The Application of Question Answer Relationship Strategy (QARS) to **Increase Students' Reading Comprehension at SMA Negeri 3 Tondano**

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ABSTRACT: This study aimed to determine whether the application of Question Answer Relationship Strategy (QARS) can enhance students' reading comprehension. This study was conducted at SMA Negeri 3 Tondano. Employing a quantitative research method through pre-experimental design with a one group pre-test and post-test, the research examines the reading comprehension of class XI Bahasa students during the 2022/2023 academic year, as the subject of this study, which consist of 24 students. Data analysis involved comparing the mean scores of the pre-test and post-test to determine the effectiveness of QARS. The findings revealed a notable enhancement in the mean score from the pre-test (51.3) to the post-test (83.3). The outcomes show a clear improvement in student performance after the application of the Question Answer Relationship strategy. Through the results of this study, it can be concluded that the application of the Question Answer Relationship Strategy is able to increase students of class XI Bahasa at SMA Negeri 3 Tondano reading comprehension.

Keywords : Question Answer Relationship Strategy, Increasing, Reading Comprehension, QARS

INTRODUCTION

Language is a means of communicating various though, feelings and human action to each other. According to (Chaer, 2003), language is a verbal tool for communication. He explained that language is an intermediary to carry out conversation between one human and another human. Learning language is a must considering how important language is in our life as humans, because by learning language we can progress to be more advance.

Reading is widely recognized as a crucial language competency that must be mastered for successful language learning. As stated by (Lerner, 1989) that children must learn to read so that they can read to learn. This prove that without reading, someone will have difficulty in learning, because in learning process, a person needs to gain knowledge and understanding of something that is obtained trough various types of reading. In addition, reading is also one of the measuring tools to assess whether a language learning process, especially English, has been maximally achieved or not.

According to (Mogea, 2023) English serves as a global language that significantly enhances our lives, particularly in educational advancement, and is extensively utilized for exchanging ideas, science, and technology on an international scale.

In order for someone to have skills in language, it is necessary to have mastery of continuous learning outcomes. As we all know, there are four basic skills used to learn language so that someone can become fluent, namely speaking, reading, writing and listening (Lengkoan et al., 2022). The four skills are a very important part and become a measuring tool for whether someone has mastered enough language skills or not.

(Kamagi, 2020) stated that reading is essential to human life and is inseparable from human activity, as it allows individuals to acquire knowledge. Through this we can see how important reading is in our lives as humans who will always go through a learning process.

To understand the reading and get benefits from what is read, then someone must understand the reading text. A person's ability to understand the text that is read is usually called reading comprehension. According to (Rahim, 2008), reading comprehension is a reading activity to gain understanding of concepts, understand words and understand ideas written and conveyed by the author. This means, when reading, it is necessary to have an understanding from the reading. This can be seen from the understanding the purpose of reading, the intent of the content of the reading and being able to take the meaning of the reading. A person does not need to memorize to be said to be said to have understood a reading, because

understanding the meaning of the reading will be seen through their understanding of what is meant in a reading.

The reality that occurs in everyday life, especially in the school environment is the inability of students to understand reading text. This resulted in them having difficulty inferring the main ideas, objectives and benefits of the reading, and what was worse, the students were not interested in reading. To solve these problems, one way that can be used is the application of the appropriate and interesting learning strategies. The Question Answer Relationship Strategy (QARS) is recognized as a potentially effective strategy for enhancing students' reading comprehension abilities.

According to (Raphael, 1986) QARS is a learning strategy in which readers are given the opportunity to identify and understand the question as best they can, then try to find information to get the right answer. This understanding can be explained more clearly that the QARS strategy can be used in an educational environment, for example by teachers. Subsequently, the teacher will provide the reading material along with questions pertaining to it, and will encourage students to seek answers from a variety of sources. So this strategy directs students to be interested in a reading text in order to get the right answer. Therefore, through the implementation of the QARS strategy, it is expected to improve student' reading comprehension skills. It is also being supported by (Asilestari, 2017) whose demonstrates that after being taught using the QAR strategy, students showed an increase in their reading comprehension and were able to answer questions more effectively.

The application of the QAR strategy effectively enhanced reading comprehension among students. (Sahbana Damanik, 2021) suggest that the QAR strategy emerged as a successful educational method for improving reading comprehension skills.

(Amumpuni, 2017) also discovered that the QAR strategy aids students in comprehending the text. Students expressed interest in answering questions related to the text, showed increased motivation to read, and reported that the reading instruction was engaging and enjoyable. This study aimed to determine whether the

application of Question Answer Relationship Strategy can enhance students' reading comprehension. The study is titled "The Application of Question Answer Relationship Strategy (QARS) to Increase Students' Reading Comprehension at SMA Negeri 3 Tondano."

