</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>13.50</td>
<td>108.0</td>
<td>0.00</td>
<td>3.473</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control Low-achievers</td>
<td>9</td>
<td>5.00</td>
<td>45.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>13.50</td>
<td>108.0</td>
<td>0.00</td>
<td>3.486</td>
<td>0.000</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control Low-achievers</td>
<td>9</td>
<td>5.00</td>
<td>45.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score of the scale</td>
<td>Experimental Low-achievers</td>
<td>8</td>
<td>13.50</td>
<td>108.0</td>
<td>0.00</td>
<td>3.470</td>
<td>0.001</td>
<td>sig. at 0.01</td>
</tr>
<tr>
<td></td>
<td>Control Low-achievers</td>
<td>9</td>
<td>5.00</td>
<td>45.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results in table (33) show that the (Z) computed value (3.470) was greater in the total score of the low-achievers' post attitude scale than the (Z) table value (1.96). This means that there are statistical significant differences of scores (0.01) and (0.05) between the low-achievers' post attitude scale between the experimental and the control group in relation to the total score of the scale in favour of the experimental low-achievers. In addition, there was a significant difference between the means of the low-achievers in the control group and the experimental group in favour of the low-achievers of the experimental group. Whereas the mean of the control group was (5.00) in relation to the total score of the scale and the mean of the experimental group was (13.50). This means that the computerized program is effective on developing the low-achievers' attitudes towards reading.

To calculate the effect size the researcher used Eta square $\eta^2$ by using the following formula:

\[
\eta^2 = \frac{Z^2}{Z^2 + 4}
\]

Table (34) shows that there is a large effect size for each domain and the total score of scale.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Z</th>
<th>$Z^2$</th>
<th>$Z^2 + 4$</th>
<th>$\eta^2$</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the value and</td>
<td>3.479</td>
<td>12.103</td>
<td>16.103</td>
<td>0.752</td>
<td>large</td>
</tr>
<tr>
<td>importance of reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards the value and</td>
<td>3.470</td>
<td>12.041</td>
<td>16.041</td>
<td>0.751</td>
<td>large</td>
</tr>
<tr>
<td>importance of reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards learning reading</td>
<td>3.473</td>
<td>12.062</td>
<td>16.062</td>
<td>0.751</td>
<td>large</td>
</tr>
<tr>
<td>via computer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards the reading teacher</td>
<td>3.486</td>
<td>12.152</td>
<td>16.152</td>
<td>0.752</td>
<td>large</td>
</tr>
<tr>
<td>Total score of the scale</td>
<td>3.470</td>
<td>12.041</td>
<td>16.041</td>
<td>0.751</td>
<td>large</td>
</tr>
</tbody>
</table>

Implementing the effect size, the researcher attributes the result that the program improves the low-achievers' attitudes towards reading to:
✓ Involving students in a technological environment (the computer laboratory) enables them to feel more motivated to use computers.

✓ The suitability of the many activities for the low-achievers.

✓ Using an exciting method for the low-achievers with colours, movements and videos and this method differs from the traditional method in teaching reading.

✓ The facilities that are presented by computers to enable the low achievers to feel self-confident.

The researcher didn’t find any study examining the role of computers on the development of the low-achievers attitudes towards reading and computer, but they clarified the role of computers on the students' motivation and attitudes towards learning in general and reading in particular. This is clear in many studies as: Owston et al (2009), Lim (2006) Dreyer & Nel ( 2003) and Christensen (2002), which confirmed the role of computer technology and the technological environment on improving students' attitudes towards learning and motivation to read.

**Summary**

After analyzing the data of the test and the attitude scale statistically, It is obvious that there are significant differences in developing the reading comprehension skills and the attitudes towards reading between students in the experimental group and their counterparts in the control one in favor of the experimental group. The results of the study indicate that students in the experimental group were more aware of the reading comprehension skills. In addition, the students who studied reading via computer became more successful in answering the reading comprehension questions.
This may be due to the pictures, sounds and videos used in the computer program. As well as, the technological environment in which students were involved in.

Concerning the computer and its effect on developing reading, the results of the current study agree with the results of several related studies as: Baniabdelrahman (2010) in his study which investigated the effect of using a computerized package on EFL students' achievement in reading. The findings of this study revealed a significant difference in reading comprehension between the two groups, regardless of gender, in favor of the experimental group taught using the computerized package. Similarly, Siddiqi (2007) examines the effect of using computer-assisted semantic mapping on the achievement of EFL students in reading comprehension at the second year in secondary school in Makkah. The results were positive in developing the reading comprehension through computer.

Regarding the computer and its effect on students' attitudes towards reading from computers, the results of the current study agree with the results of several related studies as: Ates et al (2006) confirmed that computer based learning develops the students' attitudes towards reading and computer. In the same concern, Fang (2010) clarified the effect of multimedia through (CALL) to motivate EFL students' interest in English language learning including reading.

According to the study results, reading through computer is more effective than reading from textbooks. Also, computer helps students interact with the text effectively and it develops students' attitudes toward reading.

194
Chapter V

Findings, Discussion, Conclusions, Implication and Recommendations
Chapter V
Findings, Discussion, Conclusions, Implications and Recommendations

Introduction
This chapter tackles the results of the study. It sums up the conclusions that were documented in the light of the study findings. It includes some pedagogical implications that have been reached throughout the research. In addition, The researcher suggests some recommendations which can be beneficial for syllabus designers, supervisors, teachers and researchers. They could help improve the learning process in general and teaching reading comprehension in particular.

Discussion
The current study aimed at examining the effect of a computerized program on developing ninth graders' reading comprehension and their attitudes towards reading. To achieve this aim, the researcher adopted the experimental approach where there were two equivalent groups: the experimental and the control groups. The population of the study was all ninth graders in the Middle Area of the Gaza Strip. Sixty students were chosen purposively from Deir Al Balah Preparatory "B" Boys' School in the Deir Al Balah city in the Gaza Strip to be the sample of the study. Each group has thirty students. Both groups were proved to be equivalent in terms of age, general English achievement, English Reading comprehension skills achievement and General achievement. The researcher used four tools in order to collect data: A questionnaire, an Achievement test (pre & post test), an attitude scale and a computerized program.
Interpretation of the results

First: Interpretation of the results related to question number one.

The researcher investigated the first research question which is about the suggested computerized program to develop the reading comprehension skills and students' attitudes towards reading.

The researcher designed the computerized program depending on the most important reading skills specified by experienced teachers of the ninth grade. It includes Teacher's Guide, Student's Book (the computerized program), teaching aids and evaluation tools.

The contents of the computerized program were chosen, organized and modified according to the opinions and suggestions of a group of specialists in this field.

The researcher identifies the time plan and the procedures which can be followed when implementing the program. The researcher implemented the program in the second semester 2010-2011. The researcher used a pre and post test as well as a pre and post attitude scale in order to find out the internal validity of the program. In addition, the program was reviewed by a jury of specialists in methodology and technology. The researcher controlled other variables that may affect the results by implementing a pilot study.

The suggested program was taught to the experimental group while the control one was taught by the traditional method (textbooks). After that, the post-test was applied on the two groups and the results were statistically analyzed.
Finally, the results of the study indicated that the suggested computerized program was effective in developing students' reading comprehension and improved their attitudes towards reading.

This question results agree with many studies as: Chen (2011) who conducted a study in order to evaluate the effectiveness of the design of using a computer program namely Quick Response (QR) codes to provide students direct access to pre-designed digital materials and the use of scaffolded questioning in promoting students’ reading comprehension. The results of this study indicated the effectiveness of the designed program in promoting students' reading comprehension. Similarly, Yang (2010) in his study suggested a design of an online reciprocal teaching and learning system to support teachers and students in college remedial reading instruction. The results showed that the online program had positive effect on the reading instruction.

Second: Interpretation of the results related to question number two.

The researcher investigated the second question which examined if there were statistically significant differences at $(\alpha \leq 0.05)$ in the total average score of the post-test between the experimental group and the control group.

The results concerning question two indicate that the $(t)$ computed value was greater in all the skills and in the total degree of the post test than the $(t)$ table value in the post test. This means that there are significant differences at $(\alpha= 0.01)$ and $(0.05)$ between the experimental group and the control one favouring the experimental group. There was also a significant difference between the means of both groups in favour of the experimental group. Whereas the mean of the control group was $(7.867)$
in relation to the total degree of the test and the mean of the experimental group was (12.183).

The researcher implemented the effect size, he found that the effect size of four skills namely: synonyms and antonyms, Deduce meaning from context, skimming and scanning is large. This could be attributed to the pictures shown within the computerized programme as these pictures are clear and completely related to the vocabulary. In addition, Students can deduce the meaning of words from the context especially after watching related videos about the lessons.

Concerning the following skills: predicting and relating the text to experience, the effect size is medium, but it is close to being large because the total degree of all the skills is large. This may be attributed to the fact that these skills are high-order thinking skills.

The researcher also attributes these findings to the length of the experiment which lasts for two months whereas the experimental group students received the reading text via computers. They use their own computers to read certain texts and then answer related questions. Moreover, the reading text in Unit 14 (Email from China) was a Web-quest lesson. Students were very motivated when they checked email on the internet explorer and read the email then answered the pre-reading questions. After that they read the text more and more times to find answers of the while-reading questions. Besides, they also were very happy and found it beneficial when they watched videos related to each text. More importantly, the researcher added related
sentences for certain scenes in the videos. Consequently, it can be summed up that the Computerized program is effective to develop the reading comprehension skills.

Finally, it's concluded that these findings agree with many previous studies as: Abu Seileek (2011), Philip et al (2011), Chen (2010) and Holleran (2003) which confirmed that the use of technology facilities as computers develops students' reading skills.

**Third: Interpretation of the results related to question number three.**

The researcher investigated the third question which examined if there were statistically significant differences at \((\alpha \leq 0.05)\) in the total average score of the post attitude scale between the experimental group and the control group.

The findings relating question three showed that the \((t)\) computed value was larger in all domains and in the total score of the attitude scale than the \((t)\) table value in the post attitude scale. This means that there are significant differences at \((\alpha= 0.01)\) and \((0.05)\) between the experimental group and the control one in favour of the experimental group. There was also a significant difference between the means of both groups in favour of the experimental group. Whereas the mean of the control group was \((84.000)\) in relation to the total score of the test and the mean of the experimental group was \((155.400)\).

The effect size of the attitude scale in each domain and in the total score of the scale is large. Thus, this could be because of the technological environment in which students were involved in. Moreover, students work on their own computers alone as they
could read the text more than once and they could search for the answers of the assigned questions, therefore, they felt more confident and relaxed. The researcher observed the students were motivated when doing an activity. Furthermore, students were asking most of the time when we would go to the computer laboratory. That means that the Computerized program was able to improve the students' attitudes towards reading especially from computers.

The findings of this question agree with some previous studies as: Mbah (2010), Ilter (2009), Eswaran (2008), Simsek (2007), Abdul Razak and Eswaran (2005), Usun (2004) and Hong ET AL (2003) which confirmed that the technological environments improves students' attitudes to learning in general and reading from screens in particular.

**Fourth: Interpretation of the results related to question number six.**

The researcher investigated the fourth question which examined if there were statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the high-achievers' post-test between the experimental group and the control group.

The findings of the sixth question show that the ($Z$) computed value (3.388) was greater in the total degree of the high-achievers' post test than the ($Z$) table value (1.96). This means that there are statistical significant differences of degrees (0.01) and (0.05) between the high-achievers' post-test between the experimental and the control group in relation to the total degree of the test in favour of the experimental high-achievers. In addition, there was a significant difference between the means of the high-achievers in the control group and the experimental group in favour of high-
achievers of the experimental group. Whereas the mean of the control group was (4.500) in relation to the total degree of the test and the mean of the experimental group was (12.500).

The researcher measured the effect size which was large in each skill and in the total degree of test. This may be attributed to designing several activities that suit the high-achievers and enable them to work effectively. As well as, the computerized program enabled the high-achievers to read or re-read the text whenever they needed, it also used various activities which suit all students' levels. Moreover, the teacher prepared competitions between groups which improved the high-achievers' ability to interact with the text effectively. In addition, This can be due to the types of the accurate authentic photos included in the program used to improve the students' reading comprehension. Also, the use of related authentic videos included in the program used to develop the students' reading comprehension. Furthermore, the interesting way that is used in the program to present the questions with movements, sounds and colours where the researcher designed the program on the PowerPoint program with suitable movements and sound effects. This finding confirms the effectiveness of the computerized program on developing the high-achievers' reading comprehension skills.

