# The Influence of Reading Comprehension Achievement at the Eighth Grade Students of SMP Muhammadiyah 1 Rawa Bening By Using DRTA and KWL Strategies

# Dwi Andriani STKIP Nurul Huda Sukaraja

E-mail: <a href="mailto:dwiandriani@gmail.com">dwiandriani@gmail.com</a>
Doi: <a href="mailto:10.22202/tus.2016.v2i2.1316">10.22202/tus.2016.v2i2.1316</a>

Submitted: 29-12-2016 Reviewed: 29-12-2016 Accepted: 29-12-2016

#### Abstract

There are three objectives of this study: (1) to find out whether or not there was a significant difference in reading comprehension achievement of the students between before and after they were taught using DRTA strategy, (2) to find out whether or not there was a significant difference in reading comprehension achievement of the students between before and after they were taught using KWL strategy, and (3) to find out whether or not there was a significant difference in reading comprehension achievement between the students who were taught using DRTA strategy and those KWL strategy. The 90 samples out of 120 students from the eighth grade students were chosen by means purposive sampling technique. It used quasi-experimental method. The data was analyzed using t-test. The result showed there was a significant difference in reading comprehension achievement between before and after taught using DRTA strategy, there was a significant difference in reading comprehension achievement between before and after taught using KWL strategy, and there was a significant difference in reading comprehension achievement between the students who were taught using DRTA strategy and KWL strategy.

Key Words: DRTA Strategy; KWL Strategy; Reading Comprehension Achievement.

#### INTRODUCTION

English is considered essential as a means of communication which is used as a global language. English is used as a second language for most people in the world. According to UNESCO (2009), English leads world languages as far as communication and publication is concerned. Freeman and Long (1991) observe that English has become the international language for business and commerce, science and technology, international relations and diplomacy. Therefore, it is important that English is learnt so that people can fit well in the international community.

In Indonesia, English is learnt as a foreign language which is taught as a compulsory subject from elmentary to universities. Students learn English as a means to broaden their knowledge about science, technology, culture, and arts. The students are expected to be able to master English orally and in writing. It is stated that the aims of

teaching English in Indonesia are to utilize the language to broaden the students' reasoning horison as well as to improve their communicative competence.

In teaching English at junior high school in Indonesia, the teachers teach the language based on Curriculum 2008 which is known as School-Based Curriculum. The curriculum states that the aim of teaching English at junior high school is to develop four components of language skills: listening, speaking, reading and writing. Schools have the authority and autonomy to make operational policies most appropriate for their own contexts. Thus, in implementing the competency-based curriculum, schools may decide on what competencies to include in addition to the set of competencies from the Ministry of National Education and to choose the learning materials deemed appropriate to develop those competencies. By the same token, schools can also develop their own teaching-learning materials, methods, media, and assessment. Therefore, there will be the national curriculum and the school curriculum.

Skills in reading (and learning information from) texts written in English as a foreign language (EFL reading) constitute an important element of the establishment of English curriculum of secondary and tertiary schools (both English and non-English departments) in Indonesia. The need of the learners to be skillful in reading to learn has inspired EFL reading teachers or specialists to apply some techniques in the teaching of EFL reading and to investigate the effects of the techniques on improving Indonesian students reading skills, as well as to examine various related aspects such as reading materials, reading strategies, and factors affecting reading comprehension (Cahyono & Widiati, 2006: 36).

The teaching of reading as a foreign language in Indonesia can be generally included in the teaching of reading comprehension. This is because it aims to improve the skills of learners, who have been able to read in their first language and in EFL, in understanding the meaning of a written text. It is essential then that EFL reading instructors and researchers in the Indonesian context understand the reading process and the relationship between this process and the acquisition of messages, knowledge, or information from reading texts or other written materials (Cahyono & Widiati, 2006: 37-38). Comprehension is the ultimate goal of reading. Therefore, the primary purpose of reading instruction is to develop the skills and strategies for the students to construct

meaning from text. Students must read a lot. students must be able to orchestrate multiple strategies before, during, and after reading. In addition, students must develop their knowledge base on a variety of topics in order to understand a wide array of texts. Overall, comprehension instruction must teach students how to intentionally interact with the text to create meaning (Chard & Santoro, 2008: 9).