RESEARCH METHOD

Research Design

This research utilize a quantitative method, applying a pre-experimental design involving a single group with both a pre test and a post test to know the effectiveness of the strategy used by the invertigator in the teaching and learning process.

Specifically, researchers used quantitative research through a preexperimental design with one group pre-test and post-test (Arikunto, 2010). Pupils first take a pre-test before receiving the treatment. Following the completion of the application of the treatment, they will then participate in a post-test. The aims of this research is to asses the impact of the application of QARS as the treatment employed by the investigator.

Pre-Test	Treatment	Post-Test
T_1	X	T ₂

Subject of the Research

The researcher takes Class XI Bahasa in 2022/2023 academic year at SMA Negeri 3 Tondano that consist of 24 students as the subject or the focus of this research.

The Instrument of the Research

In collecting data in this study the researcher use pre-test before applying the treatment and post test after the treatment. The test will be in the form of multiple choice questions consisting 25 multiple choice test with five choice: A,B,C, D or E.

Reading Assessment Indicators

1) Comprehension

Ability to identify the main idea and supporting details.

Ability to make inferences and draw conclusions based on the text.

Ability to answer questions about the text.

2) Vocabulary

• Ability to understand and use new vocabulary words in context.

Ability to infer the meanings of unfamiliar words by utilizing

contextual hints.

Ability to identify synonyms, antonyms, and homonyms.

3) Text Analysis

Ability to discern the author's intent and perspective,

Ability to identify literary devices (e.g., metaphors, similes,

imagery).

4) Critical Thinking

Ability to compare and contrast different texts or viewpoints.

• Ability to form personal opinions and justify them based on

evidence from the text.

5) Engagement

Ability to demonstrate interest and motivation in reading activities.

Ability to participate in discussions about the text.

Ability to connect the text to personal experiences or other

knowledge

Assessing reading comprehension with multiple-choice questions involves

evaluating how well students understand a text by presenting them with questions

that have several answer options. This method can influence reading processes and

comprehension outcomes.(Rupp et al., 2006)

The formula to score multiply choice question:

Score = $\frac{B}{N} x 100$

B: Number of correct answers

N: Number of questions

Table 1. Students' score classification

NO.	Score interval	Category	
1.	86-100	Very good	
2.	71-85	Good	
3.	56-70	Average	
4.	41-55	Poor	
5.	0-40	Very poor	

The researcher administers a pre-test to the class designated for treatment, followed by the implementation of the treatment itself. Once the treatment is completed, a post-test is given. The effectiveness of the treatment can be more precisely assessed by comparing the outcomes of the pre-test and post-test.

In the first meeting, the researcher will give a reading comprehension test as pre pre-test and then treatment or application of the question and answer strategy will be carried out in the second meeting, in third meeting the researcher also applying treatment and then after the treatment is given the researcher will give another test as post test.

Procedure of Collecting Data

The writer collected the data using written test. (Louis et al., 2000)state that test consists of a series of questions or exercises that aim to assess the knowledge, skills, intelligence, abilities, or talents of a person in a particular group. So to evaluate knowledge, in this case using a pre-test and a post-test.

In the teaching and learning process, the test can be said to be an important part of this, because through the test, the teacher can find out the extent of the student's ability or the extent to which students understand the material that has been given. namely as already mentioned above,. In this study, the researcher will provide 25 multiple choice questions with the same material for the pre-test and post-test in class XI Bahasa from SMA Negeri 3 Tondano. To collect the data, the researcher follow the steps bellow:

- Choosing the subject. In this research the writer choose Class XI Bahasa as the subject of this research.
- Preparing the material.
- Giving pre test. This pretest is given before applying this treatment with the aim of seeing how students' initial knowledge of the material to be taught.
- Giving the treatment by applying Question answer relationship strategy.
- The post-test is administered following the implementation of the treatment. The objective of this post-test is to evaluate the effectiveness of the treatment provided.
- Analyzing the data, In this case, data analysis was carried out by taking the
 outcome of the pre-test and post-test. The analysis in this research uses
 the mean formula by comparing the results previously obtained from the
 initial test, namely the pre-test, with the results obtained from the test
 results after the application of the treatment, namely the post-test.
- Making conclusion from the outcome of the research, Based on the results
 of the two tests, then after each data has been successfully collected and
 analyzed, conclusions were drawn from the overall research that had been
 conducted by the researcher.

