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## EMPLOYING SQ3R STRATEGY TO DEVELOP IRAQI EFL UNIVERSITY STUDENTS' READING COMPREHENSION

Lect. Noor Hameed Majeed

Wasit University/College of Education /Department of English language

[noorhameed@uowasit.edu.iq](mailto:noorhameed@uowasit.edu.iq)

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### ABSTRACT

Reading comprehension refers to the mental process through which the students try to understand and comprehend what they read, and comprehension is the main purpose of reading. The present study aims at finding out the effect of using SQ3R strategy on improving second year college students' reading comprehension. To achieve the aim of this study the researcher used (pre-posttest Experimental design). Two sections of second year students are randomly selected and equalized in terms of several variables that may effect on the independent variable (SQ3R), which stands for the sample of the current study in the department of psychology at Wasit University during the academic year 2018/2019. An appropriate reading comprehension test (pre-post) and observation were constructed as a data collection tools to accomplish the aim of this study. The results of the this study showed that there is a statistical difference between the mean scores of the post test of the experimental and control in favor of the experimental group, therefore the null hypothesis is rejected and proved the effectiveness of using SQ3R strategy in improving reading comprehension. The results of this study hoped to be beneficial to EFL teachers, researchers and syllables designers.

## Introduction

Mcdonough & Shaw (2003, p.90) state, "one of the first things a student is asked to do is to read. In classroom terms one of the reasons for this is partly practical: it is often through to be easier to supply a written text to be read than a spoken one to be understood." Reading is one of the important keys to learn English language, but, at the same time, it is not an easy task for the learners. To be effective readers, many strategies and techniques have to be applied during reading process (e.g. note taking, summaries, self-questioning, prediction, etc) to understand what is written. Moreover, using such strategies can effectively pave the way for them to learn how to read and understand English subject.

Reading as a skill involves "many integrated techniques such as predicting, skimming, scanning, questioning, summarizing, and finding out the meaning of vocabularies." (Asiri,2017,p.1). From the other hand, teaching and improving students' study skills is not easy task for EFL teachers especially when they teach English language in the departments of other specializations. Many academic studies state that Iraqi students face many difficulties in reading English subjects. Teachers often say that those learners are word-by-word readers and claim that their level of achievement in reading comprehension is low ( Abdul-Majeed, 2015, p. 93) Moreover, this will lead them to get low marks and fail to success. Student should have the ability to make connection between what they read with what they already know. From the other side, understanding text, chapter or a book is not easy task and student may fail to be an effective independent reader. For this reason, Many EFL students faced problems in understanding what they read individually and how to comprehend what they read.

Therefore, EFL teachers should find a suitable method or strategy to pave the way for his/her students to comprehend and analyze what is written in a book. Modern methods and strategies tend to make the process of reading less difficult. Moreover, (SQ3R) strategy is one of these strategies that aim to help the students to improve their comprehension and reading skills and help them to organize their reading process to prepare for examination.

This study aims at investigating the significant effect of using SQ3R and its worksheets to improve Iraqi EFL university students' reading comprehension in English language subject. For this aim, the following questions were sought:

- 1- Is there a statistically significance difference between the posttest scores of the experimental group students who were taught the reading comprehension by SQ3R strategy and control group students who were taught by the conventional method?
- 2- Is there a statistically significance difference between the reading comprehension pre-test and post-test scores of the experimental and the control group students?

It hypothesized that there are no statistical differences between the mean scores of post test of the control group and the experimental group in English language subject.

The current study is limited to Iraqi EFL second year students, department of Psychological and Educational Sciences/ College of Education at the University of Wasit during the academic year 2018-2019.

## **2-Theoretical Background**

### **2-1-Reading Comprehension**

The term "reading comprehension" refers to the process of understanding what is written in a text, " the understanding the results is called reading comprehension. Reading employs many different cognitive skills, including letter and word recognition, knowledge of syntax, and recognition of text types and text structure." (Richards & Schmidts, 2010, p.48). Comprehension as a skill is considered one of the main skills, an EFL learner has to learn. Many students can read, but they truly do not understand what they read. In addition, "reading" as a task is not as easy task for EFL learners. During reading, the EFL learners may face many difficult vocabularies, ideas, and new information. Therefore, they will not be able to comprehend what they read. Thus, they cannot even take notes, summarize or find an answer for a question. These difficulties will make a big gap between the reader and the text. So reading comprehension involves many strategies and techniques to understand the meaning of the text to master comprehension. The EFL teachers have to teach the students how to improve their concentration and reading strategies while reading a text and how to spend less time re-reading the text to find out the general idea, or to form an answer for a question,. etc.