None of the studies investigated the role of computers on the development of the high-achievers reading comprehension, but they handled the role of this technology on the students' reading comprehension in general. This is clear in the studies of:
Gibson (2009), Korat (2009), Liu et al (2009) and Lopez (2009) which confirmed the role of computer technology on the development of reading in general and reading comprehension in particular.

**Fifth: Interpretation of the results related to question number seven.**

The researcher investigated the fifth question which examined if there were statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the high-achievers' post-attitude scale between the experimental group and the control group.

The results of the seven question show that the (Z) computed value ($3.363$) was greater in the total degree of the high-achievers' post attitude scale than the (Z) table value ($1.96$). This means that there are statistical significant differences of degrees ($0.01$) and ($0.05$) between the high-achievers' post attitude scale between the experimental and the control group in relation to the total degree of the scale in favour of the experimental high-achievers. In addition, there was a significant difference between the means of the high-achievers in the control group and the experimental group in favour of high-achievers of the experimental group. Whereas the mean of the control group was ($4.50$) in relation to the total degree of the scale and the mean of the experimental group was ($12.50$). This clarifies the effectiveness of the computerized program on developing the students' attitudes towards reading.

Applying the effect size, the researcher interprets this result that the program improves the high-achievers' attitudes towards reading to the interesting design of the program that enables the high-achievers to be more motivated, active and co-operative.
in the reading class compared with the traditional reading class. The researcher also provides suitable types of reinforcement which promotes students to more learning. It's observed that students were more motivated than those in the control group as they wait impatiently to the reading class.

No study investigated the role of computers on the development of the high-achievers attitudes towards reading and computer, but they clarified the role of computers on the students' motivation and attitudes towards learning in general and reading in particular. This is observed in the studies of: Karemaker (2009), Lan et al (2009), Kilic (2001), Selwyn (1996) and Vorhees (1993).

Sixth: Interpretation of the results related to question number eight.
The researcher investigated the sixth question which examined if there were statistically significant differences at \( (\alpha \leq 0.05) \) in the total average score of the low-achievers' post-test between the experimental group and the control group.

The findings of question eight clarify that the \((Z)\) computed value (3.488) was greater in the total degree of the low-achievers' post test than the \((Z)\) table value (1.96). This means that there are statistical significant differences of degrees (0.01) and (0.05) between the low-achievers' post-test between the experimental and the control group in relation to the total degree of the test in favour of the experimental low-achievers. In addition, there was a significant difference between the means of the low-achievers in the control group and the experimental group in favour of low-achievers of the experimental group. Whereas the mean of the control group was (4.500) in relation to the total degree of the test and the mean of the experimental
group was (12.500). That indicates that the computerized program was able to develop the reading comprehension skills of low achievers.

The effect size was large for each skill and the total degree of test. That indicates that the computerized program has a large effect on the low-achievers of the experimental group in total score of each skill and the total degree of the test. This can be attributed to the suitability of many activities for the low-achievers' level which provides them with immediate feedback and the clarity of the pictures in presenting the vocabulary the clarity of the videos where each video includes different types of effects as pictures, sentences describing pictures and actions in addition to the music included in each video that gets students use their perspectives to think effectively. In addition, the program provides solutions to the reading difficulties as dyslexia through preparing activities that tackles these difficulties and it includes activities that clarify the abstract concepts.

The researcher didn’t find any study investigating the role of computers on the development of the low-achievers reading comprehension, but they discussed the role of this technology on the students' reading comprehension in general. This is observed in the studies of: Whitaker (2009), VanWyk and Louw (2008) and Mioduser et al (2000) which confirmed the role of computer technology on the development of reading in general and reading comprehension in particular.
Seventh: Interpretation of the results related to question number nine.

The researcher investigated the seventh question which examined if there were statistically significant differences at ($\alpha \leq 0.05$) in the total average score of the low-achievers' post-attitude scale between the experimental group and the control group.

The findings of the ninth question show that the $(Z)$ computed value (3.470) was greater in the total degree of the low-achievers' post attitude scale than the $(Z)$ table value (1.96). This means that there are statistical significant differences of degrees (0.01) and (0.05) between the low-achievers' post attitude scale between the experimental and the control group in relation to the total degree of the scale in favour of the experimental low-achievers. In addition, there was a significant difference between the means of the low-achievers in the control group and the experimental group in favour of the low-achievers of the experimental group. Whereas the mean of the control group was (5.00) in relation to the total degree of the scale and the mean of the experimental group was (13.50). This means that the computerized program is effective on developing the low-achievers' attitudes towards reading.

Implementing the effect size which was large in each domain and in the total degree of scale, the researcher attributes this finding to involving students in a technological environment (the computer laboratory) which enables them to feel more relaxed and interested to use computers. The program presents the text in an exciting method for the low-achievers with colours, movements and videos whereas this method differs from the traditional method in teaching reading which depends on
books basically. Finally, the facilities that are presented by computers enables the low achievers to feel self-confident.

The researcher didn’t find any study examining the role of computers on the development of the low-achievers attitudes towards reading and computer, but they clarified the role of computers on the students' motivation and attitudes towards learning in general and reading in particular. This is clear in many studies as: Owston et al (2009), Lim (2006) Dreyer & Nel (2003) and Christensen (2002), which confirmed the role of computer technology and the technological environment on improving students' attitudes towards learning and motivation to read.

**Conclusion**

The findings of the study hypotheses can be summarized as follows:

1. The finding of the first question showed that there were statistically significant differences at \( \alpha \leq 0.05 \) in the total average score of the post-test between the experimental group and the control group.

2. The finding of the second question revealed that there were statistically significant differences at \( \alpha \leq 0.05 \) in the total average score of the post attitude scale between the experimental group and the control group.

3. The finding of the fifth question proved that there were statistically significant differences at \( \alpha \leq 0.05 \) in the total average score of the high-achievers' post-test between the experimental group and the control group.
4. The finding of the sixth question revealed that there were statistically significant differences at $(\alpha \leq 0.05)$ in the total average score of the high-achievers' post-attitude scale between the experimental group and the control group.

5. The finding of the seventh question indicated that there were statistically significant differences at $(\alpha \leq 0.05)$ in the total average score of the low-achievers' post-test between the experimental group and the control group.

6. The finding of the eighth question confirmed that there were statistically significant differences at $(\alpha \leq 0.05)$ in the total average score of the low-achievers' post-attitude scale between the experimental group and the control group.

Furthermore, the researcher examined the effect size of the program which was large in all the results. Consequently, it can be concluded that the computer has a positive effect on the students' reading comprehension skills and their attitudes towards reading.

**Pedagogical Implications**

In the light of the study results, the researcher suggests the following:

1- Teachers should be aware of the importance of the computer in developing students' reading comprehension skills as the traditional method in teaching reading is less effective.

2- Using computers enables students to develop their attitudes towards learning in general and reading in particular.
3- Using computers enables students with reading disabilities overcome their disability.

4- Computerized instruction motivates students to read and re-read the text, thus, teachers should encourage students to read via computers.

5- Low-achievers feel relaxed and motivated when using computers, so teachers should include suitable activities which fits their ability.

6- Including related videos improves comprehension and facilitates the abstract concepts.

7- Computer based instruction provides students with immediate feedback and different types of reinforcement.

8- Using computers in the learning process encourages students to be more cooperative and active when doing an activity.

Recommendations

The researcher recommends that:

Teachers

1- should think of designing other computerized programs related to other skills as writing, speaking and listening.

2- should pay more attention to the different comprehension skills.

3- should use computers to improve students' comprehension and critical thinking.
4- should enrich the syllabus with computerized activities that enable students to feel motivated so as to develop their attitudes towards enjoying reading.

5- should attend the training courses that enable them to use modern methods in teaching like integrating technology.

6- should be aware that computers help low-achievers and get them be more active to interact with the activity effectively.

7- should concentrate more on reading skills using programs that are offered within a contextual framework that make sense for the learner.

**Course designers**

1- should include a new method in teaching English for Palestine depending on computers.

2- should provide the syllabus with self-learning strategy using computers in order to get students learn by their own at home.

**Supervisors**

1- should train teachers to use computers in the learning process as making Web-Quests, using internet and designing programs.

2- Should get teachers computerize the lessons to fit the students' abilities and enables them to interact with the lesson effectively.
Recommendations for further studies

Further researches may be taken in consideration as follows:

1- Conducting studies based on computer-based-learning so as to develop other skills as listening, speaking and writing.

2- Conducting studies based on computer-based-learning to find out the effect of the computerized programs on students with reading disabilities.

3- Conducting studies investigating difficulties facing teachers and students when using computers.

4- Conducting studies investigating computerized programs' effect on self-learning.

5- Conducting studies similar to the current study investigating other school levels.
References


Algonquin College (n.d.) *Active Reading: SQ5R. Be strategic. Make the cut.* Carleton University. Available: www1.carleton.ca/pme/ccms/wp...files/SQ5R2.pdf


pdf


Hennings, G. (1982) *Teaching communication and reading skills in the content area*, Phi Delta Kappa, Bloomington, Indiana, USA.


Learning and Writing Center (n. d.) *SQ4Rs Reading System*. Saint Martin’s University. Old Main 214. Available:

http://www.stmartin.edu/learningcenter/studyskills/handouts/SQ4RReading.pdf


Martin, D. (1991), How to Improve Reading Comprehension, How to be a Successful Student. Available: http://www.marin.edu/~don/study/7read.html


Mustafa, Z. (n. d.) *Non-courseware factors involved in using multimedia in foreign language instruction*. University of Science and Technology, Faculty of Arts and science, Department of Applied English Studies, Irbid-Jordan.


O’Sullivan, Andrew (n. d.) *Reading and Arab College students* - issues in the United Arab Emirates Higher Colleges of Technology.


Senghennydd Road, Cardiff CF2 4YG, Wales. Available:
http://www.sciedirect.com


Speed Reading Workshop (1999) *Read faster with better comprehension.*


Upper Saddle River, New Jersey.


no.2, pp. 176-183. 2006 The Montana Council of Teachers of Mathematics in 
Pre-Calculus Algebra. King Fahd University of Petroleum & Minerals. 

Zaid, M. (2008) Effectiveness of Organised E-mail Exchanges and Online 
Reading/Writing on College Students’ Literacy Development and their 
Journal. The EFL Professional's Written Form. King Khalid University, Abha, 

Mexico. WM.C. Brown Company Publishers. Dubuque, Iowa, USA.

المراجع العربية:

أبو مغني، سمح (1986): الأساليب الحديثة لتدريس اللغة العربية، الطبعة الثانية، مطبعة دار الشعب: عمان 
الأردن.

الحصاعي، موفق عبد العزيز (2010) دراسة مقارنة لمعرفة تطور اتجاهات مدرسي الفيزياء نحو استخدام 
الحاسب والإنترنت في التدريس بعد استخدامهم لهما وأثرهما في تحصيل طلبتهم. هيئة التعليم التقني – 
المعهد التقني في الناصرية – جمهورية العراق


الخطيب، عايشة هاشم نمر (2005) اتجاهات مديرية ومديريات المدارس الثانوية الحكومية نحو تقرير التعليم 
في مدارس محافظات شمال الضفة الغربية. جامعة النجاح الوطنية في نابلس، فلسطين.
الشناق، قسيم و بني دومي، حسن (2010). اتجاهات المعلمين والطلبة نحو استخدام التعلم الإلكتروني في المدارس الثانوية الأردنية مجلة جامعة دمشق _ المجلد 26 العدد (1+2) 2010

Available: scholar.najah.edu/sites/scholar.najah.edu/files/all-thesis/149.pdf

القضاء والترتبوري (1991) تنمية مهارات اللغة العربية ك والاستعداد القرائي عند طفل الروضة، الطبعة الأولى: عماني الأردن

بيرد وصالح، كريم وياجلي (2002) تنمية المهارات اللغوية للأطفال، النسخة الأخيرة

خاطر، محمود رضوي وأخرون (1981) تدريس اللغة العربية والتربية الدينية في ضوء اتجاهات الحديثة، القاهرة: دار الثقافة


جمال الفيلم (2007) فاعلية برامج مقترح في تنمية مهارات القراءة الناقدة في مجتمع المعرفة والاتجاهات نحو القراءة لدى طلاب الصف العاشر بعزة. رسالة دكتوراه. القاهرة 2007

خاطر، محمود رضوي وأخرون (1981) تدريس اللغة العربية والتربية الدينية في ضوء اتجاهات الحديثة، القاهرة: دار الثقافة

رضوان، ياسر هديب (2008) أثر تصميم برامج كمبيوترية متعدد الواسط في تنمية مهارات استخدام تكنولوجيا المعلومات والتحصيل والاتجاه نحوها لدى هيئة التدريس بكلية فلسطين التقنية. رسالة

ماجستير تكنولوجيا التعليم. البرنامج المشترك بين كلية البنية بجامعة عين شمس وجامعة الأقصى بغزة.


