The Effect of Using DRTA Strategy on Developing Reading Comprehension Skills for Seventh Graders in Gaza Governorates

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أثر استخدام استراتيجية (DRTA) في تنمية مهارات الفهم القرائي لدى طالبات الصف السابع الأساسي بمحافظات غزة

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الملخص:

هدفت الدراسة معرفة أثر استخدام استراتيجية (DRTA) في تنمية مهارات الفهم القرائي لدى طالبات الصف السابع الأساسي بمحافظات غزة. استخدم الباحث المنهج شبه التجريبي، حيث اشتملت عينة الدراسة على (80) طالبة من طالبات الصف السابع الأساسي من مدرسة شهداء رفح الاساسية موزعة على مجموعتين متكافئتين، المجموعة التجريبية وتشمل (44) طالبة والأخرى وتشمل (36) طالبة. تكونت أدوات الدراسة من قائمة مهارات الفهم القرائي، بالإضافة الى اختبار الفهم القرائي قبلي بعدي. استخدم الباحث اختبار(ت) للكشف عن الفروق بين المجموعة التجريبية والضابطة وكذلك معادلة حجم الاثر لحساب حجم أثر استراتيجية DRTA على تنمية مهارات الفهم القرائي. توصلت الدراسة الى وجود فروق ذات دلالة إحصائية بين نتائج المجموعة التجريبية والضابطة ولصالح المجموعة التجريبية، وفي ضوء هده النتائج اوصى الباحث معلمي اللغة الإنجليزية بضرورة استخدام استراتيجية (DRTA) لتنمية مهارات الفهم القرائي لدى الطالبات.

كلمات مفتاحية: استراتيجية DRTA -مهارات الفهم القرائي.

Introduction

English language, like any other language, includes four basic skills i.e. reading, writing, listening, and speaking. The skill of reading, among the four basic English language skills, has become the most significant skill in the learning process, as it shows the students' understanding of any text or material.

Dorkchandra (2010) clarifies that reading skill is essential for those who learn English as a second language and for professional development. Additionally, Sari (2017) states that reading skill is essential to master because reading is important to acquire knowledge and information. The reading skill is claimed to be receptive as well as listening (Momani & Asiri, 2017). According to what is mentioned above, the researcher states that English teachers must use suitable

and modern strategies in teaching reading because it is very important for students.

Despite the significance of mastering the reading skill, it is meaningless as a term, but the purpose of performing the reading main and sub-skills is the useful product of mastering the reading skill. In this regard, Yenisa (2017) claimed that reading comprehension is the most significant and necessary outcome of reading as it facilitates the students' understanding of the content of reading, as it increases the students' motivation to understand the reading materials. So, whatever text the students go over will never be beneficial without processing and digesting it through the reading skills.

Building upon the importance of reading, suitable strategies for teaching the English language are needed to enhance reading skills among students.

Therefore, the teacher needs to choose a particular strategy to achieve the aim of the teaching process and makes it interesting (Dalimunthe, 2017). Furthermore, directed reading thinking activity (DRTA) will be an appropriate strategy to be used in teaching reading comprehension. Directed Reading Thinking Activity (DRTA) is one of the innovative strategies that can be used by the teacher to teach reading comprehension (Kompyang,2017: p.90). The researcher clarifies Directed Reading Thinking Activity (DRTA) as an appropriate strategy that teachers use in teaching reading comprehension. It intends to improve students' ability to read reflectively and critically. In light of the importance of the DRTA strategy, the researcher will investigate the effectiveness of employing the strategy of DRTA in enhancing the reading comprehension skills among 7th graders in Gaza governorates.

Statement of the Problem

Based on the results of the preliminary interview, the researcher conducted with a sample of seven graders teachers. Many Palestinian English teachers have often complained that their seventh-graders are slow in understanding the reading texts they are exposed to in their textbooks. In other words, they claim that their students cannot understand their texts of comprehension. Besides, the

interviewees maintained that teachers should use new strategies to improve students reading comprehension skills. Furthermore, the researcher visited some of the teachers in their classrooms and found most teachers taught reading skills with conventional methods that made the class boring and demotivating the students. However, learning reading comprehension in English is not easy for Palestinian students, a lot of hurdles such as a long and difficult curriculum. Accordingly, this research aimed to explore the effect of DRTA strategy on upgrading the skills of seventh graders' reading comprehension in Gaza governorates.

Questions of the Research

1. Are there statistically significant differences at ($\alpha \leq 0.05$)between the mean scores the experimental group gets on the post-test of reading comprehension skills and that of the control group?

2. Are there statistically significant differences at ($\alpha \leq 0.05$) between the mean scores the experimental group gets on the pre-test of reading comprehension skills and their mean scores on the post-test of reading comprehension skills?

Hypotheses of the Research

1. There are statistically significant differences at ($\alpha \leq 0.05$)between the mean scores the experimental group gets on the post-reading comprehension skills and that of the control group.

2. There are statistically significant differences at ($\alpha \leq 0.05$) between the mean scores the experimental group gets on the pre-test of reading comprehension skills and their mean scores on the post-test of reading comprehension skills.

