Original Paper

The Effectiveness of Using PQ4R Strategy in Teaching Reading Comprehension in Arabic Language Subject among Ninth Grade Students' Achievement in Jordan

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Abstract

The study aimed at recognizing the effective of using (PQ4R) Strategy in Teaching comprehension Reading in Arabic Subject among Ninth Basic grade Students achievement in Jordan. To achieve this aim, a survey was used. The sample consisted of (104) male and female students distributed as (52) male student and (52) female student, chosen randomly in two experimental groups and two control groups consisted of (26) male students and (26) female students in each one. An achievement test for reading comprehension was used as an instrument for the study.

The results indicated that there are statistical significant differences in favor of the experimental group which used (PQ4R). The results also showed that there are significant differences in favor of female students. The study recommended that (PQ4R) strategy should be adopted as an effective teaching method.

Keywords

PQ4R strategy, reading comprehension, achievement

1. Introduction

The review of the educational literature emphasized the need for teaching strategies that seek to develop the students' higher mental abilities to achieve the desired goals based on the teacher's confidence in the usefulness of these strategies, his enthusiasm to use them and the extent of his benefit of using these strategies. He is the designer and leader of the cognitive activity in line with the abilities of students, the scientific and successive technological discoveries (Qatami, 2001).

The most prominent of these strategies are the meta-cognition strategies, which include a set of elements:

students' awareness of their cognitive or mental processes. These processes consist of planning, supervising, developing, and ultimately completing the task to assess the effectiveness of the operations they have performed; in order to ensure that the assigned objectives have been achieved (Nofal, 2008).

The strategy of PQ4R is considered one of the meta-cognition strategies. It is known as: A strategy that deals with the education of learning; as it helps the learner to comprehend, memorize, and retain the included reading topics in order to access to the real learning; so students shall be aware of the contents of the reading texts; which helps them to transfer their learning to other learning situations. Thus, students will be able to self—learning following the basic steps of this strategy, namely: Preview (P), Question (Q), Reading (R), Reflect (R), Recite (R), Review (R) (Sudarman, 2009).

Students can be taught the reading texts using this strategy through the following steps (Trainto, 2007).

1. Preview: by taking a preliminary look in preparation for the reading of landmarks, headlines, and prominent ideas as an attempt to summarize, and predict the content of the reading text.

2. Question: (Asking questions, questioning): Here are also considered ideas, and headings to be converted to questions depending on the text containing the appropriate answers; using the tool WH-Questions (who, what, where, why …).

The 4R in strategy (PQ4R) means:

3. (Reading): in this step, students are asked to read the scientific material carefully, with awareness of the main and sub-ideas to get the correct answers to the questions put forward in the previous step.

4. (Reflection): (Visual perception, reflection). Visual perception: the students think deeply about what they are reading to produce a visual image based on mental frames/schemes to infer contents, trying to link the learnt knowledge with what they have in their minds. This definition reinforced by what the Arabic Language Academy (2004) has pointed out that the comprehension is: the accuracy of the perception of content and the readiness of mental ability to conclude; so it enables students to employ the mental signs, and the evidential of the skill of reading in addition to linguistic and sensory evidence, which prepares them for more visualization. Thus, it becomes easier for them to comprehend compared with other students.

5. (Recite): in this step students recite their answers loudly after reading them carefully and writing the answers in the booklet. This will require students to recall information in details, which are extracted from the reading text.

6. (Review): Finally, students review the ideas they have learned, the facts contained in the reading text when necessary, and can provide suggestions and non-traditional ideas. Some educators have called this step (review or recitation): repetition of information, examination of answers to ascertain their comprehension of the text (Hornby, 1995).

So, it can be concluded that the benefits of applying the strategy PQ4R cannot be achieved completely unless we apply its steps in order. If they are separate, it means that we will not achieve the desired goals of the implementation of the strategy we seek; it is an integral whole that cannot be fragmented.

The strategy PQ4R has many advantages. It is a strategy PQ4R that can be applied and implemented in

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all educational materials; it is not limited to languages alone. It can be implemented by students individually or collectively. This strategy makes reading a more lively process, activates previous knowledge among students, and links it to new learning with the transmission of the learning impact. In addition, it stimulates students' motivation to learn with all their mental capacities in all educational fields. It also achieves the students' confidence in their ability to participate, the positive role in learning, making them the focus of the educational process, working to increase the academic achievement of the students, allowing them to join the disciplines desired at university.

