



Application of The Know-Want to Know-Learned (KWL) Method to Improve the Ability of Reading Comprehension Science Texts

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Abstract: This research is motivated by the low reading comprehension ability of elementary school students. The purpose of this study was to optimize student activity and reading comprehension abilities in the form of zigzag book products using the Know-Want to Know-Learned (KWL) method in reading comprehension of science texts. The research was conducted at Karangsari 2 Elementary School, Cirebon District, to be precise in fifth grade with a total of 20 students. This study used a classroom action research method using the Kemmis and McTaggart model which was carried out in two cycles. The instruments used were evaluation guidelines, interviews, and documentation. In the first cycle, student's activity in categorizing ideas, making guide questions, and answering guide questions was still low. Student's ability to making zigzag books is still low. In the second cycle, student activity in reading comprehension and student's ability in making zigzag books increased. So that the average score of activity and the average score of the product in cycle II fulfills the minimum completion criteria score.

Keywords: Reading Comprehension, Know-Want to Know-Learned (KWL) method, Science Text.

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INTRODUCTION

The 21st century is marked by advances in technology and information, the world of education is no exception. Today's education must lead to the development of 21st-century competencies. According to Daryanto and Karim (2017), the competencies that must be achieved in the 21st century is the ability to think critically, solve problems, and collaborate. The school is expected to be able to prepare generations that can enter and compete in the 21st century. In line with this, according to Abidin (2015), the relationship between education and thinking competencies that students must have is that education must be directed towards problem-solving skills, metacognitive thinking abilities, and creative thinking abilities. The role of Bahasa Indonesia in the current curriculum is as a bridge between one subject and another. Rahman (2018a) Learning is a change in behavior as a result of interaction with the environment or experience. Therefore, a meaningful learning process for students will have a positive impact on students. There are several language skills, namely listening skills, speaking skills, reading skills, and writing skills. Rahman

(2018b) states that language skills are the main asset of children in communicating with friends, teachers, and family.

Reading is one of the language skills that are important to master because according to Fry (in Azizifar, et al. 2015) reading is the mother of all abilities in learning and is beneficial for student life. In line with the opinion above, Slavin, et al. (2014) stated in their book that the heart of learning is reading, because the success of students in school begins with how the success of students in their reading activities. However, the problem of reading in Indonesia is the lack of interest in reading. Lack of interest in reading has an impact on the number of students who still have difficulty understanding the contents of the text correctly. Based on PISA 2018. Quoted from the OECD (2019) in the 2018 PISA results that the PISA score in the reading aspect, Indonesia got a score of 371 from an average of 487 from 72 countries. It can be seen that the value received is still far from the average value. This means that the students are still lack reading ability, especially in texts that contains information. The problem in reading is also



explained by Abidin (2013) states that the basic problem in learning to read is that learning carried out in schools is still done, only emphasizing the practical side, which is only reading text to answer questions. We must respond to this mistake in learning to read. The use of appropriate learning methods and techniques supports learning to read to be more meaningful. Helmawati (2019) states that the task of a professional teacher is to make learning that is not interesting to become interesting and what is difficult for students to become easy. This is done so that learning can be understood and meaningful for students. The use of learning media and various learning resources needs to be used to attract a student's interest. This is in line with what was expressed by Kumnuansin & Khlaisang (2014) which stated that a suitable method to encourage students to read is to use interesting content, use attractive illustration media, material, and interesting cover reading texts as well. This is intended so that learning to read does not feel boring so that students are more interested in understanding the text they read, especially in science texts.

The reading method used in this research is the Know-Want to Know-Learned (KWL) method. Related to this explanation, using the KWL method encourages students to have reading goals so that students are more active in learning. The purpose of this study is to use the Know-Want to Know-Learned (KWL) method to improve student's reading comprehension skills.

