The Effect of an Instructional Reading Program Based on the Successful Readers’ Strategies on Jordanian EFL Eleventh Grade Students’ Reading Comprehension

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Abstract

The study investigated the effect of a reading instructional program based on the strategies of successful readers on Jordanian secondary stage students’ reading comprehension in English. The participants of the study were 50 first secondary stage male students who were chosen purposefully from the northwestern badia directorate of education. Based on the results of the pretest, two groups were used: An experimental group which consisted of 26 less successful readers who were taught through the instructional program which was designed by the researchers, and a control group of 24 students who were taught the textbook material. The training lasted for two months during the first semester of the academic year 2013-2014. The results of the study showed that there was a significant difference at \( \alpha = 0.05 \) between the two mean scores of the experimental and control groups in the post reading test in favor of the experimental group due to the teaching strategy. In light of the findings, the researchers presented some recommendations to English as a foreign language (EFL) teachers and the Jordanian Ministry of Education.

Key words: English as a foreign language, Reading comprehension, Reading strategies, Successful readers

Introduction

Reading plays a primary role in learning the English language. It is the first skill that (EFL) students need to enhance their information, increase their vocabulary knowledge and develop other language skills. According to Ling (2011), reading plays an essential role in the process of language learning and teaching. It is the first skill that students should develop because it is considered a main source for language input. Anderson (1984) stresses that reading is the most important skill that should be mastered to ensure success in learning. He emphasized that foreign language readers need to develop their reading ability more than any other skill to ensure professional and academic success.

Goodman (1967) defines reading as "a psycholinguistic guessing game" and "a selective process". Anderson (1999), not different from Goodman, believes that reading is an active process in which the readers interact with the text to build the meaning using their background knowledge and experience. Grellet (1981,p.7) defines reading as a “constant process of guessing”. He believes that the reader uses more than one strategy to get the meaning of the text. The reader starts surveying the text then makes hypothesis about the content then makes predictions and confirm these predictions by skimming and re-reading the text for new predictions and more details.” Understanding a written text means extracting the required information from it as effectively as possible”. Ebrahimi (2012) views reading as a complex and interactive process that involves the characteristics of the readers, texts, and functions. Moreover, he added that reading is an individual process that requires different interpretations to different readers.

Al-Sa’oud (2002) states that reading comprehension is the final goal of any reading task. As a result, he believes that the readers have to employ different reading strategies, knowledge of the content, and experience to comprehend the reading text and obtain the meaning. Reading comprehension is considered the ultimate goal of reading. According to Snow (2002), reading comprehension is an ongoing reading process in which the reader constructs the meaning from the printed text through an interactive process. To Snow, reading comprehension requires three main components which vary in the phases of reading (pre-reading, reading, post reading). These components are: the reader interacts with the text using his/her abilities, various sources of knowledge such as linguistic and discourse knowledge, and experiences, the text which might be a printed or electrics text, and the activity which includes the reader’s purposes and process. Along this line of thought, Woolley (2011), for example, defines reading comprehension as the process of extracting meaning from the text while Pakhare (2011,p.1) considers it as “the level of understanding of a passage or text”. Gagen (2007) defines reading comprehension as an active, complex, and important process in which the reader interacts with the text using his/her vocabulary knowledge and reading strategies.

In this regard, a good question might be raised: How does reading comprehension develop? Developing students’ reading comprehension is not a simple task, teachers and parents may use different reading
strategies and techniques that might help them to develop their students’ reading comprehension. For example, Block and Israel (2005) suggests a number of reading strategies that might help students to develop their students’ reading comprehension. Thinking aloud, summarization, asking questions, and making connections were suggested good strategies to develop students’ reading comprehension. Moreover, Rampur (2011) suggests various strategies to improve reading comprehension. He emphasizes the importance of finding the appropriate place to read. At first, readers should preview the reading text such as looking into the title, introduction, and sections. They might take notes, make predictions; games might play a great role in this respect since they should be selected according to the students’ age. Such games might include storytelling, spelling test, and many other strategies which are beneficial to improve students’ reading comprehension.