عفانة، عزز (2000) حجم التأثير واستخداماته في الكشف عن مصداقية النتائج في البحوث التربوية والنفسية. 56 - مجلة البحوث والدراسات التربوية الفلسطينية، العدد الثالث ص 29
لافي، سعيد: (2006) القراءة كتنمية التفكير، الطبعة الأولى، عالم الكتب القاهرة.

مصطفى، رياض بدوى: (2005) مشكلات القراءة من الطفولة إلى المراهقة - التشخيص والعلاج (دار صفاء، عمان- الأردن.

Appendix (1)

English Reading Comprehension Skills questionnaire

The Islamic University of Gaza
Postgraduate Studies Deanship
Faculty of Education
English Curriculum & Methodology Department

English Reading Comprehension Skills questionnaire
"Grade 9"

Dear Supervisor, /Expert teacher,

The researcher is conducting a study entitled "The Effect of a Computerized Program on Developing 9th Graders' Reading Comprehension Skills and their Attitudes towards Reading in Palestine", to obtain a Master's Degree in Curriculum & English Teaching Methods.

One of the requirements of this study is to construct a questionnaire of the most important reading comprehension skills in order to build an achievement test (pre and post). Thus, the researcher has listed the reading comprehension skills for Ninth Graders as presented in the English Language Curriculum (1999). Because of the importance of your opinion and experience, you are kindly requested to look carefully at the items of the list so as to determine the degree of importance for the Ninth graders.

Please tick (√) in the suitable degree of importance.

(Key: 3 = very important, 2 = important, 1 = slightly important)

Many thanks for your kind cooperation

Supervisor □ Teacher □ Years of experience □

The Researcher,
Alaa Ali Al Udaini
<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Degree of importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Answer factual, inferential, judgment or evaluation questions.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Read familiar material with correct pronunciation and intonation.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Recognize pro-form referents.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Generate questions about reading text.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Summarize reading text.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Make predictions about reading text.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Make inferences about reading text.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Develop awareness of semantic fields (word mapping)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Develop awareness about synonyms and antonyms</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Identify the main idea of reading text</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Identify supporting details.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Distinguish main idea from supporting details.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Recognize rhetorical markers and their functions.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Comprehend visual survival material.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Deduce meaning of unfamiliar words from context.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Skim for gist or general impression of text or graphics.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Distinguish fact from opinion.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Infer mood and author's attitude or tone.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Understand different types of letters.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Scan for specific information from texts and realia (ads, menus,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>schedule, calendar, travel information and tickets.</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Interpret information presented in diagrammatic display.</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Relate text to personal experience, opinion or evaluation.</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Analyze components of text such as setting, theme, characters, etc.</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Extract and synthesize information from different sources.</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix (2)

### Results' analysis of the reading comprehension skills questionnaire

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<tr>
<th>No.</th>
<th>Reading comprehension skills</th>
<th>Very important</th>
<th>important</th>
<th>Slightly important</th>
<th>Total</th>
<th>%</th>
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<tbody>
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<td>1</td>
<td>Answer factual, inferential, judgment or evaluation questions</td>
<td>12</td>
<td>5</td>
<td>7</td>
<td>53</td>
<td>70.67</td>
</tr>
<tr>
<td>2</td>
<td>Read familiar material with correct pronunciation and intonation</td>
<td>11</td>
<td>6</td>
<td>7</td>
<td>52</td>
<td>69.33</td>
</tr>
<tr>
<td>3</td>
<td>Recognize pro-form referents</td>
<td>10</td>
<td>3</td>
<td>11</td>
<td>47</td>
<td>62.67</td>
</tr>
<tr>
<td>4</td>
<td>Generate questions about reading text</td>
<td>12</td>
<td>4</td>
<td>8</td>
<td>52</td>
<td>69.33</td>
</tr>
<tr>
<td>5</td>
<td>Summarize reading text</td>
<td>12</td>
<td>7</td>
<td>5</td>
<td>55</td>
<td>73.33</td>
</tr>
<tr>
<td>6</td>
<td>Make predictions about reading text</td>
<td>20</td>
<td>4</td>
<td>1</td>
<td>69</td>
<td>92.00</td>
</tr>
<tr>
<td>7</td>
<td>Make inferences about reading text</td>
<td>11</td>
<td>9</td>
<td>4</td>
<td>55</td>
<td>73.33</td>
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<tr>
<td>8</td>
<td>Develop awareness of semantic fields (word mapping)</td>
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<td>8</td>
<td>8</td>
<td>48</td>
<td>64.00</td>
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<td>Develop awareness about synonyms and antonyms</td>
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<td>0</td>
<td>70</td>
<td>93.33</td>
</tr>
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<td>8</td>
<td>7</td>
<td>50</td>
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<tr>
<td>11</td>
<td>Identify supporting details</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>47</td>
<td>62.67</td>
</tr>
<tr>
<td>12</td>
<td>Distinguish main idea from supporting details</td>
<td>8</td>
<td>5</td>
<td>11</td>
<td>45</td>
<td>60.00</td>
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<td>13</td>
<td>Recognize rhetorical markers and their functions</td>
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<td>5</td>
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<td>72.00</td>
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<td>7</td>
<td>51</td>
<td>68.00</td>
</tr>
<tr>
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<td>Deduce meaning of unfamiliar words from context</td>
<td>22</td>
<td>1</td>
<td>1</td>
<td>69</td>
<td>92.00</td>
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<tr>
<td>16</td>
<td>Skim for gist or general impression of text or graphics</td>
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<td>0</td>
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<td>94.67</td>
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<td>17</td>
<td>Distinguish fact from opinion</td>
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<td>5</td>
<td>7</td>
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<td>18</td>
<td>Infer mood and author's attitude or tone</td>
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<td>Understand different types of letters</td>
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<td>7</td>
<td>3</td>
<td>59</td>
<td>78.67</td>
</tr>
<tr>
<td>20</td>
<td>Scan for specific information from texts and realia (ads, menus, schedule, calendar, travel information and tickets)</td>
<td>22</td>
<td>2</td>
<td>0</td>
<td>70</td>
<td>93.33</td>
</tr>
<tr>
<td>21</td>
<td>Interpret information presented in diagrammatic display</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>51</td>
<td>68.00</td>
</tr>
<tr>
<td>22</td>
<td>Relate text to personal experience, opinion or evaluation</td>
<td>21</td>
<td>3</td>
<td>0</td>
<td>69</td>
<td>92.00</td>
</tr>
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<td>23</td>
<td>Analyze components of text such as setting, theme, characters, etc...</td>
<td>9</td>
<td>11</td>
<td>4</td>
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<td>70.67</td>
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<td>24</td>
<td>Extract and synthesize information from different sources</td>
<td>9</td>
<td>4</td>
<td>11</td>
<td>46</td>
<td>61.33</td>
</tr>
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</table>
Appendix (3)

English Reading Comprehension Skills Achievement Test

The Islamic University of Gaza
Postgraduate Studies Deanship
Faculty of Education
English Curriculum & Methodology Department

English Reading Comprehension Skills Test

" Ninth Grade "

Prepared by
Alaa Ali Al Udaini

Supervised by
Dr. Awad Keshta
Dear Professor, Supervisor, Expert teacher,

The researcher is conducting a study entitled "The Effect of a Computerized Program on Developing Ninth Graders' Reading Comprehension Skills and their attitudes towards reading in Palestine", to obtain a Master's Degree in Curriculum & English Teaching Methods.

One of the requirements of this study is to conduct a pre/post test based on the most important reading comprehension skills for ninth graders.

Because of the importance of your opinion and experience, you are kindly requested to look carefully at the items of the list so as to:

1- determine the degree of suitability for the Ninth grader students.
2- modify the language if necessary.
3- suggest ideas or issues to enrich the test.

Your notes and responses will be highly appreciated

The test should examine the students' ability to:

1- make predictions about reading text.
2- develop awareness about synonyms and antonyms.
3- deduce meaning of unfamiliar words from context.
4- skim for gist or general impression of text or graphics.
5- scan for specific information from texts and realia (ads, menus, schedule, calendar, travel information and tickets).
6- relate text to personal experience, opinion or evaluation.
<table>
<thead>
<tr>
<th>Items</th>
<th>Degree of Suitability</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>1 The test items reflect the objectives</td>
<td></td>
</tr>
<tr>
<td>2 The reading passages suit ninth graders' level.</td>
<td></td>
</tr>
<tr>
<td>3 There is coherence between the test items and the table of specification</td>
<td></td>
</tr>
<tr>
<td>4 The layout is acceptable.</td>
<td></td>
</tr>
<tr>
<td>5 The rubrics are clear.</td>
<td></td>
</tr>
<tr>
<td>6 The time assigned is suitable.</td>
<td></td>
</tr>
<tr>
<td>7 The distribution of marks is suitable</td>
<td></td>
</tr>
</tbody>
</table>

Any Additional comments are highly appreciated.

-----------------------------------------------------------------------------------------------------------------
-----------------------------------------------------------------------------------------------------------------
-----------------------------------------------------------------------------------------------------------------

Thanks a lot for your co-operation

University Professor [ ] Supervisor [ ] Teacher [ ]

Years of experience [ ]

The researcher

Alaa Ali Al Udaini
Question 1 : ( prediction ) " 3 marks "

* Look at the pictures below and choose the best answer :

1. The text is about :
   a. forests      b. earthquakes     c. farming

2. If forests disappeared :
   a. we would live    b. we would die   c. nothing would change

* Read the following text then answer the questions below :

Everybody loves trees and flowers. But plant life is not just beautiful: it is essential to us and to every animal on Earth. Without plant life, we die. This is because of the carbon cycle. Plant and animal life are partners in the cycle. Animal life breathes in oxygen (O2) and breathes out carbon dioxide (CO2). And when plant life takes in CO2, it gives out O2. Plants and trees use light from the sun to break down the CO2 and use the carbon to grow. Their waste product, oxygen, is essential for animal life. Just one tree produces enough oxygen for four people. However, this ancient carbon cycle balance is breaking down. The amount of CO2 in the atmosphere is rising. And it is rising partly because we are destroying the tropical rainforests of South
America, central Africa and South-East Asia. Industry is taking trees to produce everything from paper to houses. Farmers are cutting and burning more trees to create land for crops. Is this a problem? Yes, it certainly is. First, rising CO₂ levels are causing global warming. If we do not control them, temperatures will soon rise even faster. Land ice will melt, the sea will rise, and this will flood cities like Alexandria and Tokyo. Many living things will become extinct if the forests die. Forests contain 60% of all plant life. They are also the habitat of 80% of all insects and thousands of bird and larger animal species.

Question 2: (skimming) "3 marks"

* Read the text from line 1 to 8 then complete the following sentences:

1. CO₂ stands for ……………………
2. Plants and trees use ………………to break down the CO₂
3. Plant and animal life are ……………………. in the carbon cycle.

Question 3: (scanning) "3 marks"

* Read the text from line 9 to 18 then choose the best answer:

1- Farmers cut trees in order to ……………
   a. increase global warming
   b. create land for crops.
   c. destroy forests .

2. Global warming is caused by …………………
   ( a. rising CO₂ levels   b. planting trees   c. killing animals . )

3- If global warming continues …………………
   a. nothing will happen
   b. animals will die
   c. temperatures will soon rise faster

Question 4: (synonyms and antonyms) "3 marks"

* Extract from the passage:

   a. The meaning of: 1- necessary = ………………………. 2- international = …………………..
b. The opposite of: 1- creating X .......................... 2- fall X ................
3- slower X.............