Given the importance of meta-cognition strategies in general and strategy PQ4R in particular, many studies were conducted. For example, Hashemi's study (2015) aimed to identify the effect of PQ4R strategy in the achievement of the subjects of sociology and critical thinking among fourth graders. The sample consisted of (54) female students randomly assigned to two groups: control and experimental. The results of the study showed an increase in the achievement of the students of the experimental group for the effectiveness of strategy in recalling knowledge.

Jabouri and Khuzai (2015) carried out a study that aimed at knowing the effectiveness of teaching by using PQ4R strategy in the cognitive preference of intermediate second grade students in the history subject. The sample was chosen intentionally. It consisted of (68) students who were randomly assigned to two groups: one of which was experimental (34) students who studied by using PQ4R strategy, and the second was the control group (34) students who studied in the traditional way. The study found that the students of the experimental group were superior to their counterparts in the traditional group.

Dawoud's study (2014) was intended to know the effect of PQ4R strategy in the achievement and retention of the second-grade students in the subject of biology. The sample was randomly selected and divided into two groups: control and experimental. The results showed the excellence of the students of the experimental group who studied by using the strategy of PQ4R in the achievement and retention test.

Sayegh and Jabouri's study (2014) aimed to identify the effect of PQ4R strategy in the achievement of the second grade students in geography subject. The sample consisted of (70) Students randomly divided into two groups (control and experimental). The researchers followed the experimental approach. The study showed that the proficiency of the students in the experimental group, who studied by using the PQ4R strategy to the students in the control group who studied in the usual way.

Ghareeb's study (2011) was intended to know the effect of PQ4R strategy in the reading comprehension of the fifth graders. The study was conducted in Baghdad, and a sample was randomly selected from Al Khansa Preparatory School. The researcher chose class (A) which had (33) students as an experimental group and class (B)—34 students—as a control group. The results showed that the students of the experimental group were superior to the students of the control group in reading comprehension.

The study by AL-Ghamdi (2010) was carried out to know the effectiveness of self-questioning and PQ4R strategies in the development of reading comprehension skills among the first secondary students in Saudi Arabia. The sample of the study consisted of 90 female students in the first preparatory grade. The students were divided into three groups: the first group studied by using the strategy of

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self-questioning, while the second studied according to PQ4R strategy, and the third group studied in the traditional way. The tools of the study were a list of (38) reading comprehension skills, a list of (48) directed questions and a reading comprehension test which consisted of (44) questions. The test was applied before and after. The study showed the superiority of the experimental group students on the control group students in the reading comprehension.

A review of previous studies shows that some of them discussed the subject of achievement such as: the study by Ghareeb (2011). Also, the studies included some types of thinking such as: the study of Al-Hashemi (2015). Previous studies were applied in different fields such as history (Jabouri & Khozaie, 2015)'s study Geography such as the study by Sayegh and Jabouri (2014) and other fields. We also note that some previous studies have applied two strategies of meta-cognition strategies to balance them in influencing dependent variables such as the study by Ghamdi (2010). While the current study adopted one strategy: PQ4R strategy which has been conducted in Arabic language—Communication Skills.

It should be noted that the current study has benefited from previous studies in terms of theoretical literature, in addition to the development of the used tool of the study. What distinguishes the current study from the previous Arab and foreign studies in this regard is the measuring of the effect of the strategy PQ4R in the reading comprehension of the Arabic language subject among the ninth grade students. It was also distinguished in the geographic location in which it was applied, namely, the southern region of the Hashemite Kingdom of Jordan in Tafileh Governorate, in addition to its characteristics and ages.

2. Problem of Study

The problem of study can be summarized by asking this main question: Are there any statistical significant differences at $(0.05 = \alpha)$ between the average of the scores of the study samples in the achievement test of the reading comprehension attributed to the method of teaching (method of and PQ4R and the traditional way), and to gender (male and female), and to the interaction between gender and the way of teaching?

3. The Importance of the Study

The importance of the study is as follows:

- The practical importance of meta-cognition strategies, including the strategy of PQ4R.
- Few studies—the best of researchers—hat focus on employing strategy PQ4R in the subject of Arabic language.

