

Teaching Reading with KWL Strategy during Online Learning

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Abstract

This current study aimed at investigating the effect of KWL strategy towards the reading comprehension of second grade students at SMA N 1 Kintamani in online learning. This research was an experimental research with pre-test and post-test control group design. By involving XI IPS 1 as the control group which taught by using conventional method and XI IPS 2 as the experimental group which taught by using KWL strategy in teaching reading. The obtained data were descriptively and inferentially analyzed by using SPSS 23.0. In pre-test, the study found the experimental group ($M = 56.28$) showed higher mean score of reading comprehension rather than the control group (55.87). The result of t-test also revealed that the mean difference between experimental and control group in pre-test was not significant ($\alpha > 0.05$). Furthermore, in post-test the experimental group got better reading comprehension achievement than the control group. The result of the study found that the experimental group ($M = 74.32$) got higher mean score of reading comprehension compared to control group ($M = 61.16$). The result of t-test also confirmed that the mean difference between experimental and control group in post-test was significant ($\alpha < 0.05$). In conclusion, KWL strategy gave a significant effect on the reading comprehension of second grade students at SMAN 1 Kintamani.

Keywords: KWL Strategy, Online Learning, Reading Comprehension

Introduction

Reading is a language skill that is close related to listening, writing, and speaking. Reading can be defined as a communication tool related to convey a concept from the one who writes to the one who reads in written form (Ismail et al., 2017; Suhaimi, 2020). Suhaimi (2020) mentioned that reading provides some advantages. Through reading the readers can gain lot of information and certainly can enrich their knowledge. Furthermore, she also stated that through reading, the readers can get enjoyment and even solutions toward certain problems. In reading, comprehension is very important. Saepudin (2018) mentioned that comprehension is the main purpose in reading. Reading without comprehension will make reading itself useless. Comprehension is needed in reading in order to obtain the information

and understand the context contain in the text (Suhaimi, 2020). In line with this, Saepudin (2018) stated that comprehension in reading is a process of thinking that the intended meaning of the read text is required to be perceived by selecting the information, ideas, or fact contain in the text, finding the meaning of unknown words, and trying to interpret the meaning the writer want to convey. However, reading comprehension is not an easy skill to master There are some difficulties experienced by students in reading comprehension, such as students feel difficult to identify the main idea in the passage, the students find it difficult in reading for detailed information, the students have difficulty in making inference from the text, the students have bad reading habit, have poor reading skill, do not have adequate knowledge background to comprehend the text, and low vocabulary mastery and poor knowledge of grammar cause the students even more difficult to comprehend the text (Satriani, 2018; Utami, 2017).

Moreover, as we know, the world is currently facing the Covid-19 Pandemic, in which education is one aspect of life that is influenced by the spread of Covid-19. Due to the significant spread of Covid-19, the school in Indonesia has been transformed to Online learning from face-to-face learning (Gautami & Santosa, 2021; Sumadi et al., 2022). Online learning can be defined as the learning experience both in synchronous and asynchronous environment with the use of devices, such as laptop, computer, phone, and etc. that are connected with internet (Efriana, 2021; Kunwar et al., 2020; Zhu & Liu, 2020). Furthermore, in online learning certainly an application is needed in order to facilitate the teaching and learning process between educator and student. The applications that are often used by the teacher in online learning, such as Zoom, Google Meet, Google Classroom, Skype, WhatsApp, Moodle, Google Duo, YouTube, and etc. (Laili & Nashir, 2020; Nambiar, 2020). In online learning, technology plays an important role to conduct the learning process and it force both the student and teacher to be ready to shift the learning process (Oktariani et al., 2022). This sudden change especially felt by the teacher and makes it difficult for teachers to design learning attractively because teachers are not used to it and cause the student to become bored in following lesson. In addition, online learning resulted in ineffective communication and interaction between students and teachers where the teacher could not provide supervision to all students. Online learning makes students' reading comprehension becomes worse because the teacher only provides a text along with questions based on the text without providing further explanation, which certainly makes it more difficult for students to understand the reading text and it decreases their interest in reading.

In reading teaching and learning instruction, the strategy is required to encourage the students in the classroom, in which KWL strategy can be implemented. KWL strategy assists the students to be easier in comprehending what is being read, stimulate the prior knowledge of the readers, determine the purpose of the reading, monitor and asses the readers' comprehension, and also expand the readers' idea beyond the text. There are three steps in implementing KWL strategy (Irfan et al., 2020; Syafi'i et al., 2020). The first step is "Know", in this step the readers need to do the brainstorming and write all of their prior knowledge related to the topic. The second step is called as "Want to Know", the readers in this step are required to write down the questions that indicate something they want to know more regarding the topic. The last step is called as "Learned". In this step, the readers are required to write down all the information that they gained while reading certain text.