The relevant research from this study is Aryani, et al. (2012), the title of the research is to improve understanding skills through the Know-Want to Know-Learned (KWL) strategy for fourth-grade students of elementary school 01 Semarang. This study aims to improve teacher skills and improve student's reading comprehension skills. The results of this study were student activities, teacher skills, and reading comprehension skills of students increased. Furthermore, research from Satrijino, et al (2019) with the title of

implementing the Know-Want to Know-Learned (KWL) strategy to improve reading comprehension learning for grade IV B students with the theme of the beauty of my country's diversity in Jember Lor 02 elementary school. The result of this research is that there is a significant increase in reading comprehension learning outcomes. So that learning to read using the KWL method improves.

Based on the observations of researchers in grade V students of Public Elementary School 2, Karang Sari, it shows that the average score of reading comprehension of students is at a value of 60. Meanwhile, the minimum completion criteria for Bahasa Indonesia at the school is 64. Besides, the level of awareness and interest in reading is still low, and when recounting the results of their reading, the average student is only able to retell it briefly and not in-depth. Therefore, the researcher is interested in researching with the title "Application of the Know-Want to Know-Learned (KWL) Method to Improve Reading Comprehension Ability to Science Texts". Research that will be conducted by researchers is to improve reading comprehension skills to science texts, by making reading products, namely zigzag books. According to Abidin (2013), reading is an activity that aims to get information from the text. Obtaining information is important so that students can communicate with other students. This was stated by (Fajrudin & Hartati, 2019) Reading is the key that must be mastered by individuals because, by reading, insight becomes broader and can be a means of communication. Meanwhile, reading comprehension is a reading activity that understands the text in depth. This is in Macmillan's opinion (in Ahuja and Ahuja, 2010) which states that reading comprehension ability is a reader who can understand the meaning of the author, both expressed and implied. The KWL method according to Nurcahyanti (2018) is a reading method that emphasizes the importance of the reader's initial knowledge as a stimulus in learning to read activities to be carried out. The stages of



KWL learning in reading comprehension according to Rahman et al. (2019), namely at the pre-reading stage, where there are two categories, the first is the knowing stage which is done by brainstorming and categorizing ideas. The second stage is what I want to learn the stage. At this stage, the students make guiding questions like the purpose of reading. Furthermore, the reading stage enters what I have learned stage. At this stage, students are asked to read the text to answer the guiding questions and to achieve the purpose of reading. The last is the post-reading stage or the follow-up stage in the form of students retelling the contents of the text by making a zigzag book.

METHOD

The research was conducted at Public Elementary School 2 Karang Sari, grade V, with a total of 20 students. This research using the classroom action research method. The research design used was Kemmis and McTaggart's design. The research design steps of Kemmis and McTaggart's design (in Hopkins, 2008) were carried out through a review process consisting of 4 stages, namely planning, action, observation, and reflection. This spiral model is a continuous recurring cycle model, with the hope that each action shows an increase according to the changes and improvements that want to be achieved. This design is carried out in two cycles and in one cycle there is one treatment. The data analysis carried out by researchers was adjusted to the formulation of the research problem. The instruments used in this study were product appraisal, process assessment, observation sheets, interview guides, documentation, and field notes. The indicator to be achieved in learning activities is that students can work on the Process Worksheet, make guiding questions, and answer the guiding questions. Meanwhile, the indicator of reading comprehension ability was assessed based on zigzag books made by students with the criteria for assessing the completeness of the zigzag book

components, text content, concept organization, completeness of concepts, use of language, writing and creativity, and responding to text content. The data processing techniques used are qualitative, quantitative, and triangulation.