**Question 5:** (Deduce meaning of unfamiliar words from context)" 3 marks"

* Choose the suitable meaning for the following words:

1. (Line 16) **extinct**
   a. partly disappeared
   b. completely disappeared
   c. appeared

2. (Line 17) **habitat**
   a. homeland
   b. insect
   c. tree

3. (Line 18) **species**
   a. common
   b. types
   c. region

**Question 6:** (Relating text to personal experience, opinion or evaluation)" 3 marks"

* Decide if the following sentences True or False:

1. Forests are not important for human life . ( )
2- We should plant more trees to save the carbon cycle . ( )
3- Israeli forces cut down many trees in Palestine every year . ( )

With My Best Wishes
Appendix (4)

**Attitudes Scale Towards Reading**

Dear student,

The researcher provided this attitude scale to assess ninth graders' attitudes towards reading. The scale is divided into four domains. Each domain has nine items. He kindly invites you to read the following scale items carefully and then decide your opinion. The scale grades are from *Strongly agree (5) to Strongly disagree (1)*

Thanks for co-operation

The researcher

Alaa Ali Al Udaini

Please, tick (√) the answer that best shows your opinion.

(Key: 5= strongly disagree 4= disagree 3= undecided 2= agree 1= strongly agree)
<table>
<thead>
<tr>
<th>No</th>
<th>Domains</th>
<th>Items</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attitudes towards the value and importance of reading</td>
<td>I believe that reading develops the mind perceptions more than any other means.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>I think that reading helps in developing the ability of right thinking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td></td>
<td>I can acquire much cognition and experiences without reading.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td></td>
<td>I wish we could lessen some reading topics from the syllabus.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>I think that reading extra texts is time consuming.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>I think that reading is a basic factor in forming the human culture.</td>
<td></td>
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<tr>
<td>7</td>
<td></td>
<td>We have to continue reading even if we have wide experience.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8</td>
<td></td>
<td>I wish we could increase reading classes in the school schedule.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td></td>
<td>I think that reading is important to every student.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Attitudes towards enjoying reading</td>
<td>I think that very much reading causes boredom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>I prefer reading classes to other classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>12</td>
<td></td>
<td>I feel that the time of reading classes is very long and boring.</td>
<td></td>
<td></td>
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<tr>
<td>13</td>
<td></td>
<td>I allocate time for free reading.</td>
<td></td>
<td></td>
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<tr>
<td>14</td>
<td></td>
<td>I keep away from participating in the reading school activities.</td>
<td></td>
<td></td>
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<tr>
<td>15</td>
<td></td>
<td>I think that we should have a library at home.</td>
<td></td>
<td></td>
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<tr>
<td>16</td>
<td></td>
<td>I take care of reading extra reading texts.</td>
<td></td>
<td></td>
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<tr>
<td>17</td>
<td></td>
<td>I feel happy when we miss a reading class.</td>
<td></td>
<td></td>
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<tr>
<td>18</td>
<td></td>
<td>I feel annoyed when doing any reading task.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Attitudes towards learning reading by computer</td>
<td></td>
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</tr>
<tr>
<td>19</td>
<td>I think that reading via computer increases my comprehension.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>20</td>
<td>I enjoy reading texts via computer.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>21</td>
<td>I think that reading via computer causes less concentration.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>I wait impatiently for the computerized reading classes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>I believe that reading via computer weakens my reading skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>I think that reading via computer is time-consuming.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>I think that reading via computer helps me to be self-dependent.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>I feel that reading via computer increases my thinking skills.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>27</td>
<td>I think that reading via computer increases my ability to understand abstract concepts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Attitudes towards the reading teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>I think that the reading teacher increases my interest for reading.</td>
</tr>
<tr>
<td>29</td>
<td>I believe that the reading teacher's questions stimulate thinking.</td>
</tr>
<tr>
<td>30</td>
<td>I feel annoyed when I see the reading teacher.</td>
</tr>
<tr>
<td>31</td>
<td>I stay away from participating in the reading class because of the reading teacher.</td>
</tr>
<tr>
<td>32</td>
<td>The reading teacher encourages us to express our opinions.</td>
</tr>
<tr>
<td>33</td>
<td>I feel bored when the reading teacher presents any topic.</td>
</tr>
<tr>
<td>34</td>
<td>I feel that the reading teacher looks after some students and ignores others.</td>
</tr>
<tr>
<td>35</td>
<td>I feel that the teaching aids that are used by the reading teacher stimulate my attention.</td>
</tr>
<tr>
<td>36</td>
<td>The teacher of reading advises us to read more additional reading passages.</td>
</tr>
</tbody>
</table>
Appendix (5)

The computerized program (SB)

**Slide one**

![Slide one image]

**Slide two**

![Slide two image]
Reading and vocabulary

1. Describe the ‘before’ and ‘after’ forest photos. Say what has happened in between.

Our friends, the forests

Everybody loves trees and flowers. But plant life is not just beautiful; it is essential to us and to every animal on Earth. Without plant life, we die.

This is because of the carbon cycle. Plant and animal life are partners in the cycle. Animal life breathes in oxygen (O₂) and breathes out carbon dioxide (CO₂). And when plant life takes in CO₂, it gives out O₂. Plants and trees use light from the sun to break down the CO₂ and use the carbon to grow. Their waste product, oxygen, is essential for animal life. The world’s billions of forest trees produce the most oxygen of

Answer the following:

1. Why are trees important?
   It is essential to us and to every animal on the earth

2. What does animals breathe out?
   CO₂

Extract from the passage:

The meaning of: likes ...loves... wood ...forest

The opposite of: death ...life ...Nice ...beautiful
Slide seven

all. Just one tree produces enough oxygen for four people.

However, this ancient carbon cycle balance is breaking down. The amount of CO₂ in the atmosphere is rising. And it is rising partly because we are destroying the tropical rainforests of South America, central Africa and South-East Asia.

Industry is taking trees to produce everything from paper to houses. Farmers are cutting and burning more trees to create land for crops. Every year, people destroy an area the size of Palestine, Lebanon and Syria. If this continues, nearly all the world’s forests will disappear by 2050.

Is this a problem? Yes, it certainly is.

First, rising CO₂ levels are causing global warming. If we do not control them, temperatures will soon rise even faster.

Answer the following:

1- Why is the carbon cycle balance breaking down?
   *Because we are destroying the tropical rainforests*

2- What causes global warming?
   *Rising CO₂ levels*

3- Extract from the passage:
   
   *The opposite of: appear —— slower, faster...*

   *The meaning of: region —— international, global*

Slide eight

Land ice will melt, the sea will rise, and this will flood cities like Alexandria and Tokyo.

Many living things will become extinct if the forests die. Forests contain 60% of all plant life. They are also the habitat of 80% of all insects and thousands of bird and larger animal species.

That’s not all. Many plants have important uses. Some produce chemicals that can help fight disease, for example. Scientists believe that there are many more useful plants to discover, and these will become extinct if we do not save the forests. We will lose them before we even find them! The forests are our friends. Do we really want to kill them?

Answer the following:

1- Why will the land ice melt?
   *Because the sea will rise and this will flood cities*

2- What will happen if the forest die?
   *Many living things will become extinct*

3- Extract from the passage:
   
   *The opposite of: live —— smaller...*

   *The meaning of: illness —— types...*
The related video 1: carbon cycle

The related video 2: Plants
The related video 3: animals

Animals take in O2 and give out CO2

The related video 4: forests

Many living things will become extinct if the forests die.
Slide eleven

Protect

Lid

Oil

Slide twelve

*Complete from the list:

Oil - stained - destroyed - responsible

1. My shirt is .................. badly.
2. We use .......... for cooking.
3. Israel ................. Many houses in Gaza.
4. Ali is the ............... Of this company.
Slide thirteen

Lessons 3 and 4
Reading and vocabulary

1. Discuss these questions.
   a. Have you ever had to look after younger brothers and sisters – or the children of another family?
   b. If your answer is yes, did everything go well, or did you have problems?
   c. If your answer is no, imagine that you have to. Do you think everything would go well, or do you think you would have problems?

Slide fourteen

2. Read to find out how well you would deal with these problems.

   Quiz: Could you look after your home and family?
   
   Imagine that your parents are out, and you are looking after your young brothers and sisters. What would you do if these things happened?

   Situation 1:
   
   Imagine that you are cooking dinner for everybody, but then a pan of hot oil starts burning. What would you do?
   
   If that happened, I would ...

   Click on your opinion

   a. turn off the cooker and pour cold water on the oil.
   b. turn off the cooker and cover the pan with a lid.
Slide fifteen
The Quick feedback of (situation 1 - a)

The mixture would explode, and the whole house might catch fire

Slide sixteen
The Quick feedback of (situation 1 - b)

That would cut the oxygen supply and stop the fire.
Slide seventeen

Situation 2:

Imagine that your brother has badly stained his shirt with strawberry jam. What would you do?
If that happened, I would...

- first try cold water and soap and then, if necessary, use a gentle chemical cleaner.  
- look for the strongest chemical cleaner in the house and attack the stain with that.

Slide eighteen

The Quick feedback of (situation 2 - a)

this might not remove the stain completely, but it would protect the material.
Slide nineteen

The Quick feedback of (situation 2 - b)

this would remove it, but you would probably damage the material.

Slide twenty

Situation 3:

Imagine that your sister has broken a neighbour’s window with her football. The neighbour often gets angry, but he did not see the accident. What would you do? If that happened, I would ...

- tell her that she has done something wrong, but say nothing to the neighbour.
- go with her to say sorry to the neighbour and promise that the family would pay for a new window.
**Slide twenty-one**

*The Quick feedback of (situation 3 - a)*

This would be dishonest – and a bad example to her.

**Slide twenty-two**

*The Quick feedback of (situation 3 - b)*

you would be responsible and you could also protect her from this person.
Slide twenty-three

Situation 4:

Imagine that the children are playing noisily and asking you to play with them. However, you have to finish some homework. What would you do?
If that happened, I would ...

Click on your opinion

a. explain my homework problem, ask them to play quietly now, and promise to play with them later. [ ]

b. put them in front of the TV, and go to a friend’s house to finish my homework there. [ ]

next

Slide twenty-four

The Quick feedback of (situation 4 - a)

The children would learn to think about other people, and later you would all enjoy yourselves together.
something dangerous might happen.

Slide twenty-six

answer the following questions:

What will you do if your brother played football at home?
I will ask him to play in the garden

Extract from the text:
1. The opposite of: well X. badly, hot X. .......... safe X. dangerous...
2. The meaning of: save = ................. protect = ..........
   calmly = .................. powerful = ... strong.
English Language curriculum for Grade 9

Unit 11

Slide twenty-eight

disaster

volunteer
voluntary

organization

disabled

victims
Finish the following from the list:

*Volunteer – disaster – disabled – extra*

1. A hurricane causes ***disaster***.
2. We should ................ to help people.
3. .................. People need help from others.
4. we have ............... work to do after school.
Slide thirty-one

**Lessons 3 and 4**

**Reading and vocabulary**

1. Look at pictures a–c of young people, and do these activities.
   a. Describe the pictures.
   b. Read the title. Try to find a similarity between the people's activities.

- **(a) Rosa, a volunteer from Brazil.**
- **(b) Hanan and other volunteers from Saudi Arabia.**
- **(c) Ben and another volunteer from Britain.**

Slide thirty-two

Hello, and welcome to *Young World*, the news programme for teenagers. You know, a lot of adults think that kids don’t care about other people, but that just isn’t true. To start with, lots of you look after family members who are ill or disabled. Many young people also volunteer to help in the wider community. Let’s hear from some of them.
Answer the following:

1. What is the name of the news programme?
   Hello! World

2. How can kids help other people?
   They look after family members who are ill or disabled.

3. Extract from the text:
   the opposite of: old ........ healthy...........
   The meaning of: begin ........... right ......
   new unhealthy start correct

Read and answer the following:

1. ‘At our school, we have a choice at the end of the week. We can do extra work in the library or sports training or, like me, we can do voluntary work. We do local community projects, and we recently finished one at a primary school near here. Before, there was just an ugly old wall outside. Now, they’ve got a bright new mural. The children helped design it, we painted it, and everybody loves it! That feels good, and we had lots of fun, too.’