Reading in a foreign language is not the same as the first or second language since readers of a foreign language have very few opportunities to read in English. Reading is important for foreign language readers but it seems that many foreign language readers suffer a lot to learn to read adequately. Most scholars agree that reading in a foreign language is slower and more difficult than reading in the first language; EFL readers may face many problems while reading such text difficulty and lack of reading strategies (Anderson, 1984; Al-Qadoumi, 1995; Elashshab, 2008,Skudiené, 2002).

It seems that many students in today’s school struggle with learning to read. Besides, many teachers and parents believe that reading weakness is a realistic problem that may affect students’ self-confidence and motivation as well as their reading in later. Teaching reading is not a simple matter; teachers should change their teaching methods and use a lot of reading strategies to help students become successful readers. The current pedagogy can help the specialists to recognize what skills students must learn to read well (Armbuster and Osborn, 2003).

Despite the fact that the reading skill is one of the most basic skills in a foreign language learning and teaching, some foreign language teachers have continued to teach reading just as silent reading or reading aloud. This reason, may contribute to students’ weakness in English in general and in reading in specific are still weak in English especially in reading. Using the most appropriate reading strategies that can develop students’ reading ability could be a solution to this problem.

Research studies that go back to the 80’s reported that many Jordanian students suffer in their reading abilities, Al-Makhzoumi (1986, p.20) stated that “the majority of the Jordanian students are slow readers and have many bad reading habits”. This situation is intensified when a large number of Jordanian teachers still teach the reading texts traditionally either as a translation text or just read the text aloud, and then ask students to answer the comprehension questions following the reading text. Several studies were conducted the EFL Jordanian context(e.g., Al-Ansi, 1992;Al-Jamal, Hawayleh, and Al-Jamal ,2013; Al-Sarairah, 2006; Frahihat, 2003). These studies found that Jordanian students face many problems during reading: Their reading comprehension proficiency level is moderate and reading comprehension instruction is also neglected by their teachers. They have difficulty in understanding what they read, lack knowledge of using reading strategies and activating them to find the meaning of the text. Jordanian students are poor comprehenders of reading texts.

In this respect, educational researchers suggested a number of reading strategies that teachers may use to develop their readers’ reading skill. For example, Brown (2001) lists these strategies: skim the text for main ideas, scan the text for specific information, and analyze vocabulary, silent reading, and identify the purpose of reading; while Block and Israel (2005) mention predicting, asking questions and summarizing as significant reading strategies. Using dictionaries, skimming, guessing meaning and scanning are stated by Rokhsari (2012) and Huang and Esliam (2013).

There may be a relationship between successful foreign language learning strategies and students’ reading comprehension to learn because successful learners are more motivated than less successful ones. To be specific, there are two types of learners, unsuccessful learners and successful learners of English. Unsuccessful learners are “painful sufferers, doomed to bear the brunt of humiliation, excessive demands, unbearable stress, and play the role of being losers” (Millorod, 2001, p.405). Unsuccessful learners of English may face various problems inside the classroom; these problems are different. One of them is that they may not select the best learning strategies. Moreover, students may become uninterested to their lessons and teachers; they may ignore their teachers’ instructions or keep silent all the time without any participation (Khasawneh, 2010).

Al-Gudah (1987), Alkhwaldeh (2011), Alkhwaldeh (2012), and Mahmud (2000) reported that many of the Jordanian EFL students use various reading strategies that may help them to get meaning and understand the text such as using prior knowledge, analyzing vocabulary items, and using cognitive strategies such as skimming for information and predicting the content of the text; yet their reading abilities suffer a lot of problems. Moreover, many Jordanian EFL learners still suffer a lot in determining which reading strategy is
more useful than another and how they can apply it in their endeavour to become successful readers.

**Statement of the Problem**

Most of the Jordanian students still find difficulty in comprehending what they read. This difficulty may be due to the students’ lack of knowledge of the reading strategies that may improve their comprehension abilities. Also, as instructors of English, the researchers noticed that many of their students suffer from low reading proficiency in general and in the use of proper reading strategies in particular. A number of Jordanian researchers such as Amoush (2012), Jallad (2006), and Jarrah (2008) reported that the low reading comprehension which students suffer from may refer to the inappropriate use of reading strategies. The researchers also believe that reading strategies especially those of successful readers can be taught properly in order to develop students' reading comprehension.