4. Objectives of the Study

The objective of the study is to investigate whether there is a statistical significant effect in the achievement of the ninth grade students due to the strategy of (PQ4R), gender or interaction between the strategy and gender.

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5. The Terms of the Study (Procedural)

- Strategy PQ4R: The actual implementation of the steps of this strategy during the pedagogical treatment. Its effect is measured by the students' scores in the achievement test that was prepared.

- Reading comprehension: The extent to which the basic ninth grade students can study reading comprehension texts, the exploration of the meanings and ideas inspired by the reading texts in the subject of the Arabic language, the formulation of concepts from one format to another, and the ability to put forward assumptions and predicting logical endings; so it is the product of interactive experience with reading texts.

- Achievement: The grades obtained by the students in the achievement test prepared by the researchers for this purpose.

- Ninth Grade: One of the basic stages in the schools of the Jordanian Ministry of Education.

6. Limitations of the Study

Spatial Limit: This study was conducted in the Directorate of Kasbah Al-Tafileh, specifically Omar Bin Al-Khattab Primary School for Boys and Al-Harith Bin Omair Elementary Mixed School. Time Limit: The study was conducted in the second semester of the academic year 2017/2016.

Objective Limit: The strategy f PQ4R has been applied to measure the skills of reading comprehension (direct, deductive, creative, and critical) in the Arabic language subject-Communication Skills—first edition of the year 2015.

7. Method and Procedures

7.1 Methodology of the Study

The present study adopted the semi-experimental approach based on two groups: one is the experimental and the other is control.

7.2 Population of the Study

The population of the study consisted of all the students of the ninth grade in the schools of the Directorate of Education in the province of Tafila: they were (14 81) students.

7.3 The Study Sample

The study sample consisted of 104 students (male and female) from my school Omar Ibn al-Khattab Boys School and Al-Harith bin Omair Basic Mixed school in the Directorate of Education in Tafila. They were selected intentionally because there were adequate school students. The study groups were selected randomly and the students were distributed by (52) students in both experimental groups and (52) male and female students in the two control groups. The following table shows the distribution of the study sample:

Table 1. Distribution of Sample Members of the Study

School	Section	Group	Number	Total
Omar bin Al - Khattab for boys (Male)	A	Control	26	52
	B	Experimental	26	
Al-Hareth bin Omair Basic mixed school (Female)	A	Experimental	26	52
	B	Control	26	
			Total 104	

7.4 The Tools of the Study

It is an achievement test consisted of (28) items in the form of multiple choice test and complete the gaps…) as well as essay questions (short answer). The test measures four levels of comprehension Reading: direct comprehension, deductive comprehension, critical comprehension and creative comprehension.

7.5 The Validity of the Tool

To make sure the test has been verified, a group of arbitrators with experience in the field of Arabic language curricula, teaching strategies, the literature of the Arabic language, and the educational psychology, teachers and supervisors of Arabic language to verify the apparent reliability of the test, and in the light of the observations, some items of the test have been modified.

7.6 The Reliability of the Tool

To ensure the reliability of the test, the method of (Test-Retest), the test was applied on a pilot sample of ninth grade students within the population of the study and on a sample outside the study (40) students. And after two weeks, the same test has been re-applied on the same sample, and then the internal consistency coefficient (Cronbach's alpha) was calculated (85.4). This value is appropriate for the purposes of the study. The stability was calculated using Split-Halfin Spearman Brown coefficient, the value was (87.8) which is also suitable for the purposes of the study.

- Test time: To determine the test time, the following equation is used:

Average Test Time = First Student Response Time + Last Student Response Time 2.

The time it took the first student to answer was 35 minutes, and the time taken by the last student was 45 minutes, so the time average of the test was 40 minutes.

