The Effectiveness of K-W-L-A (Know, Want, Learned, Affect) Strategy in Improving Students' Reading Comprehension at Senior Islamic High School 4 Agam

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Article History	Abstract
  Keywords: Effectiveness, K-W-L-A strategy, Reading Comprehension	*This study aims to examine the effectiveness of the K-W-L-A strategy on students' reading comprehension at Man 4 Agam. It is a quasi-experimental study. A test was utilized as a tool by researchers to collect data. There were 30 questions, however 3 of them were found to be invalid following the validity and reliability tests. The researcher corrected the invalid questions so they could be used again. Eleventh-grade student social studies at MAN 4 Agam took part in this research. There are 40 students consisting of two classes. The control group is eleventh-grade social 1. This class consists of 20 students. The experimental group is eleventh grade social 2 which consists of 20 students. Paired sample t-test research results, the K-W-L-A strategy significantly improved the reading comprehension abilities of the students. With a significance value smaller than 0.05, namely 0.000. This shows that pupils' reading comprehension skills can be considerably improved by effectively implementing the K-W-L-A approach.*

INTRODUCTION

Reading is very important for students in obtaining information from the written text they read. Students who are proficient in reading will understand the intent behind each word or phrase contained in the text. Reading is not only about reading the written text but also about understanding the text.

Reading comprehension is the capacity to understand, interpret, and apply the meaning of the written text. It involves a range of cognitive processes, including identifying main ideas, analyzing text structure, making inferences and understanding vocabulary in context (ESRC, 2017). For students to comprehend what they read, they must not only translate the words on the page but also actively engage with the text to

construct meaning. Ceyhan & Yildiz (2020) state that reading by using the eyes and processing information in the mind is the meaning of reading comprehension. Therefore, students need to comprehend the meaning of words when reading a text because, without that understanding, they are going to be unable to comprehend the text. James (2000) states that reading comprehension is the capacity to recognize and read words accurately, understand the meanings of words and sentences, make inferences, draw conclusions, and evaluate information.

According to the researcher's experience in the educational practice program (PPL) at MAN 4 Agam, there is one factor that causes this situation to occur. The reason is that Students lack vocabulary related to the topic, so they may have difficulty understanding the text. According to Rissa (2021), most students face difficulties in mastering English skills as a foreign language, especially in understanding written texts. This can cause students to be lazy to discover the meaning of difficult words in a text in a dictionary and students cannot remember the meaning of these difficult words. Bromley (2007) stated that vocabulary is crucial to students' reading comprehension as their understanding of the vocabulary used in the text may be utilized to determine whether they understand the text.

Another factor is that students may also face challenges related to motivation and less involvement in reading in the classroom. If they do not see the value in reading or are not interested in the material, they tend not to try hard enough to understand it. Phantharakphong & Pothitha (2014) state students had significant difficulties with their reading skills because Students typically lack motivation and find reading in English challenging, so they may not put much effort into understanding English. They tend to be passive in participating in learning activities and lack effort. They do not pay enough attention to learning activities and assume that English is not something they can master. According to Nirwana (2021), students need learning that involves active participation. In active learning, they are required to be actively involved. This can increase their motivation to learn.

In reading a text, students can easily understand the information by applying their comprehension strategies. To achieve good comprehension, students need to focus and use intensive strategies in the learning process (Willy, 2016). Therefore, teachers must understand the importance of finding appropriate strategies so that the material taught can be received and understood easily by students (Nudiya and Ruhani, 2019).

The consistency of learning in reading comprehension is directly related to the strategies a teacher employs to guide students toward completing the reading comprehension activities. The choice of an appropriate and successful strategy heavily depends on the teacher's role. According to Aryani (2012), the teacher has the most control over students' reading learning. In order to make reading activities more relevant for students learning, teachers must employ efficient strategy. The application of appropriate learning strategies in the classroom is very important to develop students' attitudes, skills, and knowledge.

A strategy that is built on student participation is the K-W-L-A strategy. Students participate pre, during, and post-reading. This strategy not only provides students in understanding what they have read, but also gives them a chance to relate their own interests and opinions to what they have learned (Nirwana, 2021). Students can express

their opinions so that the teacher can see how much interest and knowledge associated with the reading text. In addition, pupils also gain broader knowledge after reading the text with the K-W-L-A strategy.