Farha & Rohani (2019) found that the use of KWL strategy in senior high school could improve students' reading comprehension on report text. Moreover, this study found that the students were more active and participative when the learning process took place. Second, Wanci (2018) showed that the students' reading comprehension on extrapolative level is improved by using KWL strategy in teaching reading. Moreover this study showed that the students' perception toward KWL strategy was positive and KWL strategy could increase the students' interest in following the reading class. Third, Rohliah & Suryani (2020) found that KWL strategy helped the students to comprehend the expository text. Fourth, Febriani & Jono (2021) found that KWL strategy could improve the students' reading comprehension of procedural text and this strategy could also increase the students' score in reading. Moreover, Rohliah & Suryani (2020) found that KWL strategy could develop students' reading comprehension skills in terms of activating prior knowledge, explicit knowledge, implicit information, word references, and recognizing word meaning based on the context. All of studies were conducted outside of Bali Island in face-to-face learning

The implementation of KWL strategy in Bali is seen very limited. It can be observed from the data shown in the past three years when Putra (2019) conducted the study focused on the effectiveness of KWL towards students' reading comprehension in Singaraja district which located at SMAN 3 Singaraja. There is limited researcher that conducts the research investigating the implementation of KWL in online learning in Bangli. As the response of this phenomenon, this current study investigated the implementation of KWL strategy on students' reading comprehension in online classroom, which involved the second grade students at SMAN 1 Kintamani due to the zero implementation of KWL strategy in this school before. This study aimed at investigating the effect of KWL strategy on students' reading comprehension in online classroom in Kintamani district. This research proposed one major research question: (1) "Does KWL Strategy gives any significant effect on students' reading comprehension in SMA N 1 Kintamani in online learning?".

Method

To analyze the current phenomenon, experimental study was conducted. Creswell (2012) stated that in experimental research, the researcher measures an idea, practice or procedure whether it gives any influence toward dependent variable (the variable that is being tested or measured in an experiment. This research used pre-test and post-test control group as the research design. There were 275 students totally and they were grouped into 9 classes. The samples of this current study were selected by employing cluster random sampling. Fraenkel & Wallen (2006) stated that cluster random sampling is the selection of groups or cluster of subjects rather than individuals. In this study, XI IPS 1 and XI IPS 2 were chosen as the samples. The control group was XI IPS 1 class and the experimental group was XI IPS 2 class. However, before both of the groups were used as the samples in this study, the normality and homogeneity both of groups were checked and the result showed both of the groups were in normal distribution and had homogeneous variances.

There are two main instruments used in this study, namely teaching scenarios and reading comprehension tests. In addition, there were two kinds of teaching scenario used. First, teaching scenario for experimental group in which the lesson was designed with the implementation of KWL strategy in teaching reading. Second, teaching scenario for control

group in which the lesson was design with conventional method in teaching reading. In addition, for reading comprehension test, there were also two kinds of reading comprehension test used, they are pre-test and post-test questions. The both groups in this study were distributed by the pre-test questions in order to check their reading comprehension before both of groups were given treatment, meanwhile post-test was delivered after they were given treatment.

Before the instruments were used in this study, all of them were tested. Teaching scenario was consulted to the researcher's advisors. Moreover, the validity of the pre-test and post-test was also required to be examined by consulting to the two expert judges. The judgments given by the two experts were then analyzed by using Gregory Formula. The result of the instrument validity revealed the value of 1 which means that the instruments have very high level and valid in term of content, so that it can be used for try-out test. After that, the instrument was distributed and tried out in one class of third grades students at SMA N 1 Kintamani which aimed to measure the empirical and reliability of the test by using ANATES. The result showed that in pre-test out of 30 items, there were 4 question dropped because the index of discrimination of these items lower than 0.30. Furthermore, for post-test, there were 3 items that were dropped because the index of discrimination of these items were lower than 0.30. However, the researcher decided to use 25 items, so that the researcher decided to drop one more item in pre-test and two more items in post-test.

The pre-test was distributed to the both groups aimed at observing their prior knowledge of reading comprehension so that the researcher was able to know their basic knowledge before the treatment was given. The treatments given for the both group were three meetings via *zoom*. *Zoom* is an application that is very useful to be used as an alternative to conduct direct communication between students and teacher through video conference that allow the students and the teacher to have the similar experiences with face-to-face learning (Laili & Nashir, 2020; Mu'awanah et al., 2021). The teaching strategy implemented for both group was contrast. The control group was treated by the conventional teaching strategy; meanwhile the experimental group was treated using KWL teaching strategy. When the entire treatments were successfully given for the both group, the post-test was distributed to identify the significant difference achievement by the both groups regarding to their reading comprehension, which had underwent a different teaching treatment. For both pre-test and post-test distributed through *Google Form*. *Google form* is a web-based that can be shared to the other people by sending a link or emailing a message and can be used for variety of productivity task and create various types of questions, such as drop down menus, multiple choice, check list, rating scale, short answers text boxes and etc. (Adelia et al., 2021; Jazil et al., 2020).