Significance of the Research

This study explored the impact of using the DRTA strategy on developing 7th graders' reading comprehension skills. The importance of the current investigation relies on the benefit that the study may provide for the students,

English teachers, and supervisors. In more detail, the significance of the current investigation can be summarized as follow:

- It may encourage English teachers to make classroom teaching effective via DRTA strategy,
- It may help seventh-graders to develop their reading comprehension skills,
- It may stimulate supervisors' interest in conducting training courses for their teachers to enhance the use of DRTA strategy in their classes.

Limitations of the Research

1. This study was conducted in Rafah Governmental schools.

2. This study was conducted on a sample of female seventh graders.

3. The study was taking place during the first semester of the academic school year (2019-2020).

Review of Literature

Definition of Reading Comprehension

Reading comprehension is defined as the ability of students to read, recognize, and understand the text. It also reflects the author's purpose for writing the text (Ramos, 2018). Kuhail (2017) also defines reading comprehension as extracting meaning from the written text. Furthermore, Yunitasari (2015) asserts that reading comprehension as a purpose of reading is not just for reading but to understand the message that the writer wants to convey. Moreover, Al Salmi (2011) conceives reading comprehension as the outcome of what meaning a text carries and what the reader brings to a written text through the reading process. Therefore, the researchers concluded that comprehension occurs due to the interaction between the knowledge that a reader already has and a text.

Goals of Reading Comprehension in English in Palestine

In (2015), the Palestinian Ministry of Education, listed specific objectives for grade seven to be achieved. Therefore, the reading texts were consciously and accurately selected to tackle various genres on global and local levels. In the same vein, other factors were considered when choosing the reading

comprehension passages namely; the learners' age and level. In this regard, the Ministry of Education (2015) pointed out the following objectives:

- Answering questions that require facts, judgment, and evaluation.

- Reading aloud to guarantee the correct intonation and pronunciation.

- Determining nouns referred to by pronouns.

- Making questions out of the reading texts.

- Making a summary of the reading texts.

- Guessing about reading texts.

- Drawing conclusions and interpretations based on reading texts.

- Recognizing the concept of synonyms and antonyms of vocabulary in a reading text.

- Identifying the main concepts and the secondary notions in a text.

- Understanding rhetorical structures and their indications.

- Inferring the meaning of new vocabulary from the given context.

- Skimming to get the general meaning of a text or graphs.

- Classifying information into facts and opinions.

- Deducing the writers' attitude and tone.

- Scanning for specific information in a text.

- Explaining information displayed in tables and graphics.

- Reflecting on texts by personal opinion and evaluation.

- Identifying the text's time, place, topic, people. etc.

- Synthesizing as well as extracting data from various texts.

(English Language Curriculum, 2015. p. 31)

The Reading Comprehension Levels

Reading comprehension is a mental process through which readers use their minds to understand a reading text. So, it requires certain mental abilities to conclude meaning from a text. This means that readers are expected to extract ideas at various levels. Lynskey and Stillie (2000) classified the levels of reading comprehension into five categories:

1**. Literal level**: At this level, teachers ask their learners to extract information that is explicitly stated on the page. Also, the students can answer questions directly from the text and comprehending the direct meaning of a reading text

2. **Reorganization level**: This level is related to information classification, data collection, and organization.

3. **Inferential level:** In this level, students should read carefully to decipher what meaning is hidden between lines.

4. **Evaluation level**: At this level, students should be able to determine what is an opinion and what is a fact.

5 . Appreciative level: Here, the students react to a passage with a realization of its language, usage, and emotion.

Furthermore, Weih (2018) presents four levels of reading comprehension: literal, inferential, application, and evaluation .

1. **Literal level**: In this level, students grasp the direct denotation of a reading text. It is related to direct and easy questions. Collage, (2004) explains that in the literal level of reading comprehension, teachers may ask; what did the writer say? It means that students or readers can remember the needed information to answer such a question without understanding the deep meaning of a paragraph. Teachers can also ask their students to read the reading texts for facts, numbers, and dates. Students may memorize such numbers. However, students do not know the real inference of such facts, in case they are out of that text. The reading subskills in the literal level are predicting, scanning, determining the general ideas of a text, extracting specific information from a menu, advertisement, calendar, schedule, tickets...etc.)

2. **Inferential level**: At this level, students understand the writer's message that he wants to convey through the text. In this regard, Collage (2004) emphasizes that at the interpretive level, students are expected to answer what is meant by what is said. Students are also ready to explain the implication and indication of the numbers and facts which they have already memorized at the literal level.

3. **Application-level**: At this level, students can understand and grasp the data included in the text and relate it to other situations. In other words, the students analyze or synthesize the given information.

4. **Evaluation level:** It means to read what is beyond the lines. In other words, students can classify knowledge and information in a text into facts and opinions. Additionally, at this level students are expected to judge the logic of the text. It is worth mentioning that the critical level occurs in two stages i.e. understanding what is the reading text implies. Here, it is divided into three sections; what a text says (restatement), what a text does (description) and what a text means (interpretation).