**Research Question**

This study aims at answering the following question:

Are there any significant differences between the students' scores in the experimental and control groups on the post reading comprehension test due to the teaching strategy (the instructional program and conventional teaching)?

**Significance of the Study**

It is hoped that the results of the study will provide the curriculum designers, textbooks writers may benefit from this study to incorporate the reading strategies of the successful readers in Action Pack series. They may also be helpful to Jordanian teachers to use these strategies through providing them with practical procedures that help them in improving students' reading comprehension.

**Operational Definitions of Terms**

**Successful readers:** In this paper, they are the students who got seventy and above on the reading comprehension test.

**Unsuccessful readers:** In this paper, they are the students who got sixty nine and or less on reading comprehension test.

**Reading strategies:** They are “operations, steps, plans, routines used by the learners to facilitate the obtaining, storage, retrieval, and use of information” (Rubin, 1987, p.19). In this study, they are the reading strategies of the successful readers that are utilized by the first secondary grade students and utilized by the instructional program.

**Successful reading strategies:** They are the strategies which are used by the successful readers in the achievement test.

**Limitation of the Study**

1. The study is limited to the eleventh grade students at Northwestern Badia Directorate of Education schools, so the results are generalized to students studying in similar contexts.
2. The study was carried out during the first semester of the academic year 2013-2014.

**Related Studies**

The studies that investigated the reading strategies of successful readers used different concepts such as good and poor readers, high and low achievers high and low proficient readers. The researchers found enough studies in this area, but they selected the most relevant ones to the present study. The researchers selected some of these studies and reported them in this paper.

Hosenfeld (1977) investigated the reading strategies used by successful and unsuccessful Turkish readers. The subjects of the study were 40 students. To collect the data, a reading strategies map and a think aloud protocol were used for both successful and less successful readers. The study revealed that successful readers keep the meaning of the passage in mind, read the passage in broad phrases, ignore words which are not important, and have positive self-concept. On the other hand, unsuccessful readers lose the meaning of sentences when they decode them, read in short phrases, ignore unimportant words, and have a negative self-concept.

Spring (1985) investigated the reading comprehension strategies used by first year university students classified as good and poor readers. A reading questionnaire consisting of 15 items was used to collect the required data. The participants’ of the study were 25 students (13 males and 12 females) named as poor readers while the good readers were 21 students (12 female and 9 male). The study results showed that good readers used reading strategies such as prior knowledge and identifying the main idea, and identifying the logical relationship within the text more than poor readers who used rereading, underlining, ask and answer questions.
revealed that the scanning strategy was used more than the skimming strategy in both groups (experimental and control groups).

Loranger (1994) conducted a study on both successful and less successful readers to find out the amount of information processing they differ in. Six eleventh grade students classified as successful and less successful readers participated in the study. To collect the data, the students were interviewed and videotaped during the study. The findings of the study showed that successful readers were active and used more reading strategies than less successful students.

Saricoban (2002) aimed to determine the reading strategies that both successful and less successful readers used during the three reading phases of reading in EFL. The participants of the study were 110 preparatory students for language studies in the English Department at Hacettepe University. A reading strategies inventory and an achievement test were used to collect the required data. The study revealed that successful readers differed in such reading strategies as analyzing in the while-reading stage, evaluating and commenting in the post-reading stage.

Uzuncakmak (2005) investigated the reading strategies used by successful and unsuccessful readers of the upper intermediate students at the Middle East Technical University students. The participants of the study were 112. The data were obtained from a reading strategy questionnaire and reading tasks. The findings of the study showed that successful readers used top-down strategies while unsuccessful readers used bottom up strategies. The study recommended that such instructional program might be beneficial for students. The researcher recommended that teachers of English as a foreign language should give some concentration on reading strategies to motivate students to use them and use more reading tasks based on these strategies. Reading strategies are one of the most important factors that help students comprehend and increase their ability to read.