According to Progress in International Reading Literacy Study (PIRLS) in 2011 is the International study about reading children in the World, Indonesia is on the 41st of 45 countries in the world. In addition, PISA 2009 database shows that Indonesia students' score is below the OECD average and on the 57th of 65 countries (OECD, PISA 2009 Database). Based on the sources of SMP Muhammadiyah 1 Rawa Bening, it was found out that the students' average score for the students' tests for the seventh and eight grade students was below standard (5.00) while the standard was 7.00, while for the teacher, the writer also finds that the teachers seldom varied their strategies in teaching learning process of English in the classroom. Therefore, the writer thinks that English teaching and learning at SMP Muhammadiyah 1 Rawa Bening should be modified and varied in terms of teaching strategies.

To encourage students to develop effective reading skills, there are various teaching and learning strategies that can be used by the teachers in classroom. Hart and Risley (2003: 4) inform that teaching students specific learning strategies increases understanding of content while they promote critical thinking skills. It means, the method which is used by the teacher may influence the result of teaching and learning activities.

The DRTA process encourages students to be active and thoughtful readers, enhancing their comprehension. A major difference between DRA and DRTA is that the teacher establishes the purposes for reading in the DRA, and the student assumes that responsibility in the DRTA (Stahl, 2003).

KWL (Know, Want, Learn) strategy is one of the teaching and learning strategies used mainly for information text (Ogle, 1986). Mapping and summarization is added to the original KWL strategy through the "Plus" activity (Carr & Ogle, 1987). This is done because writing and restructuring of text are powerful tools in helping students process information.

Research on comprehension has demonstrated that proficient readers are strategic, orchestrating multiple strategies before, during and after reading. However, instruction in comprehension strategies without a focus on content may be useless. Effective comprehension instruction involves both strategy instruction and content engagement. We still need to know how best to integrate these two key instructional areas. Good readers employ strategies before, during, and after reading that help them comprehend text. For example, while we read we frequently, and often subconsciously, summarize facts and details and confirm or challenge our existing thinking about the subject at hand. This process is strategic, and the more we read, the more we improve. We use other strategies before reading, such as clarifying our purpose for reading. During and after reading, we reflect on how a particular text might impact us or relate to our understanding of the world. Many readers exhibit challenges in employing these strategies flexibly and effectively (Chard & Santoro, 2008). That is why DRTA and KWL strategies is used.

According to Stahl (2003) in her dissertation entitled" The Effects of Three Instructional Methods on the Reading Comprehension and Content Acquisition of Novice Readers" that she used DRTA, KWL and Picture Walks in her research. It was found out that the picture walk and DRTA yielded statistically significant effects on fluency as measured by a timed maze task. Analysis of Cued Recall indicated that the DRTA yielded statistically significant effects in reading comprehension and science content acquisition. KWL was motivational, but did not yield significant effects on measures of comprehension or content acquisition. Motivation cannot be ignored as an important component of reading instruction. Based on the student interviews and the lesson transcripts reflecting enthusiastic conversations, we can conclude that teachers striving for a means of motivating students could do so successfully utilizing the KWL procedures. This supports prior research with older students and the claims of the procedure's originator. For novice readers, KWL might be used in conjunction with either DRTA or the picture walk to support their reading and content acquisition. KWL could work as a very effective strategy in attaining the ultimate goal of all-round development in learners' listening, speaking, reading, writing and interpretation abilities. Then, according to Fengiuan (2010) in his article, it was found out that KWL could work as a very effective strategy in attaining the ultimate goal of all-round development in learners'

listening, speaking, reading, writing and interpretation abilities. KWL is an effective instructional strategy worthy of our attention. From both of research, DRTA and KWL strategies can be used in reading comprehension.

Based on the background above, through this study, the writer is interested in investigating the effect of using DRTA and KWL strategies on EFL students' reading comprehension achievement of SMP Muhammadiyah 1 Rawa Bening and from both to find out which strategy between the two is more effective.

#### LITERATURE REVIEW

Reading is one of four language skills that should be mastered. Addison (1996) defines reading as an active process in which the reader shift sources of information (what they know and what the text says), elaborate meaning and strategies, check their interpretation (revise when appropriate), and use the social context to focus on their response. Our ability to understand what we read is based on our reconstruction of the meaning behind the printed words.