Accordingly, the researchers list the following reading comprehension levels:

1.The literal level: It means understanding the direct meaning of a text as intended directly by its words and lines. The sub-skills of the literal level are:

-Recognizing referents of pronouns .

-Skimming to get the gist of the text or to have an impression of it.

-Scanning to get exact data from the texts .

-Developing awareness about synonyms and antonyms.

- Predicting the meaning of a reading text.

2.The Eliciting Level: This level represents the deep meaning of the text by reading between lines. By recognizing what is beyond the text and connecting between ideas, students should be able to:

-Realize the meaning of unfamiliar vocabulary.

-Understand the information illustrated in the charts.

- summarize a reading text.

-Analyze the text's components such as setting, theme, character. etc.

-Make implications about a reading text.

-raise awareness of semantic fields.

3.The Evaluation level: This level deals with assessing and judging the knowledge and information given in a text in terms of value, quality, and appropriateness. At this level, students should be able to determine what is an opinion and what is a fact, and the sub-skills of this level are:

-Answering inferential, judgment, and evaluation questions.

-Distinguishing between the main idea and the supporting details.

-Relating text to facts, experience, opinion, or evaluation.

-Recognizing rhetorical segments and their purposes.

4.The creative level: This level goes beyond understanding the direct meaning of a text to overcome the surface meaning drawn by words structured on-page. Accordingly, students are expected to create and generate new ideas and concepts. The sub-skills of this level include the following:

-Generating questions about a reading text.

-Inferring mood and authors' attitude or tone.

-Extracting and synthesizing information from different sources.

Definition of DRTA Strategy

According to Azzahara (2018: p.4), the Directing Reading Thinking Activity (DRTA) strategy has been developed by Russell Stauffer in 1969 aiming at improving the critical reading skills of the students. The DRTA strategy intends to upgrade the students' skills in identifying the main goal of reading namely; extracting, comprehending, and assimilating information, examining reading materials, suspending judgments. In this regard, Sari (2018: p. 25) states that the DRTA strategy is suitable for teaching reading texts from various levels of difficulties and individuals and groups of students.

Advantages and disadvantages of DRTA strategy

As with any other teaching strategy, DRTA has its pros and cons. In this regard, Azzahara (2018: pp. 24-25) mentioned the advantages of DRTA; encourage the students to apply their logical abilities in the learning process, increase students' understanding through its strong emphasis on the student-generated prediction that bank on previous knowledge and experiences, besides it is viable for any choice of reading text to be taught for individual students and in groups. Additionally, DRTA supports students' ability to find reasons for their answers by extracting pieces of evidence from the reading text. Students are also predicting then go back to the text to check their prediction to decide whether it was right or not. Moreover, DRTA can be followed to teach all subjects and levels to come out

with critical readers who can test their ideas and understanding by asking reflective questions and find answers for given questions. In addition, Sari (2017: pp.26-27) clarifies the following advantages: DRTA includes various types of reading strategies so that teachers can use and be able to pay attention to the individual differences among learners and motivate students to learn through implementing different methods that pay attention to the different learning styles of the students such as visual, kinesthetic, and auditory. In addition, DRTA presents a meaningful and purposeful context of learning, since the goal of learning is not only to get a piece of information but also to build a good generation for a good future.

Despite the advantages that this strategy has in teaching reading comprehension, it has some disadvantages. In this context, Azzahara (2018: p. 25) reported that DRTA is only fruitful when teaching unseen reading texts because managing the classroom will be problematic due to the noise that students may cause if teachers use DRTA for teaching them a reading text they already seen or heard.

Concerning what has been mentioned above, the researcher states that DRTA is applicable to teach reading comprehension for individual students and groups so that this flexible strategy motivates the learners to be involved in the classroom. Moreover, DRTA activates the students' schema about the topic of the reading lesson; helps the learners to observe their comprehension of the reading text, and supports developing the learners' skills of critical thinking. However, there are disadvantages of the DRTA strategy so teachers should work hard to avoid such cons while teaching a reading lesson.

Previous Studies

Megawati (2018) examined the impact of using Direct Reading Thinking Activity on the students' reading comprehension based on the students' motivation. The researcher used a quasi-experimental design in this study. The sample of this study consisted of 45 students. The tools of the study to collect data were tests and questionnaires. T-Test was used to analyze data. The results of the study revealed that there is a significant difference between the score of the control group and the experimental one in the reading comprehension test. Thus, scores

of students who were taught by DRTA were higher than the scores of students taught using the conventional teaching method got.

Azzahara (2018) investigated the effect of applying the DRTA technique on increasing reading comprehension for students of the eighth grade in narrative text. The researcher used mixed-method (quantitative and qualitative). Thirty students were used as a sample of the study. The tools of the study to collect data were tests and questionnaires. Paired Sample t-test was used to analyze data. The findings showed significant progress in students' reading comprehension. It also showed positive responses from the students towards DRTA techniques application. There was a strong agreement among the majority of the students that they were well-motivated and highly interested in whole texts reading because of the text prediction strategy.