The process of comprehension refers to the interaction between the learners and what they read. Kintsh (1998) and Van Dijk and Kintsh (1993) as cited in Banou & pourhosein (2016, p. 230) define reading comprehension as "the process of creating meaning from text. The purpose is to get an understanding of the text rather than to acquire meaning from individual words or sentences. The outcome of reading comprehension is the mental representation of a text meaning that is combined with the readers' previous knowledge."

Almutairi (2018, p.42) states that reading comprehension strategies developed in order to teach students how to understand and explore the meaning of a written text.....teaching the students how to utilize different comprehension strategies pre, while, and post reading play an important role in developing their level and ability to understand what "they read or study." According to Boulware-Gooden et al (2007, p.71), "comprehension doesn't end with when the students can decode the words. They continue to need instructions that will support their understanding of what they are reading" as cited in Baier (2011, p.12)

From the other hand, Teaching reading comprehension strategies for EFL students is not an easy task since that the ability to read is not enough to comprehend what they read. In EFL classrooms, many strategies, activities and techniques can effectively pave the way for improving the students' comprehension and help the EFL teachers to facilitate the process of reading and studying for their students. Many

academic studies assured that the use of modern strategies, techniques could provide a motivational and interesting environment that encourages the EFL students to participate, and share information during the lectures since that "engagement" and "motivation" are the main elements of successful reading. SQ3R strategy is one of these effective strategies that can be used to assist the EFL students to be able to use their reading skills such as set a purpose for reading, summarize ideas, form questions and find answers for these questions, and to take notes using their own words, and they are considered the main keys to understand better.

The importance of this strategy was focused attention on many years ago by many studies (Putri, 2012), (Habeb& Abbas, 2018) and (khofshoh,2016) which also state the effectiveness of using the SQ3R strategy in promoting students' reading comprehension levels and reading skills with different grades and procedures. Another important result of previous study shows an important effect of using this strategy for recall and recognition tests (shaughnessy, 1987).

## **2-2-What is SQ3R strategy?**

This strategy is developed by Professor Francis. P. Robinson at Ohio University in 1940. This strategy consists of five steps (**S**urvey, **Q**uestion, **R**ead, **R**ecite, and **R**eview). Lipson & wixson (2003) as cited in (Asiri,2017, p.3) named this strategy as "the grandfather of study strategies". This strategy is considered one of the main strategies that help to make the process of learning and reading "less difficult and more interesting". It effectively helps the students to organize their information and notes during studying and reading. Moreover, students can use the SQ3R worksheets as a reading outline. Robinson (1941) describes the reading part of SQ3R as "an active search for the answer" (p. 29).

From the other hand, it gives the students a good opportunity to take notes using their own words. This will make them interact with what they read. Artis (2008, p.133) states that this strategy "reduces the need for instructor monologues (passive learning) to cover information". Thus, this strategy will make the students active reader and encourage them to use their reading skills in organized steps. Moreover, the using of this strategy assists the students to save time studying for their examination because the main important information and materials has been saved into long-term memory. Therefore, it has a great effect on the result of their learning.

SQ3R strategy consists of five main steps, which can help the EFL teachers to facilitate the process of learning for their students and help them to get rid of their feeling and impression toward English language, since the using of the five steps of this strategy will pave the way for them to organize their reading. Moreover, following the steps of the SQ3R strategy allows the students to use their previous knowledge and make connection with the new information. They help students to write their notes, summaries, set questions. etc, using their own words. This gives the students opportunity to think about the text and this is an effective way to review and prepare for an exam.