- Difficulty and ease coefficients of testing: The Difficulty and Ease coefficients of testing were found. Table 2 illustrates the result:

Table 2. Difficulty and Ease Coefficients for Reading Comprehension Test Items

No.	Difficulty coefficient	Ease coefficient	NO.	Difficulty coefficient	Ease coefficient
1	625	.484	15	6.50	.250
2	6.75	.354	16	6.50	.380

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3	.700	.105	17	7.75	.474
4	6.75	.423	18	.700	279.
5	625	.484	19	625	.484
6	6.75	.250	20	6.75	.354
7	725	4.16	21	.700	.105
8	6.75	.423	22	6.75	.423
9	.750	.363	23	6.75	.250
10	.800	.59	24	6.50	.380
11	625	.484	25	625	.484
12	6.75	.354	26	6.75	.354
13	.700	.105	27	.700	.105
14	6.75	.423	28	.250	.250

The Table above indicates that difficulty coefficients ranged between (.250-.80), and ease coefficients between (.250-.105). This indicates that the items of the test were appropriate.

The correction of the achievement test: The achievement test consisted of (28) questions included (16) multiple-choice questions and complete the gaps…, and (12) questions of (short essay). The test was corrected for each question by calculating one mark for the correct answer and zero for the wrong answer for each question. Thus, the total score of the test was (28) marks.

Group Equivalence in the achievement test: It has been made sure of the equivalence of the experimental and control groups through the use of the (Independent Samples Test) of the differences between two independent groups. Table 3 shows the result.

Table 3. The Results of the (Independent Samples Test) of the Differences between Two Independent Groups in the Achievement Pretest

Variable	Category	Number	Mean	standard deviation	Value (T)	Degrees of freedom	Statistical significance
Group	Experimental	52	10.3462	3.36	0.745	102	0.458
	Control	52	10.8269	3.215			

The results in Table 3 indicate that there are no statistical significant differences between the control and experimental groups on the pre-test, which means the equivalence of the two groups.

7.7 Steps to Conduct the Study

- Selection of the study population from school students affiliated to the Directorate of Education in

Tafileh Governorate in Jordan.

- Choosing the sample of the study and determining the schools in which the study will be applied.

- Preparation of the achievement test.

- Setting up the answer key for test questions.

- Applying the test to the sample of the study after applying it to a pilot sample.

- Preparation of teaching plans for reading texts in accordance with strategy PQ4R. The preparation of teaching plans to teach Arabic language-Communication Skills-for students of the experimental group according to PQ4Rstrategy after viewing these plans by experts in the Arabic language and the methods of teaching it.

- Teaching the students of the experimental group according to strategy PQ4R for two months from 1/3/2016 to 1/5/2016.

- Applying the achievement test after completing the teaching period on the study groups.

- Correcting the test and conducting statistical analysis.

7.8 Statistical Analysis

The study used the following statistics:

- (Arithmetical means, standard deviations).

- (T-test) for two independent samples: which was adopted for equivalence between the two study groups and knowing the significance of differences in the achievement pretest.

- the two—Way analysis of variance (ANCOVA).

- Eta Square (η^2).

8. Variables of the Study

The study included the following variables:

First: The independent variables:

Method of teaching has two levels: strategy PQ4R and the traditional way.

Gender: males and females.

Second: The dependent variable: the achievement in reading comprehension.

9. Results of the Study

To answer the question of the study: Are there any statistical significant differences at ($0.05 = \alpha$) between the average scores of the sample of the study in the achievement test of the subject of reading comprehension attributed to the method of teaching (method PQ4R and the traditional way), gender (male and female) and the interaction between gender and methods of teaching? The means of the pretests and post tests and the Standard deviations for the performance of the Ninth Basic students were calculated in the achievement test in the reading comprehension in Arabic Language subject (using strategy PQ4R and the traditional way). Table 4 shows that.

Table 4. The Arithmetical Means and the Standard Deviations of the Marks of the Study Samples in the Achievement Pretest and Post-Tests According to the Variables of Strategy and Gender

Group	Gender		Males	Females	Total
Experimental	Test	Number of students	26	26	52
	Pre-	Mean	10.19	10.50	10.35
		Standard Deviation	3.66	3.08	3.36
	Post	Mean	12.85	21.15	17.00
		Standard Deviation	5.67	3.15	6.186
Control	Test	Number of students	26	26	52
	Pre	Mean	10.31	11.35	10.83
		Standard Deviation	3.87	2.34	3.21
	Post	Mean	10.96	17.65	14.31
		Standard Deviation	4.87	3.97	5.55
Total	Test	Number of students	52	52	104
	Pre	Mean	10.25	10.92	10.59
		Standard Deviation	3.73	2.75	3.28
	Post	Mean	11.90	19.40	15.65
		Standard Deviation	5.32	3.97	6.00

Data in Table 4 above indicate that there is approximation among the averages of the study samples in the achievement pretest. The arithmetic mean of the marks of the experimental group students is (10.35) and the Standard deviation is (3.36). The arithmetic mean of the students' marks of the control group is (10.83) and the Standard deviation is (3.215). This means that there is an apparent difference in the arithmetic mean between the two groups (experimental and control) which is (0.48) mark.