Agustine (2018) investigated if using the DRTA strategy can enhance the achievement of students' reading comprehension. The researcher used qualitative and quantitative methods. The sample of the study consisted of second-year students. The tools of the study were observation, interview, and reading comprehension achievement tests. The data were analyzed using a t-test. The results of the study revealed that DRTA contributes to the improvement of the students' reading comprehension by motivating them to actively participate in reading activities. Predictions' role was deeper in establishing students' understanding of the text, and in all activities of the DRTA process, a significant difference in the students' reading achievement was recorded after being taught through DRTA.

Kompyang (2017) attempted to find out the impact of using Directed Reading Thinking Activity in a cooperative learning setting and who were taught by using Directed Reading Thinking Activity only on reading comprehension for the eleventh graders. The researcher used a post-experimental test in a design of a controlling group. The sample of the investigation comprised 65 students. The instrument of the examination was the perusing perception test. The - test helped with SPSS 22.0 was utilized to break down the information got. The tool of the study was a reading comprehension test. The -test assisted with SPSS 22.0 was

used to analyze the data obtained. The findings of the examination indicated a critical impact reading comprehension of the eleventh-grade students in which the students who were taught by using Directed Reading Thinking Activity in Cooperative Learning Setting achieved better reading comprehension than those who were taught using Directed Reading Thinking Activity only.

Commentary on previous studies

The focus of the studies reviewed in this subsection is the implementation of a new strategy to enhance reading comprehension and critical thinking skills. Agustine's (2018), Azzahara's (2018), and Sari's (2017) are foreign studies. Those studies explored the effectiveness of the Direct Reading Thinking Activity strategy on reading comprehension skills. This belief encouraged the researcher to explore the impact of the Direct Reading Thinking Activity strategy in enhancing the Palestinian students' reading comprehension skills. Some of these studies adopted the experimental design such as Megawati's (2018). Other studies used mixed-method (quantitative and qualitative) methods such as Agustine's (2018),) Azzahara's (2018) Sari's (2017). The results of all studies indicated the significant impact of the Read Ask Paraphrase strategy on developing and improving reading comprehension. The current study benefits from the previous studies in writing the definitions of the study, rationale of the study, and literature review. The population of the above-mentioned studies is different. It means that the Direct Reading Thinking Activity strategy suitable for young learners, intermediate level and high level.

Methodology

The Research Design

 This research followed the quasi-experimental design, which requires (2) groups. The experimental group and the control group. The researcher used the DRTA strategy to teach the experimental group while they used the traditional method to teach the control group.

The sample of the research

The respondents of the two groups consisted of (80) students, the experimental group was off (44) female learners while the control group was of (36) female learners. The sample was chosen randomly from Rafah Martyrs' Preparatory school for girls.

Table (1) Distribution of the sample according to groups

Group	Number
The experimental group	44
The control group	36
Total	**80**

All groups of the students were within an equal level of culture, financial level, and social class. Also, the sample of students was homogeneous in their level of achievement based on their marks in the final-second term exam of the school year (2018-2019). It is worth mentioning that all school classes were divided according to their achievement in the courses. Therefore, the participants in this study were alike regarding the level of the English language. Additionally, the variable of age was also controlled among the respondents before the intervention of the current study.

Instrumentation

To attain the aims of the research, a checklist of the reading comprehension skills and a pre-post achievement test were prepared.

First: A checklist of reading comprehension skills

Steps to build the list

A checklist of the reading comprehension skills was organized as follows:

1. reviewing all studies that have dealt with the skills of reading comprehension and the theoretical framework of studies.

2. The researchers identified and classified the skills of reading comprehension into four levels and (20) skills. Table (2) displays the list of skills in the first form

Table (2) A list of reading comprehension skills (first form)

-	**Literal Level.**
1.	Reading familiar vocabularies in a correct pronunciation.
2.	Recognizing pronoun referents.
3.	Skimming for general ideas.
4.	Scanning for exact information from the reading texts.
5.	Comprehending visual survival martial.
6.	Prediction about the text.
-	**Eliciting level**
7.	Deducing meaning of unfamiliar words from context.
8.	Interpreting information presented in diagrammatic display.
9.	Summarizing a reading text.
10.	Analyzing components of text such as setting, theme, character. etc..
11.	Making inferences about a reading text.
12.	Developing awareness of synonyms and antonyms.
13.	Developing awareness of semantic fields (word mapping).
-	**Evaluation level**
14.	Answering factual, inferential, judgment, evaluation questions.
15.	Distinguishing main idea from supporting details.
16.	Relating text to facts, opinion, experience or evaluation.
17.	Recognizing rhetorical markers and their functions.
-	**Creative level**
18.	Generating questions about a reading text.
19.	Inferring mood and authors' attitude or tone.
20.	Extracting and synthesize information from different sources

The checklist of reading comprehension skills was given to a sample of teachers chosen randomly, including personal information such as gender, qualification, experience, and years of teaching seventh grade. Then, the most significant reading comprehension skills were selected, based on their relative weight. So, the ones with more than (80%) were included in the checklist. Accordingly, (9) reading comprehension skills out of the (20) have got more than (80%). Table (3) indicates the ratios of teacher responses.