Technique of Data Analysis

The data gathered from the reading comprehension test can then be analyzed to assess whether there is a notable difference or improvement in pupils' reading comprehension using the same set of test materials. Furthermore, the test results are also used to examine whether there is any progress in students' scores between the pre-test and post-test.

In data analysis the researcher used Mean Score Formula as follows:

$$\bar{\mathbf{x}} = \frac{\sum \mathbf{x}}{\mathbf{N}}$$

(Nana Sudjana, 1996)

Where:

 \bar{x} = the mean score

 $\sum x$ = all scores of the sample

N = total number of students

FINDINGS AND DISCUSSION

Findings

This chapter outlines and examines the findings of the research. In this section, the results identified by the researcher are presented. It has been previously noted that this study employed a quantitative research through single group pre-test and post-test. Then the mean formula is used to get the average results from the pre-test and post-test, from the result we able to see whether there is a significant difference before and after the application of the treatment or in this case the application of question answer relationship strategy, whether there is an increase in the scores obtained by class XI Bahasa students as research subjects or not.

The data collected from the pre-test and post-test was subsequently arranged into a frequency distribution table and evaluated using the formula for calculating the average or mean score. To analyze the data in this study, the researcher followed these steps according to (Tatipang et al., 2021):

The initial step involves analyzing the scores of the students. During this phase, the researcher evaluates the test results for each student from both the pre-test (T1) and post-test (T2). The researcher counts the number of correct answers for each student, divides that total by the number of questions, which is 25, and then multiplies the result by 100. The findings from the pre-test (T1) are presented in Table 2, while the analysis of the post-test (T2) can be found in Table 3.

a. Pre-test result

The following are the results of the pre-test of all the research subject of 24 students of class XI Bahasa at SMA Negeri 3 Tondano.

Table 2. Pre-test result

STUDENTS	SCORE
S 01	36
S 02	60
S 03	56
S 04	72
S 05	56
S 06	48
S 07	68
S 08	56
S 09	44
S 10	56
S 11	40
S 12	36
S 13	48
S 14	44
S 15	60
S 16	64
S 17	40
S 18	56
S 19	56
S 20	44
S 21	48
S 22	40
S 23	44
S 24	60
N = 24	$\sum T1 = 1.232$

$$\bar{\chi} = \frac{\Sigma T1}{n}$$

 $\bar{\chi}$ = Mean (average score)

 Σ T1 = Total number of pupils' Pre-Test score

n = Total number of the pupils

Mean T1 =
$$\frac{1.232}{24}$$
 = 51.3

We can see the results of the pre-test or initial test carried out to see the initial abilities of the research subject students in this case class XI Bahasa, before the application of the treatment and the total score of all students if combined or added together is 1.232. Then divided by the total number of students, which is 24 students, the average score or mean score is 51.3. The highest score obtained by students in this pre-test was 72, while the lowest score obtained was 36, which of course can be said to be very low.

b. Post-test result

The following are the results of the post-test of all the research subject of 24 students, the post-test scores were collected based their score from the result of 25 multiple choice question test which has been given to student in class XI Bahasa of SMA Negeri 3 Tondano as the subject after the treatment.

Table 3. Post-test result

STUDENTS	SCORE
S 01	76
S 02	88
S 03	80
S 04	92
S 05	84
S 06	84
S 07	80
S 08	84
S 09	76
S 10	84
S 11	88
S 12	76
S 13	80
S 14	84

n = 24	$\sum T2 = 2.000$
S 24	92
S 23	84
S 22	76
S 21	84
S 20	80
S 19	88
S 18	80
S 17	84
S 16	88
S 15	88

$$\bar{x} = \frac{\Sigma T2}{n}$$

 \bar{x} = Mean (average score)

 Σ T2 = Total number of pupils' Post-Test score

n = Total number of the pupils

Mean T2 =
$$\frac{2.000}{24}$$
 = 83.3

The Post-test was conducted on the same 24 students when the pre-test was conducted also with the same test material. The post-test was conducted after the treatment were given. The post-test aims to determine students' learning achievement after being given treatment using the question answer relationship strategy, the number of tests is 25 number in the form of multiple choice test. The lowest score obtained by class XI Bahasa students as subjects in this study was 76 and the highest score obtained by class XI Bahasa students as subjects in this study was 92. The average score (mean) results is 83.3.