It is also noted that there is approximation among the mark averages of the study subjects in the achievement pretest. The mean of the male students' marks is (10.25) and the standard deviation is (3.735), while the arithmetic mean of female students' marks is (10.92) and the standard deviation is (2.75). That is, there is an apparent difference in the arithmetic mean between the marks of male and female students which is (0.67). Table 3 for the results of the equivalence of the study groups showed that there were no statistical significant differences in the pre-test among the study groups. In contrast, the data in Table 4 indicate that there is an apparent difference between the means of the achievement of the experimental and control groups in the post-tests. The arithmetic mean of the performance of the experimental group members who have studied using strategy PQ4R is 17.00 and the Standard deviation is 6.18 while the arithmetic mean of the achievement of the control group members who have studied the same subject according the traditional way is 14.31 and the standard deviation is 5.55.

It is also noticed that there is an apparent difference between the marks average of the study subjects in

the post-achievement test. The mean of the marks of male students is (11.90) and the standard deviation is (5.32), while the arithmetic mean of female student marks is 19.40 and the standard deviation is 3.97. That is, there is an apparent difference in the arithmetic mean between the scores of male and female students which is 7.50 mark.

Based on the different descriptive statistics of the scores of the study samples concerning the post-achievement test, it was decided to test the impact of the proposed strategy and the impact of gender and the interaction between in the post-achievement test using the Two-way analysis of variance (ANCOVA) as the marks of the two groups (experimental and control) in the pre test of achievement are common variant.

Table 5. Two-Way Analysis of the Variation (ANCOVA) of the Achievement of the Study Samples in the Post-Achievement Test according to the Variables of Strategy and Gender and the Interaction between Them

Source of variation	Squares Total	Degrees Freedom	Squares Averages	Calculated value (P)	Statistical significance	ETA square η^2
Associated variable (pre-)	59.390	1	59.390	2.960	.088	
Teaching strategy	203.392	1	203.392	10.138	.002	.093
Gender	1386.798	1	1386.798	69.123	.000	4.11
Teaching strategy × Gender	20.671	1	20.671	1.030	313.	
The error	1986.226	99	20.063			
Total	29198.000	104				

The results in Table 5 above show that there is an effect of statistical significance ($\alpha = 0.05$). It is attributed to the variable of the strategy of teaching, where the value of (P) = (10.138), and this value is linked with probability (0. 002). That is, there is a statistical significant difference at ($\alpha = 0.05$) in the post- achievement test. The results above also show that there is an effect of statistical significance ($\alpha = 0.05$). It is attributed to the impact of the gender variable: the value (P) = (69.123), and this value is linked with probability (0.00), i.e., there is a statistical significant difference ($\alpha = 0.05$) in the post- achievement test. The results also indicate that there is no statistical significant difference ($\alpha = 0.05$) of the value (P) (1.030) that is due to the impact of the interaction between the strategy and gender. The results of the post-adjusted arithmetical means in Table 6 show these differences.

Table 6. Post-Adjusted Mathematical Means of the Students' Grades of in the Post-Achievement Test according to the Variables of the Teaching Strategy and Gender

variable	Group	Gender	Mean
Group	Experimental	Males	12.94
		Females	21.17
		Total	17.06
	Control	Males	11.03
		Females	17.48
		Total	14.25
Gender	Males Total		1 1.89
	Females Total		19.33

The post-adjusted arithmetical means in Table 6 above show that the statistical significant difference for the strategy of teaching was in favor of students of the experimental group who studied using PQ4R strategy: the post- adjusted arithmetic mean to them is (17.06) while the post-adjusted arithmetic mean for students in the control group who studied according to the traditional method is (14.25).

The Table above shows that the statistical significant difference for gender was in favor of female students: the post -adjusted arithmetical mean is (19.33) while the post-adjusted arithmetical mean for male students is (11.89).