Table (3) The ratios of teacher responses

No.	Very important	Important	Slightly important
1	%8.33	%16.66	%75
2	%87.5	%8.33	%4.2
3	%83.3	%16.66	%4.2
4	%91.66	%8.33	%0
5	%16.66	%20.8	%62.5
6	%91.6	%4.2	%4.2
7	%83.3	%8.33	%8.33
8	%8.33	%16.66	%75
9	%4.2	%75	%20.83
10	%0	%20.83	%79.16
11	%12.5	%33	%54
12	%83.3	%12.5	%4.2
13	%16.66	%12.5	%70
14	%91.6	%4.2	%4.2
15	%12.5	%12.5	%75
16	%87.5	%8.33	%4.2
17	%0	%41.66	%58.33
18	%.91.66	%8.33	%0
19	%4.2	%8.3	%79.16
20	%0	%33.33	%66.66

The previous table shows that (11) reading comprehension skills, having the numbers (1, 5, 8, 9, 10, 11, 13,15, 17, 19, 20) are slightly important for seventh graders. The skills in the final form consist of (9) skills to be evaluated through a pre-post achievement test as in table (4).

Table (4) The final form of reading comprehension skills

-	**Literal Level.**
1.	Identifying pronoun referents.
2.	Skimming for general ideas.
3.	Scanning for precise data from texts.
4.	Prediction about reading texts.
-	**Eliciting level.**
5.	Deducing the meaning of unfamiliar words from context.
6.	Raising awareness of synonyms and antonyms.
-	**Evaluation level.**
7.	Answering factual, inferential, judgment, evaluation questions.
8.	Relating text to facts, experience, opinion, or evaluation.
-	**Creation level.**
9.	Generating questions about a reading text.

Second: A reading comprehension test

The researcher set up the achievement test to be implemented pre and post the intervention aiming at evaluating the students' level in terms of reading comprehension skills.

The goals of using the achievement test

The test investigated the effect of DRTA strategy on enhancing 7th graders reading comprehension skills.

The items of the test

The test included two reading comprehension passages. The selected passages were chosen from Students' Book 2016 of grade seven (English for Palestine

7A). The first passage discusses animal magic. It is available in Unit 3, period 3 page 22 of English for the Palestine curriculum. The second passage discusses the goal. It is available in Unit 6, period 3 page 42. Students had not taken this text in their schools yet.

The pilot study

The researcher applied it on (33) students from Rabaa El- Adwea Preparatory school for girls, considering that the ones who participated in the pilot study were not targeted in the experiment. The findings of the pilot study were statistically analyzed for the validity and reliability of the test.

The internal consistency validity

Table (5) The correlation coefficient of each item score with its domain for reading comprehension test

The reading comprehension skill	Item	Pearson correlation	Sig. level
The first skill	1	0.442	Sig at 0.05
	2	0.735	Sig at 0.01
	21	0.403	Sig at 0.05
	22	0.660	Sig at 0.01
The second skill	3	0.708	Sig at 0.01
	4	0.703	Sig at 0.01
	23	0.703	Sig at 0.01
	24	0.752	Sig at 0.01
The third skill	5	0.511	Sig at 0.01
	6	0.535	Sig at 0.01
	25	0.528	Sig at 0.01
	26	0.432	Sig at 0.05
The fourth skill	7	0.663	Sig at 0.01
	8	0.012	Not significant
	9	0.786	Sig at 0.01
	10	0.598	Sig at 0.01
	27	0.419	Sig at 0.05
	28	0.712	Sig at 0.01
	29	0.512	Sig at 0.01
	30	0.728	Sig at 0.01
The fifth skill	11	0.697	Sig at 0.01
	12	0.701	Sig at 0.01
	31	0.379	Sig at 0.05

	32	0.359	Sig at 0.05
The sixth skill	13	0.670	Sig at 0.01
	14	0.539	Sig at 0.01
	33	0.756	Sig at 0.01
	34	0.662	Sig at 0.01
The seventh skill	15	0.736	Sig at 0.01
	16	0.466	Sig at 0.01
	35	0.794	Sig at 0.01
	36	0.864	Sig at 0.01
The eighth skill	17	0.516	Sig at 0.01
	18	0.372	Sig at 0.05
	37	0.770	Sig at 0.01
	38	0.487	Sig at 0.01
The ninth skill	19	0.960	Sig at 0.01
	20	0.989	Sig at 0.01
	39	0.663	Sig at 0.01
	40	0.663	Sig at 0.01

Table (5) shows that the correlation of each item is significant at (0.01) except item (8). Upon that, it is showed that the test items are valid to be adopted in this research.