Devine (1987: 7) argues that reading comprehension is a process of activating the prior knowledge of the reader which cooperates with his appropriate cognitive skills and reasoning ability to find out the concept from a printed text. In these words, the reader must be able to understand, to interpret and to select actual information from text. It means that the knowledge that was possessed by the readers influence the ability of the readers in comprehending what they read. The readers have to be able to use their prior knowledge in order to help them to comprehend the texts that they read. If they do not have background knowledge or information about the materials that they read, they will face some difficulties in understandinthe texts or they have to work hard to understand it. It is also states that readers bring their own background knowledge of the 'field', or topic, and their understanding of language system itself. On the other word, the prior knowledge had by the readers is an important tool that can help the readers in comprehending the reading materials. It guides them to have better understanding about something, so that reading activity can improve their knowledge because reading can give many advantages. The more people read, the more they get. Thorndike (1992: 18) states that reading in a second language, however, may not so easily fit into this pattern because the neccessary

background information and familiarity with the language may be missing. That is, the reader might not have an appropriate schema available.

According to Ann & Friedman (2011), DRTA is a comprehension strategy that guides students in asking questions about a text, making predictions, and then reading to confirm or refute their predictions. Directed Reading assignments will help them read purposefully and to better effect than if they simply attempt to wade through a chapter with the help of a dictionary. With ESL students, it is often better to discuss before they read, rather than the reverse. The DRTA is an instructional framework that views reading as a problem-solving process best accomplished in a social context (Stauffer, 1969). In conclusion, DRTA is a comprehension strategy that guides students in asking questions about a text, making predictions, and then reading to confirm or refute their predictions.

According to Carr & Ogle's (1987), K-W-L-Plus stands for Know, Want, and Learn plus Mapping and Summarizing, guides secondary students through five reading strategies. It extends Ogle's (1986) K-W-L strategy to secondary readers. Ogle claims that K-W-L helps students become better readers of expository text and helps teachers to be more interactive in their teaching. After several K-W-L-Plus activities, students are encouraged to use it as an independent learning strategy.

The term KWL refers to the process of making meaning that begins with what students KNOW, moves to the articulation of questions of what they WANT TO KNOW, and continues as students record what they LEARN. The strategy is designed to be used by a teacher and group of students to work together. It is then easily transferred into a method for students' independent study. In using the strategy the teacher first leads the group through an oral discussion of each of the components and then turns the process over to students to individually write their own ideas and questions on a personal worksheet. The intent of the strategy is to involve students actively, first by making real the connection between their prior knowledge and the information that will be presented in the texts, both by eliciting what they know about the specific information and the ways that information is likely to be structured. Then teachers guide the students to think of questions they need and want to have answered and, finally, students make notes and then organize the old and new information in graphic and elaborated written form.

DRTA and KWL plus strategies need students' prior knowledge to do these strategies related to what the purpose of students' reading comprehension achievement.

Rahmawati (2012) in her research found out there was a difference on students' intensive reading ability taught by KWL or DRA strategy and there was interaction between reading strategy (KWL and DRA) and reading habits to students intensive reading ability.

#### **METHODOLOGY**

#### Method of the Study

This research used experimental research. That is, quasi-experimental research, nonrandomized control group pretest-posttest design. In this design, the writer had three groups of samples: the first is experiment group by using DRTA strategy, the second is experiment group using KWL strategy, and the third is control group.

# a. Population

For the population of this study, the writer will choose the eighth grade students of SMP Muhammadiyah 1 Rawa Bening. In this case, there are four classes. The total number of population is 120 students. The information of total number of the eighth grade students of SMP Muhammadiyah 1 Rawa Bening is shown in Table.

**Table 1:**The Population Of The Study

No.	Class	Number of Student			
1.	VIII.A	30			
2.	VIII.B	30			
3.	VIII.C	30			
4.	VIII.D	30			
Total		120			

# b. Sample

For this research, purposive sampling technique will be used. Fraenkel and Wallen (1991:138) state that in purposive sampling the researchers use their judgement to select the sample for a specific purpose.

In this research, the researcher will select the students based on the criteria: (1) the students are taught by the same teacher, (2) are in the same level class, (3) based on the result of pre-test. In this research, the students who will get30 to 65 for the pre test score will be categorized as the sample. And then the researcher will take the sample for each experimental group randomly by using lottery. From the population, the researcher will take60 students for experimental groups by using DRTA and KWL strategies and 30 students for the control group.