The obtained data in this current study were descriptively and inferentially analyzed by using the assist of SPSS 23. The descriptive statistical analysis in this study consisted of information about mean, median, range, variance, and standard deviation of the students' score in pre-test and post-test. Furthermore, inferentially students' scores were analyzed using independent t-test after the normality and homogeneity test were examined first.

Findings

This section contains the information about the result of pre-test and post-test's descriptive and inferential statistical analysis. The further discussion is presented in the following paragraph.

Descriptive Statistical Analysis

Descriptive statistical analysis describes a summary of the data consisting of information about the mean, median, range, variance, and standard deviation. The result of descriptive statistical analysis of students' pre-test score (experimental and control group) can be observed in table 1.

Table 1. Descriptive Statistical Analysis Results for Pre-Test

Category	Statistic	
	Experimental Group	Control Group
Mean	56.38	55.87
Median	56	56
Standard Deviation	18.88505	16.21469
Variance	356.645	262.916
Range	64.00	60.00

Table 1 showed the experimental group has a higher mean score in the pre-test than the control group, but it is not too significant. The experimental group's mean score was 56.38 and the control group's mean score was 55.87. Furthermore, the experimental and the control group have the same median score that was 56. In addition, the calculation of range of the experimental group was 64 which came from the highest score of experimental group which was 84 minus the lowest score of experimental group which was 20. Moreover, the control group's range score was 60 which came from the highest score of control group which was 84 minus the lowest score of control group which was 24. The variance of experimental group was higher than control group. The experimental group's variance was 356.645 and the control group's variance was 262.916. The experimental group's standard deviation was 18.88505 and the standard deviation of control group was 16.21469. The standard deviation of the experimental group was higher than control group which means that in pre-test, the students' score in experimental group more varied than in control group.

Moreover, the result of descriptive statistical analysis of experimental and control groups' score in post-test is presented in table 2.

Table 2. Descriptive Statistical Analysis Results for Post Test

Category	Statistic	
	Experimental Group	Control Group
Mean	74.32	61.16
Median	76.00	60.00
Standard Deviation	12.93158	13.74796

Variance	167.226	189.006
Range	48.00	44.00

Table 2 showed the mean score of experimental group was higher than control group. In post-test, the mean score of experimental group was 74.32 and the mean score of control group was 61.16. Moreover, the median of experimental group was 76 and the median of control group was 60. The calculation of range of the experimental group was 48 which came from the highest score of experimental group which was 96 minus the lowest score of experimental group which was 48. Moreover, the control group's range score was 44 which came from the highest control group's score which was 84 minus the lowest score of control group which was 40. The control group's variance was higher than experimental group. The control group's variance was 189.006 and the experimental group's variance was 167.226. Moreover, in term of the standard deviation, 12.93158 was obtained from the experimental group and 13.74796 was obtained from the control group.

Inferential Statistic Analysis

The obtained data were inferentially analyzed after the descriptive statistical analysis was examined. The independent t-test cannot be examined if the normality and homogeneity were examined first. The result of normality test in pre-test indicated the control group's significance value (Sig.) was 0.113 and the experimental group's significance value (Sig.) was 0.200. Moreover, in post-test the result of normality test revealed the control group's significance value (Sig.) was 0.162 and the experimental group's significance value (Sig.) was 0.136. It means that there was an excess in term of the control and experimental group's significance value in both test, which had exceeded the value of 0.05, so it indicated normally distributed data. This result brought the analysis to the next analysis, which was homogeneity of variance test. The pre-test's homogeneity revealed the probability value (Sig.) of 0.316. Furthermore, the post-test's homogeneity revealed the probability value (Sig.) of 0.336. Therefore, it indicated the equal variance shown in both pre-test and post-test because the significance value of the data exceeded 0.05, so that it indicated the homogeneous variance showed by the data. After the data had normal and homogeneous distribution, the hypothesis testing can be administered by using independent t-test. The independent t-test's result is shown in this following table below.

Table 3. The Result of Pre-Test's Independent T-Test

F	Sig. (2-tailed)	Mean Difference
1.023	.908	-.51613

Table 3 showed the significant value (2 tailed) for independent sampling test in pre-test was 0.908 which means the level of significant (2-tailed) was higher than the standards alpha ($\alpha = 0.05$). Therefore, it means that zero pre-test's significant different was identified in both group before given the treatment. Furthermore, the result of independent t-test in post-test can be seen in Table 4

Table 4. The Results of Independent T-Test for Post-Test

F	Sig. (2-tailed)	Mean Difference
59.777	.000	-13.16129

Table 4 showed the significance value (2-tailed) for the independent sampling test in post-test of 0.000, which means the significance level (2-tailed) is lower than the standard alpha ($\alpha = 0.05$). This result indicated a significant mean score difference between the both group. Consequently, H_a (Alternative Hypothesis) which stated that “*There is any significant effect of using KWL strategy on students’ reading comprehension in online learning*” was accepted. In summary, the implementation of KWL strategy gives a significant effect on students’ reading comprehension on second grade student at SMAN 1 Kintamani in online learning.