Table (6) The correlation coefficient of each domain with a total test for reading comprehension

skill	Pearson correlation	Sig. level
The first skill	0.457	Sig. at 0.01
The second skill	0.553	Sig. at 0.01
The third skill	0.553	Sig. at 0.01
The fourth skill	0.773	Sig. at 0.01
The fifth skill	0.528	Sig. at 0.01
The sixth skill	0.459	Sig. at 0.01
The seventh skill	0.737	Sig. at 0.01
The eighth skill	0.676	Sig. at 0.01
The ninth skill	0.720	Sig. at 0.01

Difficulty Coefficient for reading comprehension test

The researcher calculated the difficulty coefficient according to the following equation:

Difficulty Coefficient =

No. of students who answered correctly in low group + No. of students who

answered correctly in high group
_____

The total number of the students who answered the test

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

Table (7) Difficulty Coefficient for each item of the test for reading comprehension test

Skill	item	Corrected answers for high group	Corrected answers for low group	The total corrected answers for the two groups	Difficulty Coefficient
The first skill	1	9	5	14	0.77
	2	4	1	5	0.27
	21	9	5	14	0.77
	22	5	1	6	0.33
The second skill	3	9	5	14	0.77
	4	8	5	13	0.72
	23	9	5	14	0.77
	24	8	3	11	0.61
The third skill	5	9	5	14	0.77
	6	8	3	11	0.61
	25	7	3	10	0.55
	26	6	3	9	0.50
The fourth skill	7	5	2	7	0.38
	8	2	1	3	0.16
	9	8	2	10	0.55

	10	7	2	9	0.50
	27	8	4	12	0.66
	28	5	1	6	0.33
	29	5	1	6	0.33
	30	6	2	8	0.44
The fifth skill	11	6	2	8	0.44
	12	6	1	7	0.38
	31	7	3	10	0.55
	32	5	1	6	0.33
The sixth skill	13	9	5	14	0.77
	14	9	4	13	0.72
	33	6	3	9	0.50
	34	5	2	7	0.38
The seventh skill	15	8	2	10	0.55
	16	5	1	6	0.33
	35	8	3	11	0.61
	36	8	1	9	0.50
The eighth skill	17	5	1	6	0.33
	18	4	1	5	0.27
	37	5	0	5	0.27
	38	5	1	6	0.33
The ninth skill	19	6	1	7	0.38
	21	5	1	6	0.33
	39	6	1	7	0.38
	40	4	1	5	0.27

The researcher measured the difficulty coefficient, they found that all the items of the test were acceptable except for item (8) in the fourth skill. The items of the test became (39) divided into nine skills.

Discrimination coefficient for reading comprehension test

The researcher calculated the discrimination coefficient according to the following equation:

Discrimination Coefficient =

No. of the correct items of the high achievers - No. of the correct items of low

achievers

No. of high achievers

Table (8) shows the discrimination coefficient for each item of the test

Table (8) Discrimination Coefficient for each item of the test for reading

comprehension test

Skill	item	Corrected answers for high group	Corrected answers for low group	Differences between answers of the two groups	Discrimination Coefficient
The first skill	1	9	5	4	0.44
	2	4	1	3	0.33
	21	9	5	4	0.44
	22	5	1	4	0.44
The second skill	3	9	5	4	0.44
	4	8	5	3	0.33
	23	9	5	4	0.44
	24	8	3	5	0.55
The third skill	5	9	5	4	0.44
	6	8	3	5	0.55
	25	7	3	4	0.44
	26	6	3	3	0.33
The fourth skill	7	5	2	3	0.33
	8	2	1	1	0.11
	9	8	2	6	0.66
	10	7	2	5	0.55
	27	8	4	4	0.44
	28	5	1	4	0.44
	29	5	1	4	0.44
	30	6	2	4	0.44
The fifth skill	11	6	2	4	0.44
	12	6	1	5	0.55
	31	7	3	4	0.44
	32	5	1	4	0.44
The sixth skill	13	9	5	4	0.44
	14	9	4	5	0.55
	33	6	3	3	0.33
	34	5	2	3	0.33
The seventh skill	15	8	2	6	0.66
	16	5	1	4	0.44
	35	8	3	5	0.55
	36	8	1	7	0.77
The eighth	17	5	1	4	0.44
	18	4	1	3	0.33

skill	37	5	0	5	0.55
	38	5	1	4	0.44
The ninth skill	19	6	1	5	0.55
	21	5	1	4	0.44
	39	6	1	5	0.55
	40	4	1	3	0.33

The researcher measured the discrimination coefficient, they found that all the items of the test were acceptable except item (8) in the fourth skill. The items of the test became (39) divided into nine skills.

Controlling the variables

The researcher controlled intervening variables before the study to confirm the findings' accuracy.