Gain

Table 5. Gain

	SCORE	SCORE	
STUDENTS	PRE-TEST	POST-TEST	GAIN
S 01	36	76	40
S 02	60	88	28
S 03	56	80	24
S 04	72	92	20
S 05	56	84	28
S 06	48	84	36
S 07	68	80	12
S 08	56	84	28
S 09	44	76	32
S 10	56	84	28
S 11	40	88	48
S 12	36	76	40
S 13	48	80	32
S 14	44	84	40
S 15	60	88	28
S 16	64	88	24
S 17	40	84	44
S 18	56	80	24
S 19	56	88	32
S 20	44	80	36
S 21	48	84	36
S 22	40	76	36
S 23	44	84	40
S 24	60	92	32

The next step the researcher took in analyzing the data from this study was to examine the gain from the results of each test. Gain in the table above can be

obtained from subtracting the Post-Test and Pre-Test scores to get the gain result. Gains usually refer to positive improvements in performance, such as before and after data, it is important to analyze the data to see if there has been a significant change in the process. Through the gain table from the Pretest and Post-Test above, we can see that there are many differences in test scores before and after the treatment was implemented. The largest gain difference before and after was 48 and the smallest was 12.

c. The Frequency distribution of Pre-Test

Table 6. The Frequency distribution of Pre-Test

Score	Tally	Frequency (f)	Cumulative Frequency	Cumulative Percentage (%)
36	II	2	2	8.33
40	III	3	5	20.83
44	IIII	4	9	37.5
48	III	3	12	50
56	IIIIII	6	18	75
60	III	3	21	87.50
64	Ι	1	22	91.67
68	I	1	23	95.83
72	I	1	24	100

The next step, based on the table above, is to examine the frequency distribution matrix of the pre-test scores (T1). In this stage, the researcher organizes the pre-test scores of Class XI Bahasa students at SMA Negeri 3 Tondano previously calculated in the first step by arranging them from the highest to the lowest scores, along with the number of pupils who obtained each score.

Based on the frequency distribution analysis of the pre-test data, it was found that 2 students obtained the lowest score of 36, 3 students scored 40, 4 students received a score of 44, followed by 3 students who scored 48. Additionally, 6 students achieved a score of 56, 3 students scored 60, 1 student obtained a score of

64, another student scored 68, and finally, only 1 student earned the highest pretest score of 72. The detailed distribution of these results is presented in Table 7 above.

d. The Frequency Distribution of Post-Test

Table 7. The Frequency Distribution of Post-Test

	Frequency	Cumulative	Cumulative	
Score	Tally			Percentage
		(f)	Frequency	(%)
76	IIII	4	4	16.66
80	IIIII	5	9	37.50
84	IIIIIIII	8	17	70.83
88	IIIII	5	22	91.67
92	II	2	24	100

Based on the analysis of the frequency distribution data for the post-test, it is evident that 4 students received the lowest score of 76, while 5 students achieved a score of 80. Additionally, 8 students scored 84, 5 students obtained a score of 88, and ultimately, 2 students attained the highest score of 92 in this post-test.

Mean Score Result

Table 8. Results of Mean Score of Pre-Test and Post-Test

Pre Test		Post Test	
$\sum x (T1)$	1.232	$\sum x (T2)$	2.000
N	24	N	24
Mean Score	51.3	Mean Score	83.3

• Student improvement

Table 9. Student Improvement

Students	Mean	Score	Improvement
	Pre-test	Post-test	improvement
24	51.3	83.3	32%

The calculation of students' reading comprehension scores at Post-Test and Pre-Test. Then, each test (Pre-test and Post-Test) score according to the mean formula mentioned earlier will be divided by the total number of students, then from the results the average score or mean score will be determined as in the table 8 above.

Based on the pre-test data, the researcher found that 2 students received the lowest score of 36, 3 students scored 40, 4 students scored 44, 3 students scored 48, 6 students scored 56, 3 students scored 60, 1 student scored 64, another scored 68, and only 1 student achieved the highest score of 72. After calculating all the scores, the researcher determined that the average (mean) score in the pre-test was 51.3.

Based on the Post-Test data the researcher able to find that there are 4 students who get the lowest score in this post-test, which is 76, 5 students get a score of 80, 8 students get a score of 84, then 5 students get a score of 88 and then there are 2 students who get the highest score in this post-test, which is 92. After calculating the average score or mean score in Post-Test the researcher is able to find the results of the mean score in the Pre-test which is 83.3.

Looking at the mean score results of the two tests that have been carried out, it can be seen that there is a difference between the previous scores of their mean score, the pre-test which had a result of 51.3 and the post-test which obtained result of 83.3. We can see from the mean score result that there is a significant increase in students' score before and after the treatment is done or applied.