### **1- Survey**

This is the first step of SQ3R strategy. In this step, the students begin to scan the chapter, the introduction, and summaries at the end of the chapter. In addition, it involves to look for the title and headings that give a hint about the main idea of the written text, or to pave the way to the students to understand what the chapter is going to talk about. "This survey step only takes 3-5 minutes, but it provides an outline or framework for what will be presented. The reader should identify ideas and formulate questions about the content of the chapter" (Asiri, 2017, p.2).

## **2- Questioning**

In the second step, the students will try to form question about information and notes acquired during the first step and about what they already know. They will try to form questions from titles and subtitles. Robinson (1970) states that "Formulate questions based on the information the students have gathered at the pre reading stage: turn headings into questions, turn boldface or italicized phrases into questions, use the chapter's questions, and use course objectives to focus on particular ideas". Therefore, this step will assist the students to set a purpose for their reading and it will help them how to put their notes and information into long-term memory especially when they write them using their own words and language. In addition, generating questions is one of the most important keys which can effectively help the students to comprehend, make predictions , and set a purpose for their reading. Richard & Schmidt (2002, p.443).

## **3- Read (the first R)**

In the third step, the students will read the text to underline the main information and ideas in order to understand the content of the chapter. Richard & Schmidt (2002, p.444) state that the students in "read" step, will read to find "answers" to their questions which the form in the second step, and to determine the important parts of the chapter which clarifies the general idea. During the implementing of this step, the students are allowed to take notes and mark the unimportant information and parts of the written text they read.

## **4- Recite ( the second R):**

The students, in this step, should try to remember information from their memory without going back to the text to answer questions. This will make the students more active , as they read and "study notes, evaluate, choose what it is to be recited" Clark and Graves (2004, p.53) as cited in Habeeb & Abbas (2018, p.80) It is important that the students write their notes and points in their own words to form easily what they understand and comprehend.

## **5- Review ( the third R):**

In the last step and final R of the SQ3R, the students will increase their comprehension. Therefore, it will support their memory, because the students will "review" their points and notes through the whole chapter to find the relationship between them and to form summaries. In addition, it gives the students the opportunity to check out the missing information and ideas.

### 3-Methodology

To achieve the aim of this study, the researcher has adopted a number of procedures that will be clarified as follows:

#### 3-1-The sample of the study

The sample of this study is the second stage students in the Department of Educational and Psychological Sciences / Morning Study / College of Education for Humanities for the academic year 2018/2019. They are (71) male and female students, and they are divided into two groups, at the rate of (35) male and female students in (A) and (36) In-group (B). The research sample was randomly chosen. Thus, group (B) was chosen to represent the experimental group, and one deferred student was excluded in this section to be the number of students in the experimental group (35) male and female students. Thus, the research sample consisted of (70) male and female students and the percentage of the research sample to the research community was (99%).

#### 3-1-Equivalence between Control and Experimental groups:

The random distribution would achieve parity between groups, but the researcher considered that this parity should be achieved, especially the variables that may affect the dependent variable, which is the chronological age of students, the students' achievement in the English language and the level of intelligence for the first semester.

##### 3-1-1. Age:

T test formula for two independent samples has been used in order to determine whether or not there are any significant differences between the two groups in the age variable.

Accordingly, there are no statistically significant differences between the groups, the experimental and control, in age variable, since the calculated T -value (0.389). It is less than the critical T-value of (1.99) at the level of statistical significance (0.05) and with a degree of freedom (68). See table (1) below.

**Table ( 1 )**

**It shows the results of the T-test for students' ages, calculated in months, for the two groups:**

Group	No.of subject	Mean	S.D	D.F	Level of significance	t-value	
						Computed	tabulated
Experimental	35	241.35	5.30	68	0,05	0.389	1.99

Control	35	239.75	2.78				
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### 3-1-2. Intelligence - general mental ability

Accordingly, the process of equivalence of the two research groups in the intelligence variable was carried out on the importance of this variable, and the researcher adopted the general mental abilities test for (Oats - Lennon) for the Iraqi environment by al-Musawi (2008), so this test is characterized by honesty and consistency. It has been proven valid to use it in the Iraqi environment in many local studies, which focuses on the ease of abstract inference from the individual's response to test items that include symbols, shapes, and words that represent a wide range of mental abilities, the test consists of (50) items M/C, (22) Verbal items and (14) symbolic items. Therefore, the researcher applied it to the research sample before starting the experiment on Monday 25/2/2019.