10. Discussion of the Results

The results in Table 5 indicate a statistical significant effect at (α = 0.05). It is due to the variable of teaching strategy: the value of (P) is (10.138). And this value is linked with a probability = (0.002). That is, there is a significant difference at (α = 0.05) in the achievement posttest. The results in the Table 6 show that the statistical significance of the teaching strategy was for the benefit of students in the experimental group who have studied using PQ4R strategy. Probably, it is due to the important role of PQ4R strategy. Its six steps present a positive role in clarifying and establishing the content of the reading texts in the mind of the students: a student takes a good chance in understanding reading comprehension text since he cast a preliminary look at the reading texts, thinking deeply then reading it well, finally discussing the findings. The students combine the reflective silent reading which allows him to concentrate with the verbal discussion that brings his ideas about the reading text. This gives pleasure to the process of reading and learning and thus improves the process of comprehension. This result corresponds with the result of Ghareeb's study (2011), Ghamdi's study (2010), Sraidi's study (2012), and Zamarone's study (2008).

The results in Table 6 above indicate a statistical significant effect at the level of significance (α = 0.05)

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due to the variable of gender and in favor of female students. The post-adjusted arithmetical mean is (19.33) while the post-adjusted arithmetical mean for male students is (11.89). This result may be due to the fact that the female ability to reflect about a reading text was greater than that of males, and that their ability to concentrate was also greater compared with males. This strategy requires great reflection and concentration, which stimulated their comprehension of reading texts.

The results also indicate that there is no statistical significant difference at the level of significance ($\alpha = 0.05$) the value of (P) is (1.030) due to the effect of the interaction between strategy and gender.

11. Recommendations

- A recommendation to Arabic teachers to adopt PQ4R strategy as an effective method of teaching Arabic.

- A recommendation to the Ministry of Education to hold training courses for teachers on how to employ meta-cognitive strategies.

- A recommendation for researchers to conduct further studies on the impact of strategy PQ4R in the achievement of students in Arabic Language and other subjects and at different levels of study.

References

Dawood, A. (2014). The Impact of Strategy (PQ4R): The Achievement and retention of second-grade students in Biology subject. *The journal of the College of Basic Education for Human Educational Sciences*, *18*, 628.

Ghamdi, B., & Abdullah, S. (2010). *The effectiveness of some self-questioning strategies and PQ4R strategy in the development of reading comprehension skills among students of the first secondary grade* (Unpublished Master Thesis). Umm Al-Qura University, Saudi Arabia.

Ghareeb, H. (2011). *The Effect of the Strategy PQ4R in the comprehension of reading texts among fifth grade students* (Unpublished Master Thesis). University of Babylon, Iraq.

Hashemi, B., & Joudeh, K. (2015). *The Impact of PQ4R Strategy in the achievement of sociology and critical thinking among fourth grade students* (Master Thesis). University of Wasit, Iraq.

Jubouri, F. T., & Khazai, A. I. (2015). The effectiveness of teaching using PQ4R strategy in the cognitive preference of students in the second grade intermediate in History subject. *The journal of the College of Education for Girls of Humanities*, *17*, 433.

Nofal, M. B. (2008). *Practical applications in the development of thinking using the habits of the mind*. Amman: Dar Al Masirah for Publishing, Distribution and Printing.

Qatami, N. (2001). *Teaching thinking of the basic stage*. Edition I. Amman: Dar Al Fikr for Printing and Publishing.

Sayegh, A. H., & Jabouri, H. M. (2014). The Impact of Thompson Robinson Strategy PQ4R in the achievement of students in the second grade intermediate in Geography subject. *Journal of the College of Basic Education*, *19*, 242.

Sudarman. (2009). Pening ka tan Pema haman Dan Daysa Ingat Siswa Melalui Strategi Preview, Question, Read, Reflect, Recite, DanReview PQ4R. *Journal Pendidikan inovatif (JPT)*, *4*(2), 67.

The Ministry of Education. (2015). *Arabic Language Book-Communication Skills, Arabic Grammar-Grade 9*. Amman: Curriculum Management and Textbooks.

Trainto, D. (2007). *Model-model Pembelajaran Inovatif Berori entasi Konstruktivistik*. Jakarta: Prestasi Pustaka Publisher.