Answer the following:

1. What did they do to the ugly wall?
   they designed it and painted it

2. Who designed the mural?
   the children

3. Extract from the text:
   The noun of: choose .......... train
   The opposite of: started .......... inside ..........
Read and answer the following:

**Slide thirty-five**

2. ‘On Saturday mornings, I help at the local library. There are various jobs for volunteers. You can take books to the homes of disabled or elderly people who can’t get to the library. You can also help children with their homework. And my favourite thing is my little reading group of children who I meet every week. They really love the stories and poems that I read, and I really love the look on their faces. The library doesn’t pay me, but they let me borrow CDs and DVDs for free, and that’s very nice.’

**Answer the following:**

1. What does he do on Saturday mornings?  
   He helps at the local library

2. What is his favourite thing?  
   His little reading group of children with their homework

3. Extract from the text:
   The plural of: story ………. child …….. children
   The opposite of: young ………. old …….. lend …….. borrow

**Slide thirty-six**

3. ‘There always seems to be a big natural disaster somewhere in the world. If it isn’t an earthquake, it’s a flood or a hurricane. Well, I can’t go and help, but there is something else that I can do. I belong to an organization which sends help to disaster victims. It collects money to buy things that these victims need to survive—things like food and medicine. After that, volunteers like me pack everything into boxes ready to send. At Eid Al-Fitr, we also sent boxes of toys for children in Africa, and that was nice. It feels right to give to people who have very little.’

**Answer the following:**

1. What do the writer do in disasters?  
   He belong to an organization which sends help to disaster victims

2. What do the organization do for victims?  
   It collects money to buy things that these victims need to survive

3. Extract from the text:
   Disasters: earthquake, flood, hurricane
   The opposite of: receive ………. send …….. sell …….. buy
The related video 1: Reaching out to others

The related video 2: volunteers
The related video 3: helping children

The related video 4: Get involved in voluntary work
Slide thirty-seven

Book 9  Unit 12 Lesson 3  SB P. 72

English Language curriculum for Grade 9

Unit 12

Slide thirty-eight

Educational  educate

UNDP

Cultural

perfect

Scientific

construction
Slide thirty-nine

freedom rights friendship
carries out own official

Slide forty

Lessons 3 and 4
Reading and vocabulary

Answer these questions. ☐ ☐
a What do you already know about the UN’s work around the world?
b Look at the pictures in the text. What do they tell you about the UN?

The United Nations at work
[agency - official - carry out - friendship]

1. The UN’s staff *carry out* the actions that are agreed by the member countries.
2. One of the UN’s aims is to build *friendship* between countries.
3. UNRWA is an *agency* of the UN.
4. Arabic and English are two of the *official* languages of the UN.

---

**Slide forty-two**

Part 1 from Line 1 to 18:
Read the first part silently to find the answers for the following questions:

- How many people were killed in world wars 1 and 2?
  
  40 millions were killed

- Who carries out the UN’s future actions?
  
  Member of countries
Slide forty-three

The United Nations at work

Eight million people were killed in World War 1 (1914–18). World War 2 (1939–45) was even more terrible. By the end of it, another 32 million had been killed. Clearly, a strong international organization was badly needed to prevent future wars.

So, while that war was still being fought, plans for a new and better organization were made.

The new United Nations was created in San Francisco in April 1945 by its first 51 members. This was done while thousands were still being killed every day.

Soon after peace had been made, construction of the new UN Building in Manhattan, New York, began. The new organization was given its own flag, and everybody had high hopes for it.

Today, there are 191 UN members and six official languages are used: Arabic, Chinese.

English, French, Russian and Spanish. The aims are:

- To keep peace all over the world;
- To develop friendship between countries;
- To help improve people’s lives through better healthcare and education;
- To work for the rights and freedom of people everywhere.

Member countries meet regularly to decide the UN’s future actions. Under its Secretary General, the UN then carries out those actions.

Sadly, it often does not act as strongly as we might want. This is because it cannot do anything that has not been agreed by the members, and the members often strongly disagree with each other.

Read the first part and answer:

1 – How many people were killed in world war 1? Eight million people
2 – When and where was the new UN created? In San Francisco in April 1945
3 – How many official languages are used in the UN? Six languages
4 – Extract from the passage:

The meaning of: horrible … terrible … Building … construction
The opposite of: peace … war … special … general...

Slide forty-four

Read the text from Line 18 to the end of the text and then answer the following questions:

1 – What does UNICEF stand for? United nation children’s fund
2 – When did the smallpox finally disappear? In 1979
Slide forty-five

However, the UN has done many good things. It has often helped stop wars and keep peace.

Much good work has also been done through its various agencies. UNESCO (The United Nations Educational, Scientific and Cultural Organization) has helped educate millions of children, for example. Through the hard work of WHO (the World Health Organization), the horrible disease of smallpox finally disappeared in 1979. In Palestine, important work is being done by UNRWA. UNICEF (the United Nations Children’s Fund) also works in Palestine with, for example, many learning centres. Here, teenagers can learn music, do sports and study IT and life skills.

The UN is not perfect: nothing human ever is. However, the world is a much better place with it than without it.

Read the second part and answer:

1. Which organization is responsible for the disappearance of the smallpox?
   
   World health organization

2. What are the works that UNRWA does to Palestinians?
   
   It helps educate millions of children

3. What does the word ‘horrible’ mean?

4. Do you think the UN is perfect?

   Extract from the passage:

   The meaning of: continue complete adults teenagers disappear disappear... Firstly... finally...

   Write in full form: UN... United nation... IT... Information technology

Slide forty-six

Homework

2. Read and answer these questions.

   a. What was still happening when the UN was created?
   b. How many members were there then, and how many have joined since then?
   c. Who are the UN’s future actions decided by?
   d. What have UNESCO and WHO done to improve people’s lives?
   e. In which part of the world do UNRWA and UNICEF both work?
The related video 1: World War 1

Eight million people were killed in World War 1 (1914–18).

The related video 2: World War 2

32 million had been killed in World War 2.
The related video 3: construction of the UN

The new United Nations was created in San Francisco in April 1945 by its first 51 members.

The related video 4: Al Nakba

Palestinians were forced to leave large parts of Palestine by Israel.
The related video 5: War On Gaza

The related video 6: UN is not perfect
Slide forty-seven

Book 9  Unit 13 Lesson 3  SB P. 78

English Language curriculum for Grade 9

Unit 13

Slide forty-eight

positive  negative  attention  run away

selfish  scream

Even though  dramatic  ignore
*Complete from the list:

attention  ran away  screamed  even though

Even though I was ill, I went to school.
The girl screamed aloud. When she saw a lion.
We should pay attention to teachers.
When I saw a dog, I ran away.

Lessons 3 and 4

Reading and vocabulary

1. Look at the ‘page’ below and answer these questions.
   a. Look at the title and the cartoon. Who might this website be for?
   b. Look at the start and end of each letter. Which might be asking for, and giving help?

HELP, WORLD!
Bring your personal problem to Help, World!
We’re all here to help each other!

You say you feel ignored, and I know the feeling because I’ve got four brothers and sisters. But I don’t scream or run away. Why not do the same as me? I talked quickly to my parents, and I said, ‘I know that you love me, but I feel that you give me less attention than the others.’ It worked! They said they were sorry, and now they pay me just as much attention as they give the little ones.

Fred C
Melbourne, Australia

Dear Upset,
Even though I agree that there’s a problem, I don’t agree that your parents are the whole of it. You’re part of the family, too, and you’re also part of the problem. Although it’s right to control your feelings, it’s wrong to go away to your room alone. That seems very tragic, and you need to be more proactive. I think you should do help your parents and look after the younger ones. If you do that, I’m sure they’ll be really happy – you’ll get much more attention from them!

Rosa B
Madrid, Spain
Slide fifty-one

HELP, WORLD!

Bring your personal problem to Help, World!
We're all here to help each other!
Dear All,
I'm the oldest son, and I've got four younger brothers and sisters. I got lots of chores to do: they got all my parents' attention. Although I love my family very much, I feel bad about this. I mean, Mom and Dad often ask about my school grades, but they never ask about me. When they aren't asking me to do another chore, they just ignore me. I sometimes want to scream or run away from home. Instead, I just keep quiet, and I go away to my room alone. But what do you think? Would it help if I did something dramatic? If I don't do something soon, I'll explode! Upset.

Answer the following:

1 – Why is the writer upset? Because his parents ignore him.

2 – How many brothers and sisters has he got?

Four brothers and sisters.

Extract from the passage:

The opposite of: pay attention ......... youngest .............

The meaning of:

Grades....... Father and mother....... parents.....

Slide fifty-two

Dear Upset,

Even though I feel sorry for you, I don't think you should scream or run away – or explode! Just think about your parents! I'm sure they're very busy with the younger ones, and they probably feel you can look after yourself. So don't do anything selfish or dramatic. If you did, it would only make your parents feel bad.

Carrie M
Melbourne, Australia

1 – What does "possibly" mean? probably

2 – Extract from the text:

The opposite of: free busy....... good Bad.......

The meaning of: escape Run away.....
Slide fifty-three

Dear Upset
You say you feel ignored, and I know the feeling because I’ve got six brothers and sisters! But I disagree with screaming or running away. Why not do the same as me? I talked quietly to my parents, and I said, ‘I know that you love me, but I feel that you give me less attention than the others.’ It worked! They said they were sorry, and now they pay me just as much attention as they give the little ones.

Fuad C
Manama, Bahrain

1– What did Fuad do to solve the same problem?
He talked to his parents about the problem

2– Extract from the text:

the opposite of: agree

disagree

the opposite of: noisily

quietly

the meaning of: speak to

said

small

little

Slide fifty-four

Dear Upset
Even though I agree that there’s a problem, I don’t agree that your parents are the whole of it. You’re part of the family, too, and you’re also part of the problem. Although it’s right to control your feelings, it’s wrong to go away to your room alone. That seems very negative, and you need to be more positive. I think you should try to help your parents look after the younger ones. If you do that, I’m sure they’ll be really happy—and you’ll get much more attention from them!

Rosa B
Madrid, Spain

1– Where is Rosa from? In Spain

2– What is Rosa’s solution for the problem?
She says that you should help your parents look after the younger ones

3– Extract from the text:

the opposite of: negative

positive

the opposite of: right

wrong

the meaning of: true

false

trouble

problem
Slide fifty-five

Book 9  Unit 14 Lesson 3  SB P. 84

Slide fifty-six

light up

felt like = like

don’t mind = don’t care

homesick

at last = finally

half-way

ages = along time

getting used to

rude = impolite
Slide fifty-seven

Complete from the list:

- rude
- homesick
- getting used to
- ages

- I am **getting used to** giving under pressure.
- Ali travelled to the USA, he feels **homesick** to his country Palestine.
- We haven’t seen you for **ages**.
- That boy isn’t polite, he is **rude**.

Slide fifty-eight

![China Map and Images]
Lessons 3 and 4
Reading and vocabulary

1. Look at the photos, and do these activities.
   a. Describe the photos.
   b. Try to say what country and culture they show.
   c. Find the country on the map at the front of the book.

---

WatchChina

---

Check the mail Inbox for new e-mails.

www.mail.yahoo.com
The Web-Quest (Homepage)
(www.yahoo.com)
Read the following email then Click on the right answer:

1- Who sent the email?
   (Lucy – Yasmeen – Huda)

2- When it was sent?
   (06/07 – 06/06 – 06/05)

3- When did Lucy arrive China?
   (Three months ago – five months ago – six months ago)

4- How many people live in Shanghai?
   (about 13 million – about 12 million – about 14 million)

**AN EMAIL FROM CHINA**

Subj: Lucy goes to China
From: schmidtfamily53@aol.com
Date: 06/06/20.. 17:10:42
To: yasadhaifawi@palnet.pa

Dear Yasmeen,

1. I meant to contact you ages ago, but I’ve been so busy, and I haven’t been in touch with anybody! Sorry about that, but here’s an email – at last!

2. Well, you’re not the only one who has moved halfway round the world! We arrived here in China six months ago, and we didn’t know anybody at first, but we’re slowly getting used to our new life here.