Table 2: Sample

No	Class	Number of Student		
1.	Experimental group using DRTA strategy (VIII A)	30		
2.	Experimental group using KWL strategy (VIII B)	30		
3.	Control group (VIII C)	30		
Total 90		90		

#### **FINDINGS**

In order to analyze of there was a significant differences on students' reading comprehension achievements after they were given the treatment by using DRTA and KWL strategies, the writer used t-test in SPSS version 20. This program was used to find out the significant difference in reading comprehension achievement of the students between before and after they were taught using DRTA strategy, and the significant difference in reading comprehension achievement of the students between before and after they were taught using KWL strategy. It was also used independent sample t-test to find out the significant difference in reading comprehension achievement between the

students who were taught using DRTA strategy and those who were taught using KWL strategy.

The results of the present study were presented below. First, it was found out that there was a significant difference in reading comprehension achievement of the students between before and after they were taught using DRTA strategyas. In the pre-test, the students were given the test. The tests in the pre-test and the post-test were the same, but before the posttest was given, the students were taught using DRTA strategy. The data statistically was gotten from paired sample t-test. It was presented below.

**Table 3:** The Result of Paired Sample t-test
Reading Comprehension Achievement Before and After taught using DRTA Strategy

Pair	Test Score	Mean	Mean Difference	t	Df	Sig. (2-tailed)
Pair 1	Pre-test	65.33	13.20	3.663	29	0.001
	Post-test	78.53				

The result showed a progress in the posttest than in the pre test. It might be caused by the treatment given to them. This is in line with Stahl (2003) that DRTA strategy yields statistically significant effect on the reading comprehension and content acquisition of novice readers. It could be infered that the students' reading comprehension achievement increased significantly. It was also strengthened by Arianti (2013) that DRTA strategy was very effective and significant to increase students' ability in teaching narrative text inference to Grade XI students of SMA Negeri 5 Pontianak in Academic Year 2012/2013.

Second, there was a significant difference in reading comprehension achievement of the students between before and after they were taught using KWL strategy. In the pretest and the posttest, the students were given the same test, but the posttest was given after the treatment was given. The students were given the treatment by using KWL strategy. The results of paired sample t-test, it was presented below.

**Table 4**: The Result of Paired Sample t-test

Reading Comprehension Achievement Before and After taught using KWL Strategy

Pair	Test Score	Mean	Mean Difference	Т	Df	Sig. (2-tailed)
Pair 1	Pre-test	58.93	10.67	2.489	29	0.019
	Post-test	69.60	10.07	2.10)		

The result showed that the posttest scores were higher than the pre-test. In line with Ernita (2012), the use of KWL plus strategy can improve ability the second year students at SMPN 12 Pekanbaru in reading comprehension. It could be concluded that the result of posttest by using KWL strategy increased significantly.

Judging from the comparison of the pre test and the posttest, DRTA strategy and KWL strategies could improve the students' reading comprehension achievement. This improvement is supported by Stahl (2003) that DRTA and KWL strategy could be used in teaching reading comprehension. It was proved that in the first and second experimental groups showed significant progress in terms of reading comprehension achievement.

Obviously, there was evidence that the students' reading comprehension achievement from the pre-test to the posttest by using DRTA and KWL strategies in experiment and control groups increased. However, the increase of students' reading comprehension achievements in the experimental group was more significant than those of the control group. This significant might be caused by the learning process during the treatment. In short, it is important to remember that the progress of the students' reading comprehension achievements in the experimental groups might be caused by the method applied in this experiment. It is in line with Oxford's (1990) statement that the more strategies the students use, the better result of learning they may have.

Third, comparing between DRTA and KWL strategies in reading comprehension achievement, it could be seen that there was a significant difference between DRTA strategy and KWL strategy. By using independent sample t-test, the data statistically was presented below.

**Table 5:** Independent Sample t-test

Reading Comprehension Achievement of DRTA and KWL Strategy

	Strateg			Std.	Std. Error
	y	N	Mean	Deviation	Mean
Reading Comprehension	n DRTA	30	78.53	10.425	1.903
Achievement	KWL	30	69.60	13.880	2.534

The writer assumed that both strategies were effective in improving the students' reading comprehension achievement because both strategies let the students to be active in the class. But, the writer also behave that by using DRTA strategy, the students could explore their prior knowledge more while they were studying and the strategy let the students to be more active in the class and they also could predict the text, they could produce the logical and arguments during the class discussion and the test than KWL strategy. In other words, The DRTA strategy could encourage students to be active, thoughtful readers, and enhancing the students comprehension.