The researcher supervised herself as she showed the students how to answer the items of this test by solving an illustrative application example in front of the students in order to ensure the integrity of the test that is out of (50). Five alternatives to the answer were set (A, B, C, D, E) and the students' answers were corrected by adopting the model key answer by giving one score for each correct answer and a score of zero for the wrong answer or the students did not answer. Accordingly, the total score of the test was (50). The mean of the experimental group students scores was (23.35), with a variation of (8.37), whereas the mean of the students of the control group was (22.75) and a variation of (5.18). T -test formula for two independent samples has been used in order to determine whether or not there are any significant differences between the two groups in the intelligence variable.

Accordingly, there are no statistically significant differences between the groups, the experimental and control, in this variable, since the calculated T -value (0.717). It is less than the critical T-value of (1.99) at the level of statistical significance (0.05) and with a degree of freedom (68). See table (2) below.

**Table (2)**

#### **Equivalence between the experimental and control group in the intelligence variable:**

Group	No of subjects	Mean	S.D	D.f	Level of significance	T – value	
						computed	tabulated
Experimental	35	23.35	8.37	68	0.05	0.717	1.99
Control	35	22.75	5.18				

### 3-1-3. Academic Achievement of the First Semester

T- test formula for two independent samples is used to know whether or not there are any significant differences between the two groups in the academic achievement of the first semester variable.

As shown in table (3), there are no statistically significant differences between the two groups, the experimental and control, in this variable, since the calculated T -value (0.815) is less than the critical T-value of (1.99) at the level of statistical significance (0.05) and with a degree of freedom (68). See table (3) below.

**Table (3)**

**It shows the results of the T-test for the academic achievement grades of the English language for the two research groups:**

Group	No of subjects	Mean	S.D	D.f	Level of Significance	T – value	
						computed	tabulated
Experimental	35	18.85	5.93	68	0.05	0.815	1.99
Control	35	16.97	5.75				

### **3-2-The Teaching material**

1- The researcher taught the same syllable of the textbook of the English subject of the second year at the department of Educational and psychological sciences, so the material is (New Headway English course) by ( John and Liz Soars).

2- The researcher used the SQ3R worksheets through the implementation of this strategy to help the students to utilize the five steps of sq3r strategy and to observe the students' comprehension improvement and performance in each lecture. (see appendices) .

### **3-3-Data Collection Tools**

The researcher used **pre-posttest and observation** to collect the data, which can accomplish the aim of this study.

#### **3-3-1-Pre-Test**

The pre-comprehension test consists of (multiple-choice questions) the total number of the test items is (25). The total score of this test is (25), one score for each correct answer and zero for each incorrect answer and when two answers are provided or when no answer is provided. The pre-comprehension test was applied to the students of the experimental and control groups in order to be assured that if the students of the two groups with the same level of comprehension or not, and to be compared with the posttest score to answer the second question of the study.

**Table (4)**



### The mean, standard deviation, and T value of the experimental and control groups' scores in the pre- test

Group	No of subjects	Mean	S.D	D.f	Level of significance	T – value	
						Computed	Tabulated
Exp.	35	19.780	5.28	68	0.05	1.854	1.99
Cont.	35	7.8920	4.78				

#### 3-3-2 posttest

This test consists of 25 questions (multiple-choice) to test different levels of students' understanding and comprehension. Moreover, the test items have been constructed in the light of the behavioral objective of the materials. The total score of the test is (25). For scoring purpose, one score for each correct answer and zero for each incorrect answer and when two answers are provided or when no answer is provided. At the end of the experiment, the post was applied to the students of the control and experimental groups in order to test the hypotheses of this study and to be compared with results of the pre test to see the improvement of the students' reading comprehension after the experiment in order to answer the questions of the study. More details will be given below.

##### 3-3-2-1The test Validity

Richard and Schmidt (2001, p.575) define validity as "the degree to which a test measures what it is supposed to measure". Harris (1969, p.21) states that the face validity of the test refers to the way it looks like to the testees, administrators, educators and the like. To achieve the face validity of the pre-posttests, and their scoring scheme, the SQ3R worksheet and the lesson plan are displayed to a jury of instructors specialized in TEFL from different Iraqi Colleges. According to their judgments, they are found valid. Some of their items are reformulated according to their suggestions.