Table (9) Independent sample t-test to find differences among the experimental group and the control group in reading comprehension pre-test

Skill	Group	Number	Mean	St. deviation	T-value	Sig. level
The first skill	The experimental group	44	2.39	1.03	0.253	Not Sig. at 0.05
	The control group	36	2.44	0.99		
The second skill	The experimental group	44	2.57	1.12	1.793	Not Sig. at 0.05
	The control group	36	3.06	1.09		
The third skill	The experimental group	44	1.66	1.20	0.077	Not Sig. at 0.05
	The control group	36	1.64	1.12		
The fourth skill	The experimental group	44	1.05	1.58	1.628	Not Sig. at 0.05
	The control group	36	0.92	0.42		
The fifth skill	The experimental group	44	1.68	1.09	1.697	Not Sig. at 0.05
	The control group	36	1.41	0.98		
The sixth	The	44	1.84	1.21	0.653	Not Sig. at

skill	experimental group					0.05
	The control group	36	1.67	1.14		
The seventh skill	The experimental group	44	0.77	1.01	0.015	Not Sig. at 0.05
	The control group	36	0.78	1.79		
The eighth skill	The experimental group	44	0.39	0.84	1.207	Not Sig. at 0.05
	The control group	36	0.78	1.79		
The ninth skill	The experimental group	44	0.16	0.68	1.552	Not Sig. at 0.05
	The control group	36	0.01	0.01		
The total degree	The experimental group	44	13.05	6.26	0.728	Not Sig. at 0.05
	The control group	36	12.71	4.66		

According to the table (9) there were no significant differences at (0.05) among the mean scores the experimental group got on the pretest of reading comprehension skills and that of their counterparts in the control group. This proves that the two groups are equivalent regarding reading comprehension skills.

Procedure of the study

- Reviewing the research and the related studies on strategies of reading in general, and those which investigated the DRTA , on reading comprehension skills.

- Organizing the teacher's guide based DRTA in teaching the textbook content "English for Palestine7A".

- Designing the study tools (the skills of reading comprehension, test of reading comprehension).

- Checking the validity of the test with a panel of English language experts and the methodology and internal consistency..

- Conducting the pre-test and analyzing the results to declare the equivalence between groups.

- Practicing reading comprehension skills and critical thinking skills using the teachers' guide based DRTA strategies with the first experimental group and the second experimental group and the traditional method with the control group.

- Conducting the post-test, and analyzing the results.

Findings

Findings of the Questions

1. **Answering the first question which states:**

Are there statistically significant differences at ($\alpha \leq .05$)between the means scores in reading comprehension skills in the post-test than the experimental group and the control group get?

To answer the first question, the researcher tested the following hypothesis:

There are no statistically significant differences at ($\alpha \leq .05$) between the means scores in reading comprehension skills in the post-test among the experimental group and the control group. To investigate this hypothesis, t-test independent sample was used to explore the differences between the experimental group and the control group.

Table (10) Differences between the expr. group and the cont. group in the post test

Skill	Group	Number	Mean	St. deviation	T-value	Sig. level
The first skill	The experimental group	44	3.66	0.52	7.336	Sig. at 0.01
	The control group	36	2.54	1.07		
The second skill	The experimental group	44	3.64	.055	7.137	Sig. at 0.01
	The control group	36	2.47	1.15		
The third	The	44	5.53	2.33	8.823	Sig. at

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skill	experimental group					0.01
	The control group	36	1.62	1.22		
The fourth skill	The experimental group	44	5.45	2.24	9.461	Sig. at 0.01
	The control group	36	1.38	1.65		
The fifth skill	The experimental group	44	3.72	0.74	8.954	Sig. at 0.01
	The control group	36	1.76	1.09		
The sixth skill	The experimental group	44	3.74	0.56	10.636	Sig. at 0.01
	The control group	36	1.88	1.12		
The seventh skill	The experimental group	44	2.87	1.12	10.636	Sig. at 0.01
	The control group	36	0.81	1.21		
The eighth skill	The experimental group	44	2.73	1.21	8.634	Sig. at 0.01
	The control group	36	0.33	1.06		
The ninth skill	The experimental group	44	3.23	0.86	12.608	Sig. at 0.01
	The control group	36	0.19	1.47		
Total degree	The experimental group	44	34.65	8.75	12.896	Sig. at 0.01
	The control group	36	12.81	6.86		

The (t) value in the table (10) equals (12.896), and the same table shows that it is significant at level (0.01). As a result, the null hypothesis was rejected and the alternative hypothesis was accepted. It means that there are significant

differences at ($\alpha \le 0.05$) in means scores among the experimental group and the control group in the post-test in favor of the experimental group.

To specify the effect size of the teaching strategy on developing reading comprehension skills for the sample of the study, the researchers computed ($\eta 2$) using the following formula:

(Afana, 2016: p.217)
$$\eta^2 = \frac{t^2}{(t^2 + df)}$$

The formula of (d) value (Afana, 2016:p.201).
$$d = \frac{2\sqrt{\eta^2}}{\sqrt{1 - \eta^2}}$$

Table (11) Effect size level

Test	Effect volume		
	small	**Medium**	**large**
$\eta 2$	0.01	0.06	0.14
d	0.2	0.5	0.8

The researcher computed the effect size and the following table clarifies the effect size via (t), (d), and (η^2) values.

Table (12) (t) value, (d) and (η^2) values

sample	No.	T value	η^2	d	Effect size
The experimental group	44	12.896	0.68	2.91	large
The Control group	36				

The value of "$\eta 2$" , " t", and "d" value presented in table (12) show the large effect size of the use of (DRTA) strategy on improving the reading comprehension skills.