RESULTS AND DISCUSSION

The research was conducted through 2 cycles consisting of 1 treatment for each cycle. The research began with planning activities, after compiling the plan, the researcher researched cycle 1. After the first cycle is complete, the researcher conducts data analysis and reflection to find out the results of the research activities that have been carried out and to monitor research activities. Reflection activities are also used as input to research the next cycle so that it is better than the previous cycle. This research activity intends to improve the reading comprehension skills of fifth-grade students. In this study, researchers compiled a lesson plan that will be carried out in cycle 1 with the text "the impact of air pollution on the environment and health". In the pre-reading stage, the researcher intends to generate initial knowledge and experiences of students related to the content of the text. Stimulate students to give opinions on what categories of ideas will emerge. Next, the activity of making guiding questions. Entering the reading stage students read silently and are asked to answer the guiding questions that they have made. After answering the guiding questions, affirmations given by the teacher, the teacher and students jointly discuss unanswered questions or discuss categories of ideas that are important but have not been conveyed before. In the post-reading activity, the measured ability is the ability to understand through making the zigzag book. In the zigzag book, there are various activities of students such as rewriting the contents of the text related to the contents of the text they have read, evaluating the truth of the text, and expressing opinions based on the contents of the text. The assessment activity in cycle I am an assessment of learning activities and an assessment of product results. The



average score and the average score of the activities and products of students in

reading comprehension learning science text in the first cycle are as follows:

Table 1. Average Score and Activity Score Cycle I

Indicators	Average Score
Number of questions	2,4
Accuracy in making inquiries	2,65
Number and linkages	1,95
Average Activity Score	58,3

Table 2. Average Score and Product Score of Cycle I

Indicators	Average Score
The content of the text	5,7
Concept organization	3,6
Completeness of the concept	4,0
Use of language	2,35
Writing and creativity	1,65
Respond to text content	4,7
Average Product Score	55,0

Based on the table above, it can be seen that the activity and ability to reading comprehension of science texts in cycle I am still low. The activity value and product value obtained by students did not meet the minimum completion criteria score in Indonesian, namely 64. Therefore, the researcher redesigned the reading comprehension learning activity as optimally as possible to be carried out in cycle II so that the student's reading comprehension ability increased. The implementation of learning cycle II is the same as cycle I. In the second cycle, the text used in learning is with the title "the effect of clean air on breathing". The media used is a video about an environment where the air is clean and unclean. Besides, other media used are rural and urban images. While the last stage, students carried out activities to make zigzag books. The average score and the average score of the activities and products of students in reading comprehension learning science text in cycle II are as follows:

Table 3. Average Score and Activity Score in Cycle II

Indicator	Average Score
Number of Questions	2,95
Accuracy in making inquiries	3,05
Number and linkages	2,6
Average Activity Score	71,7

Table 4. Average Score and Product Value of Cycle II

Indicator	Average Score
The content of the text	7,4
Concept organization	4,7
Completeness of the concept	4,8
Use of language	2,8
Writing and creativity	2,3
Respond to text content	6,0
Average Product Score	70,0

Based on the table above, it can be seen that the activity and ability to reading comprehension of science texts in cycle II have increased. The activity score and product score obtained by students have met the minimum completion criteria score for Indonesian at Public Elementary School

2 Karangasari, namely 64. Based on the activity score and product score obtained by students in cycle II, it can be concluded that the KWL method can improve student's abilities in understanding the content of science texts. In other words, the reading ability of students increases. To

achieve learning that is by the 21st century, of course, students must have good literacy skills. Hartati (2017) literacy is not just reading and writing skills, but literacy includes responses, understanding, and student daily activities but is packaged in learning. Therefore, learning at this time emphasizes active students and meaningful learning. In line with this, Maryani, et al (2019) argue that the literacy movement that can be carried out in schools can develop students' critical thinking which is reflected in the results of student's discourse, both written and oral. One way to develop a student's literacy skills is by reading. Reading does not only symbolize the sound from writing. According to Abdin, et al (2015), the basis of learning to read is to design various kinds of reading activities to achieve the planned learning objectives in this study, generally, the learning activities of reading comprehension of science texts using the KWL method have been going well. Based on the research that has been done, the research findings are obtained. In cycle I, in the category of expressing opinions, students were still embarrassed and could not express their opinions. Besides, when determining the category of ideas, students do not understand and have not been able to categorize ideas. Therefore, researchers guide students in finding categories of ideas that match the text. When making guiding questions and answering guiding questions in cycle I, students were still confused because students did not understand and were not used to making guiding questions. In the reading process in cycle I, students read the text with the title