Tashtoush (2008) investigated the reading comprehension and strategies used by Jordanian EFL secondary stage students in four text types situations. The population of the study consisted of 173 students at Jordanian public schools in Mafraq. A schema–based reading test and student’s questionnaire were used to collect the data. The study revealed that EFL teachers always used prediction and scanning strategies while they sometimes used guessing meaning, skimming and paraphrasing. In contrast, Jordanian EFL students used skimming, guessing meaning, prediction, scanning and paraphrasing strategies in a descending order with the descriptive text. They also used skimming, prediction, guessing meaning, paraphrasing and scanning strategies in a descending order with the cause-effect text. They used skimming, prediction, guessing meaning, scanning and paraphrasing strategies in a descending order with the problem solving text. They used skimming, prediction, guessing meaning, paraphrasing and scanning strategies with the literature extract.

Shang (2010) investigated the frequencies and differences of four reading strategies used by good and poor Taiwanese readers. The participants were 110 students (27 males and 83 females) and they ranged in ages from 21-26 years old. A reading training program was carried out in 54 hours which included ten reading strategies classified in four categories (Cognitive, metacognitive, compensation, and testing). The findings of the study indicated that good and poor readers used more testing strategies such as skimming and eliminating techniques to comprehend the texts. Results also showed that good readers use more and varied reading strategies than poor readers.

Rokhsari(2012) tried to examine the relationship between reading comprehension and reading, cognitive, metacognitive, and test-taking strategies. He also tried to find out the reading strategies used by successful and less successful readers. Sixty intermediate students participated in the study, they were 14 male and 46 female students and they were 23-26 years old. To collect the data, the researcher used a reading comprehension test and a reading strategy questionnaire. The findings of the study revealed that successful readers used reading strategies more than less successful ones and they also used metacognitive and cognitive strategies more than less successful ones. In contrast, less successful readers used test taking strategies more than successful ones.

Looking back into these studies, the researchers noticed that successful readers and unsuccessful readers differ in their use of reading strategies. For example, successful readers use reading strategies more than unsuccessful ones. This might arise from the fact that successful readers are more intelligent, active, and
motivated readers. The current study investigated the effect of a reading instructional program based on the successful readers' strategies on developing Jordanian secondary-stage students' reading comprehension in English. This study is different from the previous studies in the sense that it started with surveying the reading strategies used by successful readers in the classroom, and then built a reading instructional program based on them, implemented it on secondary stage students for two months, then tested its effect on their reading comprehension achievement. The aim of this study was to help students become better users of the successful reading strategies. The researchers felt that there is a need to help students acknowledge the importance of reading strategies in developing their reading comprehension ability if used properly in the classroom. The researchers also noticed that the local or Arab studies which utilized a similar procedure are rare or even lacking. The researchers hope that his study might fill a gap in this area.

**Methods and Procedures**

This section presents the methodology which the researchers followed in this study. It includes a description of the participants of the study, the instruments, the validity and reliability of the instruments, design of the study, variables of the study, the statistical analysis used to analyze the results of the study, and finally steps followed in implementing the study.

**Participants of the Study**

Fifty less successful readers were chosen purposefully and were divided into an experimental and control groups: 24 students formed the experimental group while 26 students were the control group. Both groups were selected according to their scores on the reading comprehension test since they got the lowest scores among the other students.

**The Instructional Program**

To achieve the purpose of the study, the researchers designed a reading instructional program based on the results of the reading comprehension test. The total number of reading strategies was 11. These strategies were as follows: Find answers to questions, prediction, rereading, and skimming, scanning, guessing meaning from context, using dictionary, finding pronoun reference, analyzing, summarization, and synthesizing. After deciding the reading strategies, the researchers designed different reading activities in order to achieve the outcomes of the program and to achieve a high level of participation among the students to develop their reading comprehension.

**Rationale for Designing the Instructional Program**

This instructional program aimed at providing students with specific procedures and reading activities that hopefully help them improve their students' reading comprehension. This instructional program includes 11 reading strategies. EFL readers are primarily in need of mastering these strategies because they have various problems in comprehending what they read. For most of the EFL readers, reading comprehension stands as an embarrassing obstacle that may negatively affect their motivation, participation, and attitudes towards English language.

**The reading instructional program have the following objectives:**

1- improve the students’ reading comprehension.
2- increase their knowledge of reading strategies, of successful readers.
3- raise their awareness of the benefits of using the reading strategies especially those under study.
4- train them to use the reading strategies under study.