2. **Answering the second question which states:**

Are there significant differences at ($\alpha \leq$ .05) in mean scores between the pre-test and post-test of the experimental group? To answer this question, the researcher tested the following hypothesis:

There are no statistically significant differences at ($\alpha \leq$ .05) in mean scores between the pre-test and post-test of the experimental group? To investigate this hypothesis, the t-test paired sample was used as in table (13).

Table (13) Differences between the pre-test and the post-test of the exp. group.

Skill	Application	Number	Mean	St. deviation	T-value	Sig. level
The first skill	pre	44	2.43	0.92	7.703	Sig. at 0.01
	post	36	3.65	0.51		
The second skill	pre	44	3.02	1.01	4.301	Sig. at 0.01
	post	36	3.81	0.53		
The third skill	pre	44	1.55	1.11	10.632	Sig. at 0.01
	post	36	3.61	0.57		
The fourth skill	pre	44	0.18	0.39	14.768	Sig. at 0.01
	post	36	5.45	2.24		
The fifth skill	pre	44	0.93	0.90	14.481	Sig. at 0.01
	post	36	3.71	0.70		
The sixth skill	pre	44	1.66	1.18	10.144	Sig. at 0.01
	post	36	3.74	1.13		
The seventh skill	pre	44	0.73	1.62	12.143	Sig. at 0.01
	post	36	2.83	1.22		
The eighth skill	pre	44	0.72	1.55	16.652	Sig. at 0.01
	post	36	2.73	1.46		
The ninth skill	pre	44	0.11	0.01	17.489	Sig. at 0.01
	post	36	3.20	1.22		
Total degree	pre	44	11.53	4.24	19.303	Sig. at 0.01
	post	36	32.95	6.91		

Table (13) shows that the computed (t) value for the mean scores of the reading comprehension test equals (19.303) and that it is significant at level (0.01). As a result, the null hypothesis was rejected and the alternative hypothesis was

accepted. This means that there are significant differences at ($\alpha \leq 0.05$)in mean scores between the pre-test and the post-test in favor of the post-test.

Interpretation of the results related to question number one.

The first question investigated if there were statistically significant differences at ($\alpha \leq 0.05$) in the mean scores in reading comprehension skills in the post-test between the experimental group and the control group. The answer to the first question indicates that there were significant differences at ($\alpha = 0.01$) in favor of the group who learned through the DRTA strategy. This is attributed to the clarity and simplicity of the DRTA strategy in teaching reading comprehension. Moreover, the DRTA strategy has some useful characteristics such as increasing the chance of students' work or cooperative work, motivates the students to search for details, involve students and explain directly to understand. Finally, it's concluded that these findings agree with some of the previous studies such as Megwati's (2017), Augstine's (2018), Azzahara's (2018), and Kompyang(2017) which confirmed that the use of DRTA strategy enhances and develops students' reading comprehension skills.

 Concerning the value and ' η^{2}' value displayed in the table (12), it is noticed that the effect size of the (DRTA) strategy was large on reading comprehension skills.

Interpretation of the results related to question number two.

The second question investigated if there were statistically significant differences at ($\alpha \leq .05$) in mean scores between the pre-test and the post-test of the experimental group. The answer to the second question indicated that there were statistically significant differences at ($\alpha \leq 0.05$) in mean scores between the pre-test and the post-test of the experimental group in favor of the post-test. This is attributed to the effective impact of using the DRTA strategy in teaching reading comprehension. Moreover, students worked in groups to answer questions and felt confident in the classroom.

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Recommendations

Based on the findings of this study, the following recommendations are suggested:

1. For English teachers:

- use the DRTA strategy to create an appropriate environment of learning.

- play the role of a facilitator, guide, and supporter to aid students to obtain the skills of the language.

2. For further studies

The researcher presents the following topics for future research:

- The effectiveness of using the DRTA strategy on improving speaking skills.

- Conducting studies using other new strategies to develop reading comprehension.

- Carrying out similar studies to the present study to examine other levels of students .

Conclusion

This study aimed to explore the impact of using the DRTA strategy on developing 7th graders' reading comprehension skills. The quasi-experimental design was used in the study. There were two equivalent groups (the experimental group and the control group) to achieve the aim of the study. The sample of the study consisted of (80) students who were chosen randomly from Rafah Martyrs Preparatory 'Girls' school in Rafah city. The experimental group consisted of forty-four students and the control group consisted of thirty-six students. It was proved that the two groups are equivalent. Four tools were used to collect data: a checklist of reading comprehension skills and reading comprehension test (pre and post- test). Finally, the researchers concluded the following results:

- The result of the first hypothesis revealed that there were statistically significant differences at (α≤ 0.05) in means scores between the experimental group and control group in favor of the experimental group.

- The result of the second hypothesis revealed that there were statistically significant differences at (α≤ 0.05) in mean scores between the pre-test and the post-test of the experimental group in favor of the post-test.

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