##### 3-3-2-2Reliability of the Post-Test

Richard & Schmidt (2002, p.454) state that "reliability is a measure of the degree to which a test is gives consistent results. A test is said to be reliable if it gives the same results when it is given on difficult occasion or it is used by different people". The researcher used (Kuder-Richardson 20) to estimate the test reliability of the present study. Twenty students (male and female) were randomly selected to be the reliability sample. The test is considered a good test if it its reliability is more than (0.70).(Van Esetal,1984, p.317).

##### 3-3-2-3Pilot Administration of the post-test

For knowing the acquired time the students need to answer the items of the test, and to determine the clarity of the test items' instructions. The researcher applied the test to a random pilot sample of (20) students and they are from the second stage / Department of Educational and Psychological Sciences on Thursday 25 / 4/2019. The results showed

that (45-50) minutes were sufficient and appropriate to answer all the test items and this indicates that there is no ambiguity in the test items is noticed.

### **3-3-2-4 Item Analysis**

To apply this process, a sample of (20) students are randomly chosen from the population and given a test in order to evaluate the test effectiveness, and to determine the difficulty level and discriminating power of the test items, and then to find out the reliability of the test. After scoring the paper of the test, the researcher arranged the scores from the highest to the lowest. Then, the scores were divided into two groups (upper and lower) at the rate 50%. At the end, the researcher estimates the following:

### **3-3-2-5 Difficulty level**

Baker (1989:54) states that measuring the level of test difficulty of the test items is that "it permits the identification of items which are too difficult or too easy range from (0.25-0.75). The difficulty level of the test items is founded to range between (0.33-0.66), so they are considered acceptable.

### **3-3-2-6 Discriminating Power**

It refers to the effectiveness of the test items to distinguish between the students with high scores and the students with low scores in the same test. According to Anastansy (1976, p.114), the discriminating power of a test items is considered acceptable if it is 0.30 and above. The discriminating power of the test items is founded to range between (0.30-0.70). Therefore, it is considered acceptable.

## **3-4 Observation**

Throughout the implementation of this strategy, the researcher intends to collect notes and observe the students' improvement and performance in each lecture. From the other hand, using the SQ3R worksheets (see appendix 2) helps the researcher to observe the students' progression and improvement in using the five steps of this strategy. In addition to observe their performance when they try to complete the comprehension task ( e.g. fill the sq3r worksheet) in each lecture.

Through observation, the researcher observes and assesses the students on their ability follow along as the class fills out the SQ3R worksheet. He will know students understand SQ3R by walking around the classroom to listen in on conversation and noting students' responses to questions and discussion. The researcher observes the students applying the five steps during reading. From lecture to another, the researcher notes that the students seemed more confidence to participate during the lecture, work with their classmates to form questions and work together to find answers, write notes and recall information. In addition, the researcher notes that using the SQ3R worksheet helps the students to understand how to read a text for an exam. Moreover, the researcher notes that (%91) of the students' number participate and engaged during the lecture and work to fill the sq3r worksheet.

## **3-5 Procedures**

For achieving the aim of this study, the researcher as mentioned earlier, taught the experimental group with the (SQ3R) strategy and she tries to cover the five steps (Survey, Question, Read, Recite, and Review)(see appendices:1,2,3) . In addition, she tries to facilitate the implementation of this strategy. Therefore, she followed the following procedures to pave the way for the students of the experimental group to understand how to apply the five steps to comprehend the main information of what they study and read.

- 1- The first lecture has been devoted to introduce the SQ3R strategy to the students. Moreover, the researcher clarifies the role of students, the role of teacher and the procedures for conducting this strategy. In addition, she explains how they can use the SQ3R worksheet to follow and applying of the five steps of this strategy during reading their assignments. The teaching procedures are done according the five steps of the SQ3R to teach the experimental group (see Appendices:1,2). On the other hand, the conventional method is used to teach the control group.
- 2- In first step (survey), the researcher asks the students to read and focus on the headings, the introduction, pictures, and the titles in the text to understand its general idea and she asks them to think about what they know about it.( see Appendices:1,2).
- 3- In the second step, she asks them to change what they survey such as titles into a question and this step will help the students to set goals for reading and studying.
- 4- In the third step (Read), she asks them to read to find the answers to their questions. This step will give the students a good opportunity to practice and improve their reading and learning skills like: (note taking and summarizing) to form answers.
- 5- In the forth step, she asks the students to recall the important notes, points, and information.
- 6- To apply the last step, the researcher asks the students to review the text by re-reading the text's main information that they collect to get feedback.