The K-W-L-A strategy has four stages. First, the Know step, where students brainstorm related to the topic to be discussed. Second, is the Want step, where students write questions about what they want to know about the reading material. Third, the Learned step, in which students discuss the information they get from the reading material. Fourth, the Affect step, where students again brainstorm about the effect of the reading topic they have read. Carr & Ogle created the K-W-L-A strategy in 1987, and Mandeville followed in 1994. In addition to support students in making connections between their prior knowledge and new information, this strategy enables them to evaluate the appropriateness, interest, and worth to them personally of their educational experience (Wiesendanger, 1994).

Learning is not only the teacher who is required to be active but pupils are also necessary to be active so that they can master the material that has been given because in this process of learning student activeness is more dominant. Therefore, researchers are interested in research related to Reading comprehension by using the K-W-L-A strategy. In this case, the researcher concerns with the effectiveness of the K-W-L-A strategy in improving students' reading comprehension at senior Islamic high School 4 Agam.

METHOD

This study conducted using a quantitative research methodology. The researcher employs a quasi-experimental study. Total sampling was used in this research. Total sampling is when the number of samples taken is the same as the population (Sugiyono, 2011). The sample consisted of two classes, namely, eleventh grade social 1 and eleventh grade social 2 at MAN 4 Agam. In determining the control and experiment classes, the researcher used an online spinner found on Google. The result found that the control group was eleventh grade social 1 and the experimental group was eleventh grade social 2.

The instrument was test in this research. According to Arikunto (2006:127), a test is a set of inquiries, exercises, or other procedures designed to evaluate a person's or a group's competence, capacity, knowledge, talent, or intelligence. The researcher provided a pre-test to the pupils at the first meeting. The pre-test consisted of thirty multiple-choice tests with 60 minutes to answer. After conducting the pre-test, The students received treatments. After using K-W-L-A strategy, researchers conducted a post-test consisting of 30 multiple choice questions.

Researchers conducted statistical analysis to establish whether the experimental and control groups differed significantly from one another. Previously, researchers used the Komolgorov-Smirnov Test to carry out a normality test on the data to make sure it was distributed normally. Furthermore, researchers conducted a homogeneity test to determine there is similarity between the variances of the two sample groups. After conducting the homogeneity test, data were tested using the t-test to assess whether there was a substantial difference in student learning achievement between the class that applied the K-W-L-A strategy and the class that did not apply it.

RESULT AND DISCUSSION

The researcher conducted the study at MAN 4 Agam, focusing on students of eleventh grade social. Eleventh grade social 2 class was chosen as the experimental class, where students learned using K-W-L-A strategy. Meanwhile, eleventh grade social 1 became the control class, where students learned with conventional strategies.

Table 1. Pre-test and Post-test Experiment Class

Pre-Test				Post-Test			
No.	Score	No.	Score	No.	Score	No.	Score
Students 1	23	Students 11	26	Students 1	60	Students 11	46
Students 2	40	Students 12	43	Students 2	63	Students 12	70
Students 3	30	Students 13	63	Students 3	66	Students 13	90
Students 4	50	Students 14	40	Students 4	80	Students 14	63
Students 5	46	Students 15	40	Students 5	73	Students 15	66
Students 6	60	Students 16	63	Students 6	86	Students 16	86
Students 7	50	Students 17	56	Students 7	76	Students 17	80
Students 8	36	Students 18	46	Students 8	43	Students 18	56
Students 9	23	Students 19	43	Students 9	50	Students 19	63
Students 10	40	Students 20	40	Students 10	70	Students 20	70
Mean : 42.90				Mean : 67.85			

Considering the information in the table, the experimental class pre-test results showed a score range between 23 to 63, while the post-test results showed a score range between 43 to 90. The experimental class's overall score significantly increased from 42.90 to 67.85.