The mean score results that have been obtained as explained above can show that before the application of Question Answer Relationship Strategy, the test results of students from class XI Bahasa can be said to be still low and with the increase in student scores in the post-test, we can say that the use or the application of Question Answer Relationsip Strategy able to enhance or increase students' reading comprehension.

Table 9 above demonstrates a notable improvement in students' scores, with a 32% increase from the pre-test average of 51.3 to the post-test average of 83.3. This significant difference indicates that students' reading comprehension improved after the application of the Question Answer Relationship Strategy, as reflected by the 32% gain shown in the table.

Finally, through the various data above, it can be said that the results of this study show that Question Answer Relationship Strategy is able to increase students' reading comprehension, especially in this case, students from class XI Bahasa at SMA Negeri 3 Tondano.

Discussion

This study was conducted in Class XI Bahasa at SMA Negeri 3 Tondano during the 2022/2023 academic year. The aim of the study was to find out whether the Question Answer Relationship Strategy could increase students' reading comprehension. The carried out the study over the course of three meetings.

The First Meeting: The researcher greeted, then ask one of the student to pray before starting the activity, checked attendance and continued apperception with questions and answers about the material that they had before and the material to be given, the researcher gave pre-test questions to find out the initial scores of the students who were the subjects. After that the researcher convey information about upcoming learning activities and asked one of the students to pray and greet.

In the second meeting: The researcher greeted, ask one of the student to pray before starting the activity, checked attendance and continued apperception with questions and answers about the material to be given, then the researcher gave and delivered the material and examples of analytical exposition texts, Then researcher gave an explanation and examples of Question Answer Relationship strategy. The researcher later divided students into 5 groups, then gave an analytical exposition text along with questions. The researcher asked students in each group to discuss the text to identify the kinds of questions and how to answer the questions using the question answer relationship strategy. After that when the meeting would end, the researcher would then make conclusions, reflect on the analytical exposition text material, convey information about upcoming learning activities and ask one of the students to pray and greet.

The third meeting: The researcher greeted, ask one of the student to pray before starting the activity, checked attendance and continued apperception with questions and answers about the material to be given, then the researcher gave and delivered the material and examples of analytical exposition texts then gave an analytical exposition text along with questions. The researcher asked students in each group to discuss the text to identify the types of questions and how to answer the questions using the question answer relationship strategy. Then the researcher gave a post-test question to find out the results of the development of students' reading abilities after the treatment. After that when the meeting would end the researcher then make conclusions, reflect on the analytical exposition text material, The researcher then thanked the students who had helped in the research process and ask one of the students to pray and greet.

Prior to applying the treatment, the researcher determined that the average score of the students on the pre-test was 51.3, with the highest score of 72 attained by a single student. Conversely, the lowest score recorded in this pre-test was 36, achieved by two students. Based on the score classification outlined in Table 1, which categorizes scores between 41 and 55 as poor, it can be concluded that these initial results from the pre-test indicate a lack of proficiency which is included in the poor category.

Following the application of the Question Answer Relationship Strategy, a post-test was administered. The results showed that four (4) students achieved the lowest score of 76, while two (2) students obtained the highest score of 92. The

average score on the post-test was 83.3, which is noticeably higher than the average score on the pre-test. Referring to the classification of student scores, this post-test result represents a significant improvement from the pre-test and falls into the "good" category based on the mean score.

Finally, with this research, the researcher together with previous researchers who took the same strategy namely question answer relationship such as Ade Sabhana Damanik, Leoni Tusanti, Rengganis Siwi Amumpuni, Putri Asilestari have proven that question answer relationship strategy can increase students' reading comprehension.

CONCLUSION AND SUGGESTION

Conclusion

Based on the data analysis presented in the previous chapter, the researcher concludes that the results show a clear improvement in student performance after the implementation of the Question Answer Relationship strategy. This is evidenced by the increase in the mean post-test score (83.3), which is significantly higher than the pre-test mean score (51.3). Therefore, the use of the QAR strategy after the pre-test had a positive and meaningful impact on the students' test scores in this study.

Thus, It can be concluded that the application Question Answer Relationship Strategy can increase students of class XI Bahasa at SMA Negeri 3 Tondano reading comprehension.

Suggestion

Drawing from the data analysis results presented in the previous chapter and the conclusions previously outlined, the researcher will now offer suggestions:

1. To English teachers who have difficulty in teaching English especially in reading. Question answer relationship strategy able to be used by the English teacher in teaching learning process in order to increase students' reading comprehension.

2. To future researchers, this research also can be used by other future researcher as their source when they do their research because many students in Indonesia facing similar problems in reading.

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