3. I guess Palestinian culture is very different from American culture, but I think Chinese culture is even more different. Just think of the Great Wall. Who else has a 4,100 km wall? This country is really something!

4. Most of the time I like living here, and I love going to traditional events like Chinese New Year. (The fireworks light up the sky and the parties and dancing in the streets are very noisy and exciting.) But sometimes there are bad days, and I really miss seeing everybody. Once or twice, I’ve really felt like going home. Do you ever get homesick, too?

5. We live in Shanghai now. It’s a very big city – about 13 million people – and it’s getting bigger all the time. Everybody is busy all the time, and the streets are always crowded. People in shops and restaurants talk very loudly and they don’t smile much, so they often seem to be rude or angry. But it’s just the Chinese way. In fact, people here are fine when you get to know them, and I’ve finally managed to make several good friends.

6. I’m learning to speak Chinese now, but it’s very hard! I’m also trying to learn to read and write, and that’s hard work, too. But I don’t mind doing it because I’d really like to understand the culture better.

7. We’re hoping to get home to Orlando in early July. Will you be back from Palestine by then? I’d really love to see you in the summer. Write soon!

Love
Lucy

Click on the links below to read more information about:

**The Great Wall of China**

**The city of Shanghai**
Great Wall of China

From Wikipedia, the free encyclopedia

The Great Wall of China is a series of stone and earth walls, fortifications, and related buildings built on the northern borders of several Chinese empires. The wall was originally built to protect the borders of the Chinese Empire against invasions from nomadic groups. The wall was expanded and maintained throughout the history of China. Today, it is a UNESCO World Heritage Site.

The Great Wall stretches from Shanhaiguan in the east to Jiayuguan in the west, creating a barrier that helped protect China from invasions. The wall was primarily built during the Ming Dynasty, from the late 14th century to the early 17th century. It is estimated that over 1 million people worked on the wall, constructing it with bricks, stones, and ice. The wall is about 6,400 km long and stands up to 7 meters high in some places.

The Chinese used various techniques to build the Great Wall. They used stone, brick, and rammed earth, and they also used wooden ladders and siege towers to help construct the wall. The wall was finally completed in the early 17th century, and it continues to be a symbol of China's rich history and culture.
Shanghai (Chinese: 上海, pinyin: Shànghǎi, Zhuyin: Shānhe) is a municipality of China.

The city is located in eastern China, at the middle portion of the Chinese coast, and sits at the mouth of the Yangtze River. Due to its rapid growth in the last two decades, it has again become one of the world's leading cities, exerting influence over finance, commerce, culture, and fashion.

Once a fishing and textiles town, Shanghai grew in importance in the 19th century due to its favorable port location and was one of the cities opened to foreign trade by the 1842 Treaty of Nanking. The city then functioned as a center of commerce between east and west, and became a multinational hub of finance and business in the 1950s. However, with the Communist Party takeover of the mainland in 1949, the city's international influence declined. In 1990, the economic reforms introduced by Deng Xiaoping resulted in an intense re-development of the city, aiding the return of finance and foreign investment to the city. Shanghai is now aiming to be a global finance hub and international shipping centre in the future, and is predicted to become one of the world's main global financial centres, on the level of London and New York, in this regard.

Shanghai is also a popular tourist destination renowned for its historical landmarks such as the Bund, People's Square (the former race track) and Yu Garden, and its extensive river port Fudong skyline. It hosted the World Expo in 2010, attracting 70 million visitors. It is described as the "showcase" of the booming economy of China.

During the 1950s and 1960s, Shanghai became an industrial centre and centre for radical.leftist influences from China and her three cohorts, together the Core of Asia, were based in the city. Yet, even during the most turbulent times of the Cultural Revolution, Shanghai was able to retain high economic productivity and relative social stability. In most of the history of the People's Republic of China (PRC) in order to funnel wealth to rural areas, Shanghai has been a comparatively heavy contributor of tax revenue to the central government. This came at the cost of severely crippling Shanghai's infrastructural and capital development. Its importance to the fiscal well-being of the central government also benefited economic liberalizations begun in 1978. Shanghai was finally permitted to institute economic reforms in 1991, starting the massive development still seen today and the birth of Shanghai Pudong.

![China Flag](image)
Answer the following
1. Is the American culture similar to the Chinese culture?
   No, it isn’t.

Extract from the text:
The meaning of:
- double
- In contact
- In touch
The opposite of:
- interesting
- noisy
- quietly

The related video 1: china
The related video  2: The Chinese civilization

The related video  3: The Great Wall
The related video  4: The Chinese National Day

The related video  5: Shanghai
bionic

impossible

athletes

able bodied
*Complete from the list:

Bionic – impossible – connect – developments

1. There are many new developments.
2. Some disabled people use bionic legs.
3. It’s impossible to live under water.
4. You can connect the internet to your computer.
Slide sixty-six

Read the title and look at the pictures below. What subject do you think this article will be about? 🤔

SCIENCE MAGAZINE TALKS TO...

Slide sixty-seven

This month, SCIENCE MAGAZINE reporter Mark Brigg talked to Dr Julia Way, Professor of Medicine at the International Medical College in Sydney, Australia.

I asked Dr Way to describe some of the new developments in medicine. ‘The speed of development is huge,’ she said, ‘and it’s happening in every area.’ She explained that this included not just amazing new medical operations. It also included powerful new types of medicine to fight the world’s worst diseases. ‘There’s much better basic health care around the world, too,’ she went on. ‘As a result, people are living longer, healthier lives than their parents and grandparents did.’

I then asked Dr Way if medicine was doing anything to help disabled people. I wondered whether there were any important developments in this area. ‘Many,’ she replied. ‘We’re now able to do things that were not possible just a few years ago.’

I asked her to explain. She said, ‘Some people can now recover from their disabilities. For example, medical science is finding new ways for people to see and hear again.’

Then I asked when doctors would be able to do the same for all disabled people. ‘Sadly, that’s impossible,’ Dr Way said. ‘But here’s another important development: disabled people today are being helped to live like...'

**Answer:**

1. Who is Dr Julia Way? 
   Professor of medicine at the international medical college in Sydney.

2. Are there any developments in medicine? 
   Yes, they are.

2. Extract from the text:

   The meaning of: very big ................. huge.
   answered .................. replied.
   The opposite of: excluded included.
   possible .................. impossible.
The related video 1: science magazine
The related video  2: new medical machines

MRI can ‘see’ everything in the body

The related video  3: amazing operations

There are amazing new medical operations.
The related video 4: machines for disabled people

Some people can now recover from their disabilities

The related video 5: cheetah legs
The related video  6: bionic arms
Appendix (6)

Teacher's Guide

*English for Palestine 9*

**How to teach the reading lessons using the suggested computerized program**

*Dear teachers,*

It's a matter of fact that *English for Palestine 9* syllabus focuses on the reading skill more than other skills. Clearly, each unit has six lessons; lesson one is a listening lesson integrated with reading as students listen then read the text to answer the comprehension questions. In addition, lesson 3 is a reading lesson that needs two classes. Also, *English for Palestine 9* has 4 poems, included in lesson 5, that students read then answer reading comprehension questions.

The researcher suggests a computerized program with related pictures and videos for the reading lessons 3-4 in the units 9, 10, 11, 12, 13, 14 and 15. It aims at improving the reading comprehension skills for ninth graders and developing their attitudes towards reading in general and reading through computer as well.

This teacher's guide is a suggested lesson plan for each reading lesson (3+4) based on computer-based-learning. It contains the following:

1. Learning objectives for each lesson
2. Procedures and activities.
3. Evaluation
**Learning Objectives of the Lesson:**

- To identify the difference between pictures.
- To read a text for scanning
- To read a text for skimming
- To read a text aloud

**New Vocabulary:**

- Essential – carbon cycle – partners –
- breathes in – breathes out – takes in –
- gives out – break down – product –
- balance – destroying – rainforests –
- melt – extinct – habitat

**Aids included in the computer program**

- pictures – video – activities

**Words to be revised:**

- Forests – plants – animal – CO2 – O2 –
- global warming – contain – insects.

<table>
<thead>
<tr>
<th>Steps</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Warm-up</strong></td>
<td>⇒ Greetings</td>
</tr>
<tr>
<td></td>
<td>⇒ Spider gram: Natural resources.</td>
</tr>
</tbody>
</table>

| Revision       | ⇒ T. Revises homework with Ss……… Checks the answers                       |
|                | ⇒ T. revises countries and nationalities by playing a game.                 |
|                | ⇒ T. asks some oral questions about forests as:                             |
|                | - Why are trees important?                                                 |
|                | - Do you like plants?                                                      |
|                | - Do you have a farm?                                                     |
|                | - What do you grow at home?                                                |
|                | - Have you seen forests? Where? etc…                                      |
|                | ⇒ Introducing the new vocabulary with their pictures via computer.         |
|                | ⇒ Ss practice saying the words.                                            |
|                | ⇒ Ss repeat CGP                                                            |
|                | ⇒ Ss describe the pictures.                                                |
|                | ⇒ Ss put the words in meaningful sentences.                                |

**SB Ex.1:** Describe the ‘before’ and ‘after’ forest photos. Say what has happened in between

- ⇒ T. helps Ss in saying sentences describing the pictures.
- ⇒ T. discusses picture number 2.
- ⇒ Ss answer the following exercise:

*Complete from the list: Essential – break down – melts*

1. Water is ............... for us.
2. Ice ............... when temperature is high.
3. Our bodies ............... when we die.
<table>
<thead>
<tr>
<th>Part 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Presentation</strong></td>
<td><strong>Pre-reading questions:</strong></td>
</tr>
<tr>
<td></td>
<td>⇒ Ss. read the text from: <strong>Everybody</strong> ....to.... <strong>four people</strong></td>
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<tr>
<td></td>
<td>⇒ Ss. look at the computer screen to answer the following:</td>
</tr>
<tr>
<td></td>
<td>▪ What are the carbon cycle elements ?</td>
</tr>
<tr>
<td></td>
<td>▪ Why are forests important for every animal and human ?</td>
</tr>
<tr>
<td><strong>While Reading</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>⇒ Ss listen to the text so as to answer the while-reading questions .</td>
</tr>
<tr>
<td></td>
<td>⇒ T. explains the task</td>
</tr>
<tr>
<td></td>
<td>⇒ Ss. get in groups to answer the questions.</td>
</tr>
<tr>
<td></td>
<td>⇒ T. checks answers and then displays the answers on the screen.</td>
</tr>
<tr>
<td>1-</td>
<td>Why are plants essential to us ?</td>
</tr>
<tr>
<td>2-</td>
<td>What do plants take in?</td>
</tr>
<tr>
<td>3-</td>
<td>Extract the opposites of: dark ............. death .............</td>
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<tr>
<td>3-</td>
<td>Extract the meanings of: nice ............. increasing .............</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Presentation</strong></td>
<td><strong>Pre-reading questions:</strong></td>
</tr>
<tr>
<td></td>
<td>⇒ Ss. Read the text from: <strong>However</strong> .... to .... <strong>even faster</strong></td>
</tr>
<tr>
<td></td>
<td>⇒ Ss. Look at the computer screen to answer the following:</td>
</tr>
<tr>
<td></td>
<td>▪ What do we produce from trees?</td>
</tr>
<tr>
<td></td>
<td>▪ What will happen in 2050?</td>
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<tr>
<td><strong>While Reading</strong></td>
<td></td>
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<td>⇒ Ss listen to the text so as to answer the while-reading questions .</td>
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<td></td>
<td>⇒ T. checks answers and then displays the answers on the screen.</td>
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<tr>
<td>Answer the following :</td>
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<tr>
<td>1-</td>
<td>Why is the carbon cycle balance breaking down ?</td>
</tr>
<tr>
<td>2-</td>
<td>What causes global warming ?</td>
</tr>
<tr>
<td>3-</td>
<td>Extract from the passage :</td>
</tr>
<tr>
<td></td>
<td>The opposite of : appear ............. slower .............</td>
</tr>
<tr>
<td></td>
<td>The meaning of : region ............. international .............</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Steps</td>
<td>Procedures</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Presentation  | **Part 3**  
**Pre-reading questions:**  
⇒ Ss. Read the text from: **Land ice ... to the end of the text**.  
⇒ Ss. Look at the computer screen to answer the following:  
  ▪ Why are forests important for animals?  
  ▪ What are some plants used for?  
**While Reading**  
⇒ Ss listen to the text so as to answer the while-reading questions.  
⇒ T. explains the task  
⇒ Ss get in groups to answer the questions.  
⇒ T. checks answers and then displays the answers on the screen.  
**Answer the following:**  
1. Why will the land ice melt?  
2. What will happen if ice melts?  
3. Extract from the passage:  
   The opposite of: ice .......... smaller ..........  
   The meaning of: illness .......... types ..........  
**Post Reading**  
At the end of the lesson, Ss watch a video for plant life and the importance of forests then they discuss what they have seen. |
| Evaluation    |                                                                             |
| Consolidation |                                                                             |
Learning Objectives of the Lesson:
- To predict what will happen
- To read a text for scanning
- To read a text for skimming
- To match the situation with its discussion.
- To extract meanings and opposites.