**Implementation of the Instructional Program**

Before implementing the program, the researchers explained the nature of the program and its outcomes to the students in Arabic then he stressed the significance of learning these strategies since they may improve their reading ability and help them to get better achievement in the English language. The researcher asked some students about their past experiences in reading English and if they used any strategies. They answered that they faced many problems and sometimes they avoid answering some questions because they found them difficult to be answered. The instructional program was designed along the three stages of reading. Every strategy has a number of activities and students were asked to read the passage and find answers based on
using the suitable reading strategy. To teach the eleventh reading strategies that were chosen in the instructional program, the researcher followed these procedures:

1- **Introducing the strategy:** It is defined and its aims and uses were mentioned.
2- **Modeling its use:** The strategies were modeled to the students to show how to use them.
3- **Timing:** The appropriate time for each strategy was decided.
4- **Practicing:** Students were asked to use the suitable reading strategy to read and answer the given questions.
5- **Providing feedback:** Students were helped to find out the difficulties they face; the appropriate feedback was provided.

**Research Instrument**

The study utilized a reading comprehension test to divide students into successful and unsuccessful readers.

**The Reading Comprehension Test**

The researchers designed a pre-post reading comprehension test. The test included two reading passages with varied questions. The total number of the questions was 15. Table 1 presents the questions that belong to each stage, its strategies, question types, and the percentages distributed along the two texts of the test.

<table>
<thead>
<tr>
<th>Reading stage</th>
<th>Question Number</th>
<th>Reading strategy</th>
<th>Question Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-reading stage</td>
<td>1</td>
<td>Find answers to questions</td>
<td>Completion</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Predictions</td>
<td>Completion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Finding pronoun reference</td>
<td>Multiple choice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Guessing meaning from context</td>
<td>Multiple choice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Using dictionary</td>
<td>Multiple choice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Re-reading</td>
<td>True / False</td>
<td></td>
</tr>
<tr>
<td>While reading stage</td>
<td>6</td>
<td>Scanning</td>
<td>Completion</td>
<td>74%</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Skimming</td>
<td>Matching</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Using Dictionary</td>
<td>Multiple choice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Finding pronoun reference</td>
<td>Completion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Scanning</td>
<td>True / False</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Guessing meaning from context</td>
<td>Multiple choice</td>
<td></td>
</tr>
<tr>
<td>After reading stage</td>
<td>14</td>
<td>Analyzing</td>
<td>Completion</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Summarizing</td>
<td>Completion</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>11</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that the total number of the reading strategies was 11 while the questions were 15. One hour and a half was given to the students to answer the given questions.

**Validity of the Test**

**Content validity:** To ensure the validity of the reading comprehension test, it was submitted to 10 EFL specialists, supervisors and teachers. The test was revised in view of the jury’s comments and recommendations. **Construct Validity:** To ensure the construct validity of the reading comprehension test, it was piloted on a sample of fifty-five students who were chosen from outside of the participants of the study. Pearson correlations of the test items with the whole degree of the test, stages of reading and reading strategies were calculated. The values of the correlation coefficients for the test and its items were above 0.20 which indicates that the quality of the test was acceptable to be included in the study.

**Internal Validity:** To ensure the internal validity of the reading comprehension test in terms of the reading strategies, correlation coefficients for the test strategies were calculated by using Pearson correlation. The results of the inter-correlation coefficients of the reading strategies of the test ranged between 0.50-0.90. In addition, the inter-correlation coefficients of the reading strategies according to the three stages of teaching reading were calculated using Pearson coefficients. The results of the inter-correlation coefficients of the reading strategies with the test as a whole ranged between 0.79-0.93, and the inter–correlation coefficients among the stages of the test ranged between 0.55-0.69 which means that it is a good indicator of the quality of to adopt in the study.

**Reliability of the Test:** To establish the reliability of the test, it was given to the same pilot study two weeks after the pretest application according to the test and retest procedure; Pearson correlation coefficients between the first and the second application were used. The results of the internal-consistency of the test was 0.86, the stages of reading ranged between 0.80-0.95. Moreover, the internal consistency of pre-reading strategies ranged between 0.77-0.87 and the while reading strategies ranged between 0.75-0.90; the post –reading strategies
ranged between 0.77-0.87. In addition, the stability index of the test was 0.80 while it ranged between 0.75-0.77 for pre-reading strategies. In contrast, while reading strategies ranged between 0.84-0.95, while the post reading strategies ranged between 0.77-0.86. This means that the reliability of the test is accepted.