Table 2. Pre-test and Post-test Control Class

Pre-Test				Post-Test			
No.	Score	No.	Score	No.	Score	No.	Score
Students 1	43	Students 11	43	Students 1	53	Students 11	73
Students 2	53	Students 12	40	Students 2	60	Students 12	66
Students 3	30	Students 13	33	Students 3	60	Students 13	46
Students 4	40	Students 14	53	Students 4	66	Students 14	73
Students 5	46	Students 15	36	Students 5	73	Students 15	56
Students 6	40	Students 16	33	Students 6	56	Students 16	36
Students 7	36	Students 17	46	Students 7	50	Students 17	50
Students 8	36	Students 18	56	Students 8	56	Students 18	76

Students 9	40	Students 19	50	Students 9	60	Students 19	60
Students 10	36	Students 20	63	Students 10	50	Students 20	76
Mean : 42.65				Mean : 59.80			

The information shown in the above table indicates that the control class pre-test results showed a score range between 30 to 63, while the post-test results showed a score range between 36 to 76. Mean value of the experimental class greatly enhanced from 42.65 to 59.80.

1. Data Analysis

There were some data collected after the pre-test and post-test. The data was processed using SPSS to obtain a description of information, as follows:

Table 3. Descriptive Statistics

Descriptive Statistics		N	Minimum	Maximum	Mean	Std. Deviation
Experimental Class	Pre-Test	20	23	63	42.90	11.978
	Post-Test	20	43	90	67.85	13.068
Control Class	Pre-Test	20	30	63	42.65	8.689
	Post-Test	20	36	76	59.80	10.904

The experimental class's pre-test results varied from 23 to 63, whereas the control class's results fell between 30 and 63. The experimental class's post-test results ranged from 43 to 90, while the control class's results varied from 36 to 76. The experimental class pre-test mean value was 42.90, whereas the control class mean value was 42.65. Both classes' average post-test scores went up from the pre-test; however, the experimental class's average post-test score went up more noticeably. The experimental class post-test had an average value of 67.85, whereas the control class post-test had an average value of 59.80.

2. Normality Test

The researcher next carries out a normality test after receiving the data description. To conduct a normality test, researchers used the Kalmogorov Smirnov Test in SPSS.

Table 4. Normality

Tests of Normality

	Class	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Result	PreEks	.154	20	.200*	.947	20	.328
	PostEks	.105	20	.200*	.972	20	.805
	PreCntrl	.170	20	.133	.940	20	.243
	PostCntrl	.143	20	.200*	.951	20	.377

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

To consider data as normally distributed, the significance value must exceed 0.05. In the experimental class pre-test, the significance value was 0.2, which shows it to be higher than 0.05. Similarly, for the control class pre-test, the significance value

was 0.1, which was also greater than 0.05. The significance value of the post-test of both classes is also greater than 0.05, which is 0.2. Thus, we can infer that the data is all distributed normally.

3. Homogeneity Test

The next step in data analysis is to check for homogeneity after examining for normality. Statistics were analyzed with SPSS software to verify for homogeneity.

Table 5. Homogeneity
Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Result	Based on Mean	.583	1	38	.450
	Based on Median	.594	1	38	.446
	Based on Median and with adjusted df	.594	1	36.959	.446
	Based on trimmed mean	.555	1	38	.461

The criteria for homogeneity test in SPSS if the Sig. Mean > 0.05, then the data is considered to have a homogeneous variance. Based on the homogeneity test, the Sig. Mean has a value of $0.450 > 0.05$. This shows that the post-test data for the experimental and control classes are homogeneous.

4. Hypothesis Test

The researchers analyzed the data to test the hypothesis using a paired sample t-test, as follows:

Table 6. Paired Sample t-test
Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	PreEks - PostEks	-24.950	7.149	1.598	-28.296	-21.604	-15.609	19	.000
Pair 2	PreCntrl - PostCntrl	-17.150	8.139	1.820	-20.959	-13.341	-9.424	19	.000

Based on the table above, the two-tailed paired sample t-test has a significance level of 0.000. The null hypothesis (H_0) cannot be accepted because this significance value is less than 0.05; therefore, the alternative hypothesis (H_1) must be accepted. In conclusion, the use of K-W-L-A strategy has effectiveness in improving reading comprehension of eleventh grade students of MAN 4 Agam.