Discussion

The data analysis revealed the better reading comprehension achievement showed by the experimental group that treated using KWL strategy than the conventional strategy given to the control group. This different achievement was observed from the result of the both pre-test and post-test. The experimental group’s mean pre-test score was 56.38 and the mean post-test score was 74.32. On the other hand, the control group’s mean pre-test score was 55.87, and the mean post-test score was 61.16. Then, to determine the significance of the different score between the both groups, the inferential analysis was examined. The independent t- test used to examine the experimental and control group’s pre-test and showed significant values (2-tailed) higher than alpha ($\alpha = 0.05$). This result indicated no significant different towards the students score in the pre-test. In other words, the students’ reading comprehension in both groups before treatment was equal. Moreover, after both of the groups were treated differently for three meetings, post-test was administered, the independent t-test revealed the significant value (2-tailed) was lower than alpha ($\alpha = 0.050$). Considering this result, the strategy of KWL in reading comprehension in online teaching and learning instruction contributed a significant effect towards the second grade students’ reading comprehension at SMAN 1 Kintamani, which means the alternative hypothesis was accepted.

Furthermore, several relevant studies supported the result of this current study. First, a study by Rohliah & Suryani (2020), which investigated the effectiveness of KWL strategy in reading class. The study revealed the effectiveness of KWL strategy to be implemented in reading class because the students experienced a significant improvement in reading in which this strategy gave positive influence and helped the students understand the text better. In addition, Wanci (2018) conducted similar research, which revealed that KWL strategy improved the students’ score significantly. Moreover, during the implementation of KWL strategy, there were several positive behaviors that were done by the students. KWL strategy increased the students’ participation. Although, not all of the students presented KWL chart that they already made to their friends, but all of the students actively participated in fulfilling KWL chart, it could be seen when the reading class finished in *Zoom* application, the students then immediately sent the KWL chart that they already made to the researcher. Similarly, Farha & Rohani (2019) found that during implementing KWL strategy, the students were more active. Moreover, KWL strategy made students’ curiosity increased. It can be seen when the students’ had a question in W (Want to Know) column, but they could not find the

answer in the text. They would search the answer of the question on the internet until they find the answer. It indicated that KWL strategy made the students' motivation in reading was also increased. They had motivation to read additional sources to answer their curiosity.

Although KWL strategy made the students achieved better in reading comprehension, there were several difficulties the students experienced when they were filling KWL strategy chart. During treatment, the students experienced difficulties in filling in the K column. They seemed difficult to write down the things that they know about the topic or the title of the text given because they only have limited knowledge related to the topic discussed. In addition, lack of vocabulary knowledge made it difficult for students to write sentences in English, so it makes the students took a relatively long time to fill in the KWL table. The implementation of KWL strategy in during the reading class was not always ran smoothly. There are some students who found it difficult to be implemented in the reading classroom and encountered some problems. However, the overall implementation of this strategy provided the students with a significant effect in term of the students' reading comprehension improvement in online learning. It means that the KWL strategy can be effectively used as the alternative teaching strategy to teach reading in online learning and can increase student involvement and curiosity in reading activity.

Conclusion and Suggestions

The analysis concluded a significant effect contributed by KWL strategy in term of the students' reading comprehension improvement in online learning. It means that the KWL strategy can be effectively used as the alternative teaching strategy to teach reading in online learning and can increase student involvement and curiosity in reading activity. This can be seen by the difference performance shown by the both group in which the experimental group tend to perform a better score in the post-test after treated using KWL strategy. Furthermore, the independent t-test result in this study showed that the alternative hypothesis in this study was accepted. Besides that, this strategy also gives the others positive effects on students in online learning. KWL strategy increases the students' participation in online learning in which this strategy makes the students actively participate in each step of the implementation of KWL strategy. In addition, this strategy also makes the students' curiosity and motivation in reading increased.

Furthermore, the researcher would suggest the students to implement this strategy to assist them during the reading instruction. Besides, the English teachers were suggested to consider this strategy as the alternative strategy in order to establish an engaging online classroom. In the other hand, for the future researcher who wanted to conduct a relevant study, the study can be conducted in larger and different population that focus on some genres of text especially in online learning. It is also suggested to do in deep analysis to find the other benefits of KWL strategy in reading comprehension.

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