In order to apply these teaching procedures, the researcher adopted an effective lesson plan and sq3r worksheet that can provide a motivated environment to apply the teaching procedures for conducting this strategy inside the classroom. Moreover, the use of sq3r worksheet gives a good opportunity for the students to participate effectively during the lecture and to learn how to read and interact with the text. All the procedures are followed during the lecture are mentioned in detailed in the lesson plan (See Appendix: 1).

The researcher uses the (SQ3R) worksheets for many reasons :to help the students to understand how to apply the five steps of this strategy, to engage the students with the text, to encourage them to participate during the lecture and to encourage the students to work with their classmates to fill the worksheets. This will pave the way for the students to increase their comprehension. In addition, the using of the worksheet helps the researcher to observe the students' performance and improvement. (See Appendix:2). Form the other hand, the researcher taught the reading comprehension for the students of the control group with the conventional method. The experiment started on Tuesday 26/2/2019 and ended on Sunday 28/4/2019. This means the experiment of this study lasted for (10 weeks), two lectures per week for each group. At the end of the experiment, the posttest has been administrated to the control and the experimental

groups at the end of the experiment. The test has been administrated to (70) students of the second year, Department of Psychological and Educational Sciences, College of Education at the University of Wasit on Sunday 28/4/2019. The allotted time for answering the test questions is one hour.

### 3-6 Data Analysis

The scores obtained from the pre-posttest are analyzed by applying the (SPSS), and T-Test for two independent samples, which is also, used for the equality of the experimental and control groups in age, intelligence, pre-test and the academic achievement of the first semester variables. In addition, T-Test for two independent samples and percentage are used to analyze the results and discussion of this study. Kuder-Richardson 20 is used to find out the reliability of the post-test.

### 3-7 Results and Discussion

At the end of the experiment, the post-test was applied to the students of the experimental and control groups and the data obtained has been analyzed to achieve the aim of this study and to answer the questions of the study. Therefore, the researcher compared the students' score (experimental and control) in the post-test to answer the first question (see table 5).

**Table (5)**

**The mean, standard deviation, and T value of the experimental and control groups' scores in the post- test**

Group	No of subjects	Mean	S.D	D.f	Level of significance	T – value	
						Computed	Tabulated
Exp.	35	22.12	5.28	68	0.05	4.978	1.99
Cont.	35	8.400	4.78				

As shown in table (5), the mean, standard deviation, and T value, of the experimental and control groups' scores in the posttest have been compared to find out whether or not there is a statistical difference between the two groups in the post-test. The mean score of the experimental group is (22.12), while the mean score of the control group is (8.400) in the posttest. This indicates that the SQ3R strategy and its worksheet have a positive impact on the students' reading comprehension achievement and there is a statistical difference between the two groups in the posttest. Since the computed t-value (4.978) is higher than that of the tabulated-T value (1.99) at (0.05) level of significance and (68) degree of freedom.

The difference is in favor of the experimental group students who are taught English subject with SQ3R and its worksheet. Therefore, the null hypothesis of this study is rejected. The researcher used t-test formula for two independent samples to analyze the two groups' scores in the post-test in order to achieve the aim of the study, answer the first question and to test the hypothesis of this study.

In order to answer the second question of this study, the researcher compared the scores of the pre-posttest of the experimental and control groups to see if there is a statistical difference between the students' scores in the pre- posttest.