Results of the Study

To answer the question which asked if there were any significant differences at $\alpha=0.05$ between the students’ mean scores on the reading comprehension test due to the teaching strategy, means and standard deviations of the students’ scores on the pre- and posttests were calculated. Moreover, the researchers calculated the adjusted means and the standard errors of the students’ scores on the posttest due to the teaching strategy; the results are presented in Table 2 below.

Table 2: Means and Standard Deviations of the Students’ Scores on the Pre and Posttests Due to the Teaching Strategy and the Means and Standard Errors of the Posttest

<table>
<thead>
<tr>
<th>Teaching strategy</th>
<th>N</th>
<th>Pretest scores of the test</th>
<th>Posttest scores of the test</th>
<th>Adj. Mean</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Mean</td>
<td>Std. Dev.</td>
</tr>
<tr>
<td>Conventional</td>
<td>26</td>
<td>12.923</td>
<td>1.76</td>
<td>19.154</td>
<td>2.15</td>
</tr>
<tr>
<td>Instructional Program</td>
<td>24</td>
<td>6.167</td>
<td>3.10</td>
<td>28.250</td>
<td>0.73</td>
</tr>
</tbody>
</table>

It can be concluded from Table 2 that there is an observed difference between the two means of the students’ scores on the posttest due to the teaching strategy. To investigate the significance of the observed difference, ANCOVA was used for the students’ scores on the posttest after excluding the students’ scores on the pretest. Table 3 presents the results of this analysis.

Table 3: Results of ANCOVA of the Students’ Scores on the Posttest

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Score Pretest (Covariate)</td>
<td>86.972</td>
<td>1</td>
<td>86.972</td>
<td>124.197</td>
<td>0.000</td>
<td>72.55%</td>
</tr>
<tr>
<td>Teaching strategy</td>
<td>697.359</td>
<td>1</td>
<td>697.359</td>
<td>995.838</td>
<td>0.000</td>
<td>95.49%</td>
</tr>
<tr>
<td>Error</td>
<td>32.913</td>
<td>47</td>
<td>0.700</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1152.480</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that there is a significant difference at $\alpha=0.05$ between the two means of the students at the posttest due to the teaching strategy in favor of the students in the experimental group. The practical significance of the teaching strategy was 95.49 which is classified as a high degree according to Al-Sharbini (1995) classification of the practical significance.

Moreover, to investigate which of the three stages of reading was more affected by the teaching strategy, means and standard deviations of the students’ scores on the pre and posttests according to the three stages of reading were calculated due to the teaching strategy. The adjusted means and standard errors were also calculated for the students’ scores on the posttest. The results are presented in Table 4.

Table 4: Means and Standard Deviations of the Students’ Scores on the Pre and Posttests of the Reading Stages

<table>
<thead>
<tr>
<th>Stage</th>
<th>Teaching strategy</th>
<th>N</th>
<th>Pretest scores of the reading stages</th>
<th>Posttest scores of the reading stages</th>
<th>Adj. Mean</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Mean</td>
<td>Std. Dev.</td>
</tr>
<tr>
<td>Pre-Reading</td>
<td>Conventional</td>
<td>26</td>
<td>1.192</td>
<td>0.78</td>
<td>2.077</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>Instructional Program</td>
<td>24</td>
<td>0.563</td>
<td>0.36</td>
<td>2.875</td>
<td>0.30</td>
</tr>
<tr>
<td>While reading</td>
<td>Conventional</td>
<td>26</td>
<td>1.209</td>
<td>0.31</td>
<td>1.802</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>Instructional Program</td>
<td>24</td>
<td>0.583</td>
<td>0.38</td>
<td>2.625</td>
<td>0.23</td>
</tr>
<tr>
<td>Post Reading</td>
<td>Conventional</td>
<td>26</td>
<td>1.038</td>
<td>0.90</td>
<td>1.192</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>Instructional Program</td>
<td>24</td>
<td>0.479</td>
<td>0.52</td>
<td>2.063</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Table 4 shows that there is an observed difference between the two means of the students’ scores on the posttest due to the teaching strategy. To investigate the significance of the observed difference, MANCOVA was used for the students’ scores on the posttest of the stages of the reading after excluding the students’ scores on the pretest. The results are presented in Table 5.
Table 5: Results of MANCOVA for the Students’ Scores on the Posttest