Discussion

The K-W-L-A strategy significantly improved the students' reading comprehension skills, depending on the findings of using paired samples t-test. The significance level was less than 0.05 (0.000). This shows that the application of the K-W-L-A strategy significantly improved the students' reading comprehension ability.

Yulianah and Raras (2020), which demonstrated that the K-W-L-A Strategy was successful in enhancing pupils' reading ability and interest. Their research supports the researcher's findings which show that the K-W-L-A strategy has proven effective in improving students' reading ability. This strategy involves reading, writing, listening, and speaking activities, and helps students improve deep understanding because students are invited to understand the text before reading, while reading and after reading. By using the K-W-L-A strategy, students become more active and involved during the process of learning. Students are also able to relate the reading to the previous experience or knowledge, thus increasing their interest in reading. Thus, The K-W-L-A strategy has enhanced the reading skills and interest of students.

Research by Agus, Novita, and Riza (2020), In this finding, the KWL strategy provides learning to students to be more courageous in expressing their opinions to friends in front of the class. In addition, this strategy also gives other students the confidence to listen and appreciate their friends' understanding of the text. In line with the research conducted, there was also an increase in student confidence after the K-W-L-A strategy was implemented. The previous study only used the KWL strategy but in this study used K-W-L-A. The addition of column A in the K-W-L table serves to help students build relevant, interesting, and valuable to them personally to their educational experience. Students discuss the answers by involving their feelings and this step is useful for finding moral values contained in the text. It is also useful to reveal students' affective responses to the reading. Based on Supriyono (2008), the appreciation stage can help students to appreciate the author's intention by involving the affective dimension. Column A is added so that students can express the feelings or attitudes that arise in themselves after reading. Yopp (2000: 414) supports the statement by saying that column A (affect) is to show how they feel about the topic. The K-W-L-A strategy, according to Wiesendanger (2001: 99), can be used at all three stages of reading: prior to, during, and after. This strategy not only allows students to assess their interest and value towards their learning experience, but also helps students relate what they already know to what they are learning.

The efficiency of the K-W-L-A strategy in improving pupils' understanding of reading can be seen after the experimental group was treated using the strategy. The use of K-W-L-A strategy in reading comprehension makes the atmosphere of class discussion more active. Students' activeness increased as shown by students' activities from the beginning to the end of learning, such as recalling prior knowledge related the topic, questioning based on their curiosity interests, answering the question, getting new information and sharing their opinion about the impact of the text. In the end, students can understand the content of the reading as a whole. This is accordance with the statement of Wiesendanger (2001) who argue that the K-W-L-A strategy focuses on elaborating and monitoring students' understanding. Therefore, this strategy is suitable to be used in reading comprehension learning so that students are accustomed to expressing their opinions in class, improving the quality of discussion, being enthusiastic in participating in discussion, enthusiastic in following the learning, and able to comprehend the text.

K-W-L-A strategy in reading comprehension is one of the alternatives that can be used by the teacher to assist pupils in reaching objectives in reading activities. The right and effective strategy makes learning activities more meaningful. The K-W-L-A

strategy in this study is also used to provide variations in reading comprehension learning strategy.

In summary, this strategy can be used as one of the alternative strategies in learning reading comprehension. Learning by using the K-W-L-A strategy in English teaching can provide a beneficial impact on students by increasing the learning experience more interesting and increasing student activeness so that students are accustomed to expressing their opinions in the classroom.

CONCLUSION

The K-W-L-A strategy is beneficial in raising pupils' reading comprehension, as may be inferred from the study's findings and following discussion. The two-tailed paired sample t-test significant value was smaller than 0.05, it was 0.000. The increase in the average score of the experimental class that applied the K-W-L-A strategy can also be used as a verification of the study's conclusions.

According to the conclusion of the research, there are several recommendations that can be given for the benefit of students, teachers, and other researchers. First, the researcher suggests that students must take an active role in their learning process to improve English language skills. The more attention students give to the learning process, the more their English proficiency will improve. Second, it is recommended that teachers use the K-W-L-A strategy in learning reading comprehension to improve students' English proficiency. This strategy is proven to support students in activating previous knowledge, understand the content better, build the discussions, and assess the reading based on personal interests. Finally, the researcher supports other researchers who want to continue research on the application of the K-W-L-A learning strategy.

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