As shown in tables (4 and 5), the mean score of the experimental group is (19.870) in the pretest, while the mean score in the posttest is (22.12). From the other hand, the mean score of the control group is (7.920) in the pretest, while the mean score is (8.400) in the posttest. The computed t-value in the posttest is more than the tabulated value in favor of the experimental group while in the pre-test; the computed t-value is less than the tabulated t-value. This comparison indicates that the experimental group has achieved better in the posttest than the pretest. Then, the researcher used the percentage to show the extent of the improvement of the students of the experimental group between the pre and posttest scores and compare it with percentage of the control group (see table 7). The percentage of experimental group between the pre-posttest is (%11. 3) while the control group percentage is (%6.06). This comparison showed that the improvement of the experimental group students is higher than the control group. This improvement and the statistical difference between the two tests can be constructed in terms of the employing of the SQ3R strategy and its worksheet in teaching reading comprehension.

Based on the results of this study numerous justifications concerning the viability of utilizing SQ3R worksheets on students' reading comprehension can be made. Accordingly, the students of the experimental group seemed to succeed in the post-test. This may relates to that fact that the using of SQ3R worksheets helped the students to be aware of what they should read, and what notes they should write to understand the main information and parts of the text, in order to complete a reading comprehension task (e.g. fill the SQ3R worksheets).

Moreover, these results confirm that the students under the experimental group seemed to succeed because of being engaged and practice pair and group work to apply the five steps of this strategy to complete their worksheets; this may increase their comprehension of each assignment. In addition, the using of the worksheet of this strategy helped the students to follow and use five steps of this strategy and the researcher to observe the improvement of the students' performance and comprehension during the employment of this strategy. Accordingly, the using of (SQ3R) worksheets has a statistically significant impact on Iraqi EFL students' reading comprehension and performance. From other hand, the results of this study are in agreement with the results of previous studies [1], [11], [13], [14], and [20].

The researcher hoped that the results of this study be beneficial to the researchers to replicate the using of this strategy to examine the effect of this strategy on writing, speaking and thinking skills. In addition, the results hoped to encourage the EFL/ESL teachers to use this strategy to help their students to take notes, understand, and connect ideas, information, from titles and chapters. It helps teachers to provide an interesting environment, which make the process of reading interesting for his students, and this will motivate the students to improve their reading skills. In addition, they can use the worksheets of the (SQ3R) strategy as an assessment tool to assess the students' progress and comprehension. From the other hand, the EFL teachers should encourage their

students to use this strategy as a study guide, note taking and recall technique to comprehend what they read. Moreover, students' workbook should contain tasks or activities for employing the five steps of this strategy.

### **Conclusion**

After the analysis of the obtained data of the pre-posttest and the observation, the researcher concludes that the students' of the experimental group achieved and performed better than those of the control group, since there was a significant improvement and difference between the pre and post test scores in favor of the experimental group. In addition, the researcher concludes that this strategy has a positive impact on the students' achievement in the posttest and these results support the fact that applying the SQ3R in Iraqi EFL classes can provide interactive opportunities for the students to be interacted and engaged during the process of learning. Through observation, the researcher concludes that this strategy and using the worksheet is suitable to encourage the students to participate and communicate with their classmates in pair or group work during the lecture. Finally, this strategy has proved its efficiency in developing Iraqi EFL university students reading comprehension and suggested to be used in Iraqi EFL classrooms for better outcomes.

## **Appendix (1)**

### **SQ3R Strategy- Lesson Plan**

Student Learning Objective:

- Students will be able to follow the sequence of SQ3R in a section of expository text by checking off and writing responses on a worksheet with teacher guidance.
- Students will be able to orally list the SQ3R sequence and what do in each part of the sequence.

Materials:

- Each student will need a reading assignment from a textbook or a printed article
- A copy of the SQ3R guided worksheet for each student
- Each student will need a pen or pencil
- Overhead projector and markers
- Transparency of SQ3R worksheet

Set:

Open the lesson by telling the students, “Today we are going to work on a strategy to help us understand what we read better. This strategy is called SQ3R. We will talk more about what that stands for in a little bit.”

“When you read textbooks or any other kind of nonfiction book you need to read for understanding and with purpose, otherwise you will not learn the information the words are trying to communicate to you.” Write “understanding” and “purpose” on the board.

Gauge student responses. Ask follow up questions. For example:

- “When a teacher gives you a worksheet, why does the teacher ask the kinds of questions she asks?”
- “How do you know you understood what you read?”
- “Why is it important to understand what you have read?”
- “When is it difficult for you to understand new material? What is a barrier for your understanding?”