#### CONCLUSIONS AND SUGGESTIONS

From the results in the previous chapter, some conclusions could be drawn. First, there was a significant difference in reading comprehension achievement of the students between before and after they are taught by using DRTA strategy.

Second, there was a significant difference in reading comprehension achievement between before and after they are taught using KWL strategies.

In other words, the writer can conclude that DRTA and KWL strategies were the factors which increase students' reading comprehension achievement to the both groups. The success of DRTA and KWL strategies taught depend on how the teacher explore and taught by using both strategies and how far the students' want to receive that strategies.

Third, there was a significant difference between the student's reading comprehension achievement on DRTA and KWL strategies. After the treatment, it was found that using DRTA strategy was more effective than KWL strategy. It happened may be caused in DRTA, the practice was provided during reading in actively justifying and verifying predictions, integrating text-based information with prior knowledge, and

having an immediate opportunity to discuss new concepts seemed to help children when they were called on to respond the questions about the text.

#### REFERENCES

- Ann, B., & Friedman, T. L. 2011. *Classroom strategies*. Available athttp://www.adlit.org/strategies/23356/.(Accessed 15 February 2011).
- Arianti, N. 2013. Teaching narrative text inference by using directed reading thinking activity (DRTA) strategy (Unpublished Master's Thesis). Tanjung Pura University: English Education Study Program, Teacher Training Education.
- Cahyono, B.Y., & Widiati, U. 2006. The teaching of EFL reading in the Indonesian context: the state of the art. *TEFLIN Journal*. 17(1), 53-55.
- Carr, E., & Ogle, D. 1987. K-W-L Plus: A strategy for comprehension and summarization. *Journal of Reading*, 30(7), 626-631.
- Chard, D., & Santoro, L.E. 2008. Building a community of reading experts: What is reading comprehension and why is it important?. Eugene: University of Oregon,.
- Devine, T. G. 1987. Teaching reading comprehension from teaching to practice. Boston: Merril Publishing.
- Ernita, H.S.K. 2012. The use of kwl plus strategy to improve reading comprehension of the second year students of smp N 12 pekanbaru (Unpublished Master's Thesis). Riau University: English Education Study Program, Teacher Training Education..
- Freeman, D. L., & Long, M. H. 1991. *An introduction to second language acquisition research*. Cambridge: Longman Group.
- Hart, B., & Risley, T. R. 2003. The early catastrophe: The 30 million word gap by age 3. *American Educator*, 1(2), 4-9.
- Direktorat Tenaga Kependidikan. 2008. *Kurikulum tingkat satuan pendidikan (KTSP)*. Direktorat Jenderal Peningkatan Mutu Pendidik dan Tenaga Kependidikan: Departemen Pendidikan Nasional.
- OECD. What students know and can do: Student performance in reading, Mathematics and Science(Vol. I). Available at <a href="http://dx.doi.org/10.1787/9789264091450-en">http://dx.doi.org/10.1787/9789264091450-en</a>. (Accessed 16February 2010).

- Ogle, D.M. 1986. K-W-L: A teaching model that develops active reading of expository text. *Reading Teacher*, *3*(9), 564-570.
- Oxford, R.L 1990. Language Learning Strategies: What every teacher should know. Boston:Heinle & Heinle Publishers.
- Rahmawati, L.E. 2012. "Pengaruh strategi know want to learn (KWL) dan direct reading activity (DRA) terhadap kemampuan membaca intensif ditinjau dari kebiasaan membaca (studi eksperimen pada siswa kelas 11 SMA Negeri Wilayah Sragen Barat)". <u>Digital Library Universitas Sebelas Maret</u>. Available at <a href="http://digilib.uns.ac.id/pengguna.php?mn=detail&d\_id=12563">http://digilib.uns.ac.id/pengguna.php?mn=detail&d\_id=12563</a>. (Accessed 5 June 2011)
- Stahl, D.K. 2003. The effects of three instructional methods on the reading comprehension and content acquisition of novice readers (Unpublished Master's Disertation)., Georgia: University of Georgia Faculty of Teacher Training and Education.
- Stauffer, R. G. 1969. *Directing reading maturity as a cognitive process*. New York: Harper & Row.
- Thorndike, R. D. 1992. Reading in a foreign language: Identification of subskills of reading comprehension by maximum likelyhood factor analysis. Chicago: Riverside Publishing.
- UNESCO. Mother tongue multilingual education. Available at http://www.portal.unesco.org/education/en/ev/. (Accessed 2 June 2009).