<table>
<thead>
<tr>
<th>Effect</th>
<th>MANCOVA Test</th>
<th>MANCOVA Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Reading Stage Pretest (Covariate)</td>
<td>Wilks’ Lambda</td>
<td>0.507</td>
<td>13.928</td>
<td>3</td>
<td>43</td>
<td>0.000</td>
<td>49.28%</td>
</tr>
<tr>
<td>While Reading Stage Pretest (Covariate)</td>
<td>Wilks’ Lambda</td>
<td>0.285</td>
<td>35.988</td>
<td>3</td>
<td>43</td>
<td>0.000</td>
<td>71.52%</td>
</tr>
<tr>
<td>After Reading Stage Pretest (Covariate)</td>
<td>Wilks’ Lambda</td>
<td>0.596</td>
<td>9.721</td>
<td>3</td>
<td>43</td>
<td>0.000</td>
<td>40.41%</td>
</tr>
<tr>
<td>Teaching strategy</td>
<td>Hotelling’s Trace</td>
<td>22.290</td>
<td>319.494</td>
<td>3</td>
<td>43</td>
<td>0.000</td>
<td>95.71%</td>
</tr>
</tbody>
</table>

Table 5 shows that there is a significant effect at $\alpha=0.05$ due to the teaching strategy in the students’ scores on the posttest of the stages of reading. To find out which reading stage was more affected by the teaching strategy, ANCOVA was used for the students’ scores on the students’ posttest according to the teaching strategy after excluding the students’ scores on the pretest. The results are presented in Table 6 below.

Table 6: Results of ANCOVA for the Students’ scores on the Posttest according to the Stages of Reading

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Reading Stage Posttest (Covariate)</td>
<td>Pre-Reading Stage Pretest (Covariate)</td>
<td>0.304</td>
<td>1.137</td>
<td>0.029</td>
<td>2.46%</td>
<td></td>
</tr>
<tr>
<td>While Reading Stage Posttest (Covariate)</td>
<td>While Reading Stage Pretest (Covariate)</td>
<td>0.209</td>
<td>0.780</td>
<td>0.382</td>
<td>1.70%</td>
<td></td>
</tr>
<tr>
<td>After Reading Stage Posttest (Covariate)</td>
<td>After Reading Stage Pretest (Covariate)</td>
<td>0.279</td>
<td>1.042</td>
<td>0.313</td>
<td>2.26%</td>
<td></td>
</tr>
<tr>
<td>Teaching strategy</td>
<td>2.602</td>
<td>9.728</td>
<td>0.003</td>
<td>17.78%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>12.035</td>
<td>0.267</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20.920</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows that there are differences at $\alpha=0.05$ between the means of the students’ scores on the posttest due to the teaching strategy in favor of the instructional program. The effect size for the teaching strategy was arranged in a deseeding order as follows: while reading stage strategies with an effect of 62.32%; Post reading stage strategies with an effect of 34.00%; and pre-reading stage strategies with an effect of 17.78%.

These results indicate that there is a strong effect for the teaching strategy on the students’ use on the reading strategies due to the instructional program.

Discussion of the Results

The question of the study examined the effect of an instructional program on developing Jordanian secondary stage students’ reading comprehension. The results as shown in Tables 1-6 showed that there is a statistically significant difference (at $\alpha=0.05$) between the students’ posttest scores in the experimental and control groups due to the teaching strategy in favor of the instructional program. The practical significance for the teaching strategy was 95.49%. It seems that the instructional program succeeded in increasing students’ scores on the posttest.

The researchers believe that the instructional program was designed in a proper way, so it helped in developing students’ self-confidence and participation. It consists of various reading activities with different reading topics that might encourage them to answer the questions without hesitation. One of the aims of the instructional program was to develop students’ reading comprehension through engaging, encouraging, and involving them in different reading activities.