After the mini discussion about reading for understanding and with purpose restate student responses. The researcher tells the students, “You seem to have a good idea about what it means to read for understanding and with purpose. You have also come up with reason about why this is important. Today we’re going to learn about the SQ3R POWER TOOL. SQ3R is a series of steps that helps you read an article or chapter of any textbook with better understanding.

In SQ3R you follow a series of steps [write steps out on the board]: survey, question, read, recite, and review.”

Implementation Procedures:

- 1.) Pass out copies of the SQ3R guided worksheet to each student and ask students to open their books to page ?
  
- 2.) Address each of the SQ3R steps by describing it .Then, model the reading strategy using the text on the overhead. Finally, direct students to the textbook and ask them to follow and use the steps on their own.(use the worksheet)
  - **Survey**
    - When students survey a piece of text they are previewing it and preparing their minds for setting purpose of your reading.
    - Students need to look for a few things including: headings and subheadings (these are the topics of the text), introduction, pictures, captions under the pictures.
    - Students should check off the items on the worksheet as the researcher leads them through the survey.
    - Ask students to pick out the headings pictures, and captions on the page.
  - **Question**
    - Turn each heading and subheading into a question.
  - Ask students to volunteer to turn the headings into possible questions and record it on their worksheet.
  - **Read**
    - Have students silently read one section at a time.
    - Tell students to reread parts they did not understand and reread captions under pictures. Stress the importance of monitoring their reading.
  - **Recite**
    - Split students into pairs for this portion of the lesson.
    - Have students orally retell the text in their own words with their partners. The teacher should wander the classroom listening in on these retellings to make sure students are saying main ideas and help students who are struggling with the retelling.
    - Next, have students go back and write down the answers to their questions on their worksheet with their partners.
    - Ask students for answers to the questions and record their responses on the worksheet.
  - **Review**
    - Then, students need to go back and answer their questions from their memory and draw together a summary of big ideas.



- 3.) When the review is finished, call students' attention back to the front of the room. Ask the students to flip their papers over and to tell a person next to them the five SQ3R steps.
  - Next, have different students say one of the steps and the step's description. To ensure all students participate.
- 4.) Collect the SQ3R guided worksheets from the students. Pass out the simplified chart that they can use independently and walk them through the differences.
- 5.) Review the five steps of the strategy (( Survey the page before you read, turn some headings into questions, read for answers to your questions, recite what you learned, and review it when you are done. Make sure you are reading for understanding and you are reading with purpose)).
- 6.) Follow up for the lesson on a different day: have students do SQ3R in pairs without teacher modeling like in the first lesson.

#### Assessment of Student Learning

The researcher will assess the students on their ability follow along as the class fills out the SQ3R worksheet. The researcher will know students understand SQ3R by walking around the classroom to listen in on conversation and noting student responses to questions and discussion.

[Comprehension Lesson: SQ3R Strategy. www.ccusd93.org](http://www.ccusd93.org)

## Appendix (2)

### SQ3R Guided Worksheet

**Survey**

Read all the headings and subheadings

Skim the introduction paragraph

Look at the pictures

Read the captions under the pictures

Read the blue vocabulary words

**Question**

Turn the headings and subheadings into questions

*For example a heading in a piece of text that says, "Eating Habits of Dinosaurs" may be turned into a question like "What sorts of foods to dinosaurs eat?"*

1.) Heading :

Question \_\_\_\_\_

\_\_\_\_\_

2.) Heading:

Question \_\_\_\_\_

\_\_\_\_\_

3.) Heading:

Question \_\_\_\_\_

\_\_\_\_\_

**Read**

I have done the following:

- Read the text *one* section at a time
- Reread the captions and look at the pictures
- Locate the answers to our questions
- Monitor my reading- I reread passages I did not understand

**Recite**

My partner and I have done the following:

- Retell the text to each other in our *own words*.
- Write the answers to our questions:

1.) Answer: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2.) Answer: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3.) Answer: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### **Review**

My partner and I have done the following:

Ask each other our questions and answer them from memory (not looking at the text!)

Go back over any parts of the reading we still do not understand.

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