New Vocabulary:
- Material – stained – cleaner – explode – dishonest
- responsible – lid – protect – oil – noisily

New Vocabulary:
- Material – stained – cleaner – explode – dishonest
- responsible – lid – protect – oil – noisily

New Vocabulary:
- Material – stained – cleaner – explode – dishonest
- responsible – lid – protect – oil – noisily

Aids included in the computer program:
- pictures – matching game – activities

Words to be revised:
- Neighbours – parents – pan – soap
- gentle

Steps | Procedures
---|---
Warm-up | ⇒ Greetings
⇒ Spidergram (family members)

Revision
⇒ T. Revises homework with Ss………. Checks the answers
⇒ T. asks some oral questions as:
  - What will happen if you have to take care of the house?
  - What would you do if you arrived school late?
  - What would you do if someone stole your wallet? Etc…
⇒ Introducing the new vocabulary with their pictures via computer.
⇒ Ss practice saying the words.
⇒ Ss repeat CGP
⇒ Ss describe the pictures.
⇒ Ss put the words in meaningful sentences.
  * Complete from the list:
  Oil – stained – destroyed – responsible
  1- My shirt is ………… badly.
  2- We use …….. for cooking.
  3- Israel ………… Many houses in Gaza.
  4- Ali is the ……………… Of this company.

Presentation
⇒ T. discusses the questions
⇒ T. helps Ss to answer the quiz items.
⇒ T. asks Ss to answer Situation 1 using their own computers.

Evaluation
⇒ T. displays some pictures of certain situations.
⇒ T. helps Ss to answer the quiz items.
⇒ T. asks Ss to answer Situation 1 using their own computers.
| Presentation | Ss answer Situation 1 and they have the feedback immediately.  
| Ss choose the answer.  
| The matching interpretation of their answer appears to get students understand what will happen.  
| Ss continue reading the situations  
| Ss continue answering the situations.  
| The computer will show Ss the interpretation of their choice.  
| T. goes round the class helping Ss.  
| T. discusses the questions one by one.  
| T. asks Ss: Who chose (a) , then record the number of Ss  
| T. asks some Ss to read what will happen if they chose (a)  
| Ss do the same with the rest of the Situations. |

| Evaluation | Ss answer the following questions:  
| 1- What will you do if your brother played football at home?  
| Extract from the text:  
| The opposite of : well X........ hot X......... safe X ......  
| The meaning of :save = ... calmly=....... = powerful =...... |
**Learning Objectives of the Lesson:**

- To describe the pictures then find the similarities between them.
- To read a text for scanning
- To read a text for skimming
- To introduce experience and opinion about voluntary work.

**New Vocabulary:**

- Kids – disabled – volunteer – voluntary
- extra – elderly – disaster – victims – earthquake – organization

**Aids included in the computer program**

- Pictures – video – activities

**Words to be revised:**

- Community – library – local – various
- borrow – natural

<table>
<thead>
<tr>
<th>Steps</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm-up</td>
<td>Greetings</td>
</tr>
<tr>
<td></td>
<td>Puzzle (organization)</td>
</tr>
</tbody>
</table>

<table>
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<td></td>
</tr>
<tr>
<td>T. asks some oral questions:</td>
<td></td>
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<tr>
<td>- Do you like helping people?</td>
<td></td>
</tr>
<tr>
<td>- Have you ever helped your neighbours or friends? how?</td>
<td></td>
</tr>
<tr>
<td>- Could you help your little brothers if your parents are out?</td>
<td></td>
</tr>
<tr>
<td>- If your little sister cried because she wants her mother, what would you? etc…</td>
<td></td>
</tr>
<tr>
<td>T. revises words related to disasters.</td>
<td></td>
</tr>
<tr>
<td>Ss talk about the massacres that Israel did and sill doing to Palestinians.</td>
<td></td>
</tr>
<tr>
<td>Introducing the new vocabulary with their pictures via computer.</td>
<td></td>
</tr>
<tr>
<td>Ss practice saying the words.</td>
<td></td>
</tr>
<tr>
<td>Ss repeat CGP</td>
<td></td>
</tr>
<tr>
<td>Ss describe the pictures.</td>
<td></td>
</tr>
</tbody>
</table>
⇒ Ss put the words in meaningful sentences.

*Complete from the list:*
  Volunteer – disaster – disabled –extra
  1- A hurricane causes ............
  2- We should .................. to help people.
  3- ............... People need help from others .
  4- we have ............... work to do after school

SB Ex.1: Look at the pictures and do these activities:

⇒ Ss describe the pictures.
⇒ Ss look at the pictures and try to find the similarities.
⇒ Ss watch a video of a voluntary work.
Ss discusses the voluntary work.
T. displays the program advertisement.
Ss read the ad. in order to answer the following questions:

The Prologue:

Answer the following questions:
  What is the name of the news programme ?
  How can kids help other people ?
  Extract from the text :
    The opposite of : old ............... healthy.............
    The meaning of : begin ............... right ......

Part 1

⇒ Ss read the first part of the text and then answer the following questions.
⇒ T. explains the task
⇒ Ss get in groups to answer the questions.
⇒ T. checks answers and then displays the answers on the screen.

Answer the following :
1- What did they do to the ugly wall ?
2- Who designed the mural ?
3- Extract from the text :
   The noun of : choose ............... train ...............
   The opposite of : started ............... inside

...............
<table>
<thead>
<tr>
<th><strong>Steps</strong></th>
<th><strong>Procedures</strong></th>
</tr>
</thead>
</table>
| **Part 2** | ⇒ Ss read the second part of the text and then answer the following questions.  
⇒ T. explains the task  
⇒ Ss get in groups to answer the questions.  
⇒ T. checks answers and then displays the answers on the screen.  
**Answer the following:**  
1- What does he do on Saturday mornings?  
2- What is his favourite thing?  
3- Extract from the text:  
   - The plural of: story ............... child ...............  
   - The opposite of: young ............... lend ............... |
| **Part 3** | ⇒ Ss read the third part of the text and then answer the following questions.  
⇒ T. explains the task  
⇒ Ss get in groups to answer the questions.  
⇒ T. checks answers and then displays the answers on the screen.  
**Answer the following:**  
1- What do the writer do in disasters?  
2- What does the organization do for victims?  
3- Extract from the text:  
   - Disasters: ............... , ............... , ...............  
   - The opposite of: receive ............... sell ...............  
Ss connect between the pictures, names of volunteers and the stories below. |

---

**Consolidation**

---
**Learning Objectives of the Lesson:**

- To talk about the pictures
- To read a text for scanning
- To read a text for skimming
- To meaning from context
- To introduce opinions

**New Vocabulary:**


**Aids included in the computer program**

- pictures – video – activities

**Words to be revised:**

- Education – health care – services – organization – war – peace – disease

---

<table>
<thead>
<tr>
<th>Steps</th>
<th>Procedures</th>
</tr>
</thead>
</table>
| Warm-up | ⇒ Greetings  
⇒ Puzzle (UN) |

<table>
<thead>
<tr>
<th>Revision</th>
<th>Presentation</th>
</tr>
</thead>
</table>
| ⇒ T. Revises homework with Ss………. Checks the answers  
⇒ T. revises the services that are given to Palestinians by UNRWA.  
⇒ T. asks some oral questions about the UN and its work in the counties that need help as we do in Palestine especially because of war or occupation.  
⇒ T. Introduces the new vocabulary with their pictures via computer.  
⇒ Ss practice saying the words.  
⇒ Ss repeat CGP  
⇒ Ss describe the pictures.  
⇒ Ss put the words in meaningful sentences. |

*Complete from the list:*

- [agency – official – carry out – friendship]

1-The UN’s staff ………….. the actions that are agreed by member countries.

2-One of the UN’s aims is to build ………….. between countries.

3-UNRWA is one of several ………….. of the UN.

4-Arabic and English are two of the ………….. languages of the UN.
Part 1

Pre-reading questions:
⇒ Ss. Read the text from: Line 1 to 18
⇒ Ss. Look at the computer screen to answer the following:
  ▪ How many people were killed in world wars 1 and 2?
  ▪ Who carries out the UN’s future actions?

While Reading
⇒ Ss listen to the text so as to answer the while-reading questions.
⇒ T. explains the task
⇒ Ss get in groups to answer the questions.
⇒ T. checks answers and then displays the answers on the screen.

Read the first part and answer:
1- How many people were killed in world war 1?
2- When and where was the new UN created?
3- How many official languages are used in the UN?
4- Extract from the passage:
  The meaning of: horrible ........ Building ...............  
  The opposite of: peace ........ special ...............low .......

Ss watch a video of World War 1 and 2

Part 2

Pre-reading questions:
⇒ Ss. Read the text from: 19 to the end of the text
⇒ Ss. Look at the computer screen to answer the following:
1- What does UNICEF stands for?
2- When did the smallpox finally disappear?

While Reading
⇒ Ss listen to the text so as to answer the while-reading questions.
⇒ T. explains the task
⇒ Ss get in groups to answer the questions.
⇒ T. checks answers and then displays the answers on the screen.
<table>
<thead>
<tr>
<th>Steps</th>
<th>Procedures</th>
</tr>
</thead>
</table>
| **Presentation** | **Read the second part and answer:**  
1- Which organization is responsible of the disappearance of the smallpox?  
2- What are the works that UNRWA does to Palestinians?  
3- What does the word “horrible” mean?  
4- Do you think the UN is perfect?  
4- Extract from the passage:  
   The meaning of: continue .......... adults ............  
   The opposite of: appear .......... Firstly ............  
   Write in full form: UN .......... IT ................. |
| **Evaluation** |  |
| **Consolidation** | **Post Reading**  
At the end of the lesson, Ss watch a video for UN deeds and the importance of its role to prevent wars and help people then they discuss what they have seen. |
Learning Objectives of the Lesson:

⇒ To predict what the text about by looking at the title
⇒ To read a text for scanning
⇒ To read a text for skimming
⇒ To evaluate situations and introduce opinions

New Vocabulary:

Attention – ignore – selfish – run away
– dramatic – scream – even though – negative – positive

Aids included in the computer program:
pictures – activities

Words to be revised:

Upset – parents – control

Steps | Procedures
--- | ---
Warm-up | ⇒ Greetings
⇒ Game (hanged-man)

Revision

⇒ T. Revises homework with Ss......... Checks the answers
⇒ T. asks some oral questions about forests as:
  - Have you ever helped your friend? How?
  - Have you ever had a problem?
  - Did anybody help you? etc....
⇒ Introducing the new vocabulary with their pictures via computer.
⇒ Ss practice saying the words.
⇒ Ss repeat CGP
⇒ Ss describe the pictures.
⇒ Ss put the words in meaningful sentences.
⇒ Ss answer the following exercise:

*Complete from the list:

attention – ran away – screamed – even though

1. ………. I was ill, I went to school.
2. The girl …………. aloud. When she saw a lion.
3. We should pay ………….. to teachers.
4. When I saw a dog, I ……………

Presentation

Evaluation

Pre-reading

SB Ex.1: Look at the page below and answer these questions:

⇒ Ss look at the title and the cartoon and then say who this website might be for.
⇒ Ss look at the start and end of each letter and then say which letter asks for help and which one gives help.
<table>
<thead>
<tr>
<th><strong>While Reading</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Letter 1</strong></td>
</tr>
<tr>
<td>➢ Ss listen to the first letter so as to answer the following questions.</td>
</tr>
<tr>
<td>➢ Ss get in groups to answer the questions.</td>
</tr>
<tr>
<td>➢ T. checks answers and then displays the answers on the screen.</td>
</tr>
<tr>
<td><strong>Answer the following:</strong></td>
</tr>
<tr>
<td>1- Why is the writer upset?</td>
</tr>
<tr>
<td>2- How many brothers and sisters has he got?</td>
</tr>
<tr>
<td>Extract from the passage:</td>
</tr>
<tr>
<td>The opposite of: pay attention .......... youngest ..........</td>
</tr>
<tr>
<td>The meaning of: levels .......... Father and mother ..........</td>
</tr>
</tbody>
</table>

| **Letter 2** |
| ➢ Ss listen to then read the second letter in order to answer the following questions. |
| ➢ Ss get in groups to answer the questions. |
| ➢ T. checks answers and then displays the answers on the screen. |
| **Answer the following questions:** |
| 1- What does “probably” mean? |
| 2- Extract from the text: |
| The opposite of: free ............... good ............... |
| The meaning of: escape ............... |

<p>| <strong>Letter 3</strong> |
| ➢ Ss listen to then read the third letter in order to answer the following questions. |
| ➢ Ss get in groups to answer the questions. |
| ➢ T. checks answers and then displays the answers on the screen. |
| <strong>Answer the following questions:</strong> |
| 1- What did Fuad do to solve the same problem? |
| 2- Extract from the text: |
| The opposite of: agree ............. noisily ............. |
| The meaning of: speak to ........ Small ........ |</p>
<table>
<thead>
<tr>
<th>Steps</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation</td>
<td>Part 3&lt;br&gt;⇒ Ss listen to then read the fourth letter in order to answer the following questions. &lt;br&gt;⇒ Ss get in groups to answer the questions. &lt;br&gt;⇒ T. checks answers and then displays the answers on the screen. &lt;br&gt;<strong>Answer the following questions:</strong>&lt;br&gt;1- Where is Rosa from? &lt;br&gt;2- What is Rosa’s solution for the problem? &lt;br&gt;3- Extract from the text:&lt;br&gt;    The opposite of: trouble .................. all ...............&lt;br&gt;    The meaning of: true ...................... Cheerful ...............&lt;br&gt;<strong>Post Reading</strong>&lt;br&gt;At the end of the lesson, Ss discuss the solutions and say which one is the most suitable and then they write their suggestions to solve the problem.</td>
</tr>
</tbody>
</table>
### Learning Objectives of the Lesson:
- To describe photos
- To match pictures with their paragraphs
- To read a text for scanning
- To read a text for skimming
- To extract meaning and opposites

### New Vocabulary:
- Ages – at last – rude – half-way –
- Getting used to – felt like – homesick –
- Light up don’t mind

### Aids included in the computer program
- Pictures – using internet to check an email
- (web-quest) – related video – activities

### Words to be revised:
- Polite – culture – fireworks – several –
- Crowded

### Steps | Procedures
--- | ---
**Warm-up** | ⇒ Greetings
| ⇒ Spider gram: Asian countries.

**Revision** | ⇒ T. Revises homework with Ss……….. Checks the answers.
| ⇒ T. asks some oral questions about China as:
- Where is China located?
- What is the capital of China?
- What is China famous for?
- How many people live there? Etc….

**Presentation** | ⇒ Introducing the new vocabulary with their pictures via computer.
| ⇒ Ss practice saying the words.
| ⇒ Ss repeat CGP
| ⇒ Ss describe the pictures.
| ⇒ Ss say the opposite of some words.
| ⇒ Ss put the words in meaningful sentences.
| ⇒ Ss answer the following exercise:

*Complete from the list:*
- Rude – homesick – getting used to – ages

1. I am ............... to living under pressure.
2. Ali travelled to the USA, he feels ............... to his country Palestine.
3. We haven’t seen you for ...........
4. That boy isn’t polite, he is ............

**Evaluation** | SB Ex.1: Ss describe the photos, try to find out which country is it and which culture they show.
| ⇒ T. helps Ss in saying sentences describing the pictures.
**Presentation**

⇒ *Ss watch a video of China, Great Wall and the national day to answer the following question:*

* Get Ready to watch a video and write what things you have seen.

**The text**

*Ss use their own computers and click on the link www.mail.yahoo.com to go through a WEB-QUEST of an email.*

**Pre-reading questions:**

⇒ *Ss click on the link and sign in to yahoo mail in a WEB-QUEST.*

⇒ *Ss Click on the INBOX MAIL to check the new email.*

⇒ *Ss read the email to answer the multiple-choice question:*

Read the following email then Click on the right answer:

1- **Who sent the email?**
   (Lucy – Yasmeen – Huda)

2- **When it was sent?**
   (06/07 – 06/06 – 06/05)

3- **When did Lucy arrive in China?**
   (Three months ago– five months ago– six months ago)

4- **How many people live in Shanghai?**
   (about 13 million– about 12 million– about 14 million)

⇒ *Ss are to have 4 minutes to check the links integrated below the email to get more information about the Great Wall and Shanghai City.*

**While Reading**

⇒ *Ss read the text so as to answer the following questions .*

⇒ *Ss get in groups to answer the questions.*

⇒ *T. checks answers and then displays the answers on the screen.*
<table>
<thead>
<tr>
<th>Steps</th>
<th>Procedures</th>
</tr>
</thead>
</table>
| Presentation | **Answer the following:**  
|             | 1- *Is the American culture similar to the Chinese culture?*  
|             | 2- *What language is Lucy learning now?*  
|             | 3- **Extract from the text:**  
|             |   The meaning of: two times .......... In contact .....  
|             |   The opposite of: boring .......... quietly ............  
| Evaluation  | **Post Reading**  
|             | At the end of the lesson, Ss watch a video for China again in order to consolidate what they have studied.  
| Consolidation | **Post Reading**  
|             | At the end of the lesson, Ss watch a video for China again in order to consolidate what they have studied.  
|             |
### Learning Objectives of the Lesson:

- To predict what the article is about
- To read a text for scanning
- To read a text for skimming
- To deduce meaning from context
- To read a text aloud

### New Vocabulary:

- Athletes
- Included
- Developments
- Able-bodied
- Connect
- Bionic
- Disabilities
- Impossible

### Aids included in the computer program

- Pictures
- Related video
- Activities

### Words to be revised:

- Special
- Wheelchairs
- Replied
- Basic
- Bends
- Medical

### Steps | Procedures
--- | ---
Warm-up  | ⇒ Greetings  
         | ⇒ Body parts game.

### Revision  

⇒ T. Revises homework with Ss……… Checks the answers
⇒ T. revises the medical machines they have seen in the previous lesson.
⇒ T. asks some oral questions about new medical operations and machines as:
  - Have you ever seen a medical operation?
  - What was it? Was it successful?
  - Do you like to be a doctor in the future? why?
  - Do you help disabled people? How? etc...
⇒ Introducing the new vocabulary with their pictures via computer.
⇒ Ss practice saying the words.
⇒ Ss repeat CGP
⇒ Ss describe the pictures.

### Evaluation

*Complete from the list:

Bionic – impossible – connect – developments

1- There are many new ............
2- Some disabled people use ............ legs.
3- It's ............... to live under water.
4- You can ............. the internet to your computer.

SB Ex.1: Look at the charts. Describe changes to medical care for Palestinians since 1996.
⇒ T. helps Ss in saying sentences describing the charts.
<table>
<thead>
<tr>
<th>Presentation</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-reading questions:</strong></td>
<td></td>
</tr>
<tr>
<td>Predict the relationship between the photos and the title</td>
<td></td>
</tr>
<tr>
<td>⇒ Ss read the title and look at the pictures below to answer the question: What subject do you think this article will be about?</td>
<td></td>
</tr>
<tr>
<td><strong>While Reading</strong></td>
<td></td>
</tr>
<tr>
<td>Part one (the first column)</td>
<td></td>
</tr>
<tr>
<td>⇒ Ss listen to and then read the text so as to answer the following questions.</td>
<td></td>
</tr>
<tr>
<td>⇒ Ss get in groups to answer the questions.</td>
<td></td>
</tr>
<tr>
<td>⇒ T. checks answers and then displays the answers on the screen.</td>
<td></td>
</tr>
<tr>
<td>Answer the following questions:</td>
<td></td>
</tr>
<tr>
<td>1- Who is Dr Julia Way?</td>
<td></td>
</tr>
<tr>
<td>2- Are there any developments in medicine?</td>
<td></td>
</tr>
<tr>
<td>2- Extract from the text:</td>
<td></td>
</tr>
<tr>
<td>The meaning of: very big ......answered ..........</td>
<td></td>
</tr>
<tr>
<td>The opposite of: excluded .......... possible ......</td>
<td></td>
</tr>
<tr>
<td>Part 2 (the second column)</td>
<td></td>
</tr>
<tr>
<td>⇒ Ss read the text to answer the following questions.</td>
<td></td>
</tr>
<tr>
<td>⇒ Ss get in groups to answer the questions.</td>
<td></td>
</tr>
<tr>
<td>⇒ T. checks answers and then displays the answers on the screen.</td>
<td></td>
</tr>
<tr>
<td>Answer the following questions:</td>
<td></td>
</tr>
<tr>
<td>1- What did Dr. Julia say about the Cheetah Legs?</td>
<td></td>
</tr>
<tr>
<td>2- What should anybody do if he lost an arm?</td>
<td></td>
</tr>
<tr>
<td>2- Extract from the text:</td>
<td></td>
</tr>
<tr>
<td>The meaning of: new ..........began ..........</td>
<td></td>
</tr>
<tr>
<td>The opposite of: wins .......... general ..........</td>
<td></td>
</tr>
<tr>
<td><strong>Post Reading</strong></td>
<td></td>
</tr>
<tr>
<td>At the end of the lesson, Ss watch a video for new medical operations, new bionic body parts, new machines for disabled people and they discuss what they have seen.</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix (7)

**Referees' Committee**

Questionnaire = 1  
Achievement test = 2  
The suggested program = 3  
Attitude Scale = 4

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Qualification</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>1</td>
<td>Prof. Ezzo Afanna</td>
<td>Faculty of Education (IUG) (PHD)</td>
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<td>√</td>
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<tr>
<td>2</td>
<td>Dr. Moh'd Atiya A. Raheem</td>
<td>Al Aqsa University (PHD)</td>
<td>√</td>
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<td>3</td>
<td>Dr. Nazmi Al Masri</td>
<td>Faculty of Arts (IUG) (PHD)</td>
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<td>7</td>
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<td>Ministry of Education (PHD)</td>
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<tr>
<td>8</td>
<td>Dr. Jameel Al Tahrawi</td>
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<tr>
<td>9</td>
<td>Dr. Ahmad Allouh</td>
<td>UNRWA (PHD)</td>
<td>√</td>
<td>√</td>
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<tr>
<td>10</td>
<td>Mr. Kamal Hassaballah</td>
<td>UNRWA (BA)</td>
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<td>11</td>
<td>Mr. Nabeel Al Haj</td>
<td>UNRWA (BA)</td>
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<td>12</td>
<td>Mr. Tayseer Mesmeh</td>
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<td>Mr. Ahmad Herzallah</td>
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<td>16</td>
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<td>17</td>
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<tr>
<td>18</td>
<td>Mr. Moh'd Al Faleet</td>
<td>UNRWA (MA)</td>
<td>√</td>
<td>√</td>
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<tr>
<td>19</td>
<td>Mr. Tawfiq Abu Huwaishel</td>
<td>UNRWA (MA)</td>
<td>√</td>
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<tr>
<td>20</td>
<td>Mr. Moneer Hassan</td>
<td>UNRWA (MA)</td>
<td></td>
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Personal details

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The Islamic University-Gaza  
M.ED  
English Curriculum & Teaching Methods

1996-2000  
Al Aqsa University (The Governmental College of Education)-Gaza  
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English Language Teaching

Work experience

2000- STILL  
A teacher of English language - UNRWA Schools-Gaza  
1998-2000  
A tourists' guide - Beit Sahour Company for Tourism
The Effect of Using Computer Programs on 9th Graders' Reading Comprehension at UNRWA Schools