In this respect, the researchers took into consideration the students’ individual differences, so they designed activities that require students to work individually, pairs or in groups. Most of the time, students were asked to do their reading activities individually or in groups. For example, in guessing the meaning from context,
students were asked to read the passage individually to guess the meaning of words. Then, they were asked to work in pairs with the same group to compare their answers and check them in the whole group. Finally, they were asked to compare their answers with another group to check their answers. It’s worth mentioning that such procedure may provide students with benefits such as motivation, good participation, and develop students’ self-confidence. In contrast, the researcher feels that the control group was asked to work in pairs or groups in very few situations because of the very limited number of passages in the students’ book. As a result, the experimental group was expected to achieve higher scores than the control group.

In the researchers’ opinions, students always were encouraged and motivated to use more than one strategy to answer the same question. Moreover, using pictures, dictionaries, and authentic material improved the students’ participation. They feel that sometimes students have to take risks and try to answer even if their answers were wrong. In the next time, they will learn and find their mistakes and try to avoid them.

The improvement in the students’ reading comprehension could have been a result of the number of reading activities which give them the opportunity to practice the strategies without any hesitation. For example, in finding pronoun reference, two reading activities were used to practice the required strategy. Students were given adequate time and they were free to discuss and work in pairs or groups.

Using internet is one of the most important tools that make students feel comfortable and encourage them to use authentic English easily. In the instructional program, students were asked to use the internet and watch videos on reading strategies in the school lap. For example, in using dictionary strategy, students were asked to search the internet and find specific website for dictionary use. Students were also asked to use these websites to check the meaning of words by themselves and they were given an appropriate time to do the task. In the researcher’s opinion, he believes that computer has a positive effect in this respect. It makes them participate effectively and use the internet frequently to find the meaning of words. The participants found that technology is a good way to improve their reading comprehension and learn something new.

In addition, the participants were given an appropriate time while implementing the instructional program to think, and discuss and interact with the teacher to execute the reading activities. So, it seems that this may help students to answer the questions of the test and motivate them to read and answer effectively. Motivation plays a great role in the dramatic progress in reading comprehension. Students were encouraged and motivated to participate in the reading activities inside the classroom. This claim agrees with Ahmadi (2013) who investigated the relationship between motivation and reading comprehension. The findings of his study revealed that motivation had a positive effect on students’ reading comprehension.

The aim of the instructional program was to develop the students’ knowledge of reading strategies and help them to use or utilize these reading strategies in their reading. The students were asked to read aloud and silently, ask questions, work individually or in groups. To promote this idea, the researchers sometimes selected different spokesmen for each group to help students to participate effectively and give them the opportunity to read. In addition, students have the opportunity to use online dictionaries by using the internet to find the meaning of words. The researchers believe that technology is an effective part of the learning process nowadays; it provides students with various options to students to learn English.

The researchers took into consideration the idea of individual learning and group learning. So, they designed some reading activities that require students to participate and share their answers with each other. Moreover, it seems that the instructional program was designed successfully since it is based on the students’ results on the reading strategies inventory towards reading strategies. In this respect, the researcher also believes that the methodology of the instructional program has its effect on students’ reading comprehension. Many researchers such as Khalaji and Vafaeeseresht (2012) and Reza(2013) emphasized the importance of strategy-based program in developing students’ reading comprehension since these programs are provided with specific instructions for teachers to teach such strategies.

One of the important factors in making any instructional program a success is to create a positive classroom atmosphere. The general atmosphere was wonderful and the students were cooperative and followed the researcher’s instructions.

In fact, reading strategies are considered keys for reading comprehension and they can help readers to develop their reading ability and become successful readers. These results are supported by many researchers who investigated the effect of reading strategies on developing students’ reading comprehension. For example, Al-Alrabiyat(2004);Adam, Mwdawi, and Eldoum (2013); Hammash (2004);Genc, (2011); Iwai (2011); Khoshshima and Tiyar (2014); Takallou (2011), Wichadee (2011); Yang(2006) studies support the idea that reading strategies had a positive effect on developing reading comprehension.
Reference


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