"the impact of air pollution on health and the environment". However, the students seemed less enthusiastic because it seemed that many were chatting and just reading. This has an impact on the student's ability to answer guiding questions and when creating reading products. Most students only tell the content briefly and are not in-depth and in detail at the time of retelling. Student creativity is still not developed because for them making reading products is a new thing. Whereas in cycle II, students began to be enthusiastic in the learning process. At the brainstorming stage, students were brave enough and quite capable of finding the categories of ideas that will appear in the text. Students have also become accustomed to and understand how to make guiding questions. At the reading stage, students have started to have reading goals, by underlining what is important and by the answers to the guiding questions. When making the zigzag book, students are also more excited because they already have the imagination to decorate their zigzag book. Apart from that, the improved reading results mean that the quality of retelling is getting better, almost all-important categories of ideas have been shared by students. Although some students only explain one or two categories of ideas. Besides, the student's ability to get or make suggestions is by the context of the reading. The average score of the activities of the participants has increased in each cycle. There is also an increase in the average score of student activities. In cycle I to II can be seen from the chart below:

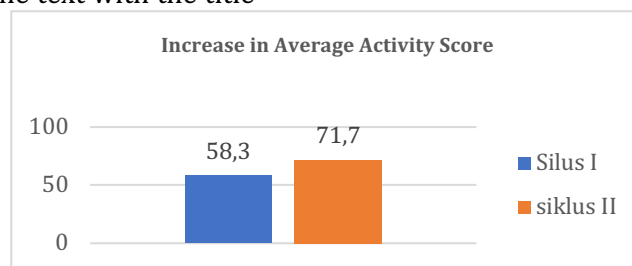


Figure 1. Increase in Average Activity Score

Based on the table above, it can be seen that the activities of students in reading comprehension have increased significantly. This is because students have become accustomed to the tasks that must be done. In addition to the score of the activity, the

ability of students to understand the contents of the text has also increased. This can be seen from the product score that has increased from cycle I to cycle II. The zigzag book score chart is as follows:

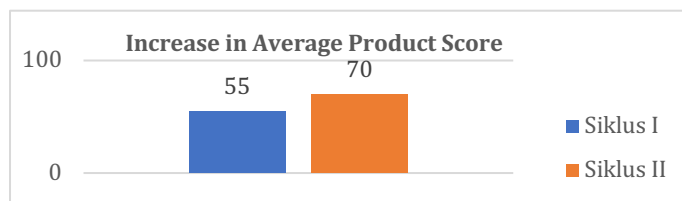


Figure 2. Increase in Average Product Score

Based on the graphic above, it can be concluded that the ability of students to understand the content of science texts as shown through the activity of making zigzag books has increased. This happens because students are used to understanding the contents of the text in depth.

CONCLUSION

Based on the results of data analysis and discussion that has been stated, it can be concluded that the learning activities of students in reading comprehension of science texts using the KWL method from cycle I to cycle II experienced a significant increase. After using the KWL method, students became more interested and enthusiastic about reading science texts. Student's reading interest has increased. Besides, students are more active in learning because of the various activities they carry out working on Process Worksheets. Students become braver to ask questions, express opinions about learning topics, and dare to criticize various problems related to learning topics. Students also know various reading techniques that suit their goals.

REFERENCES

Abidin, Y. (2015). *Pembelajaran Multiliterasi Sebuah Jawaban Atas Tantangan Pendidikan Abad ke-21 dalam Konteks Keindonesiaan*. Bandung: Refika Aditama

Abidin, Y. (2013). *Pembelajaran Bahasa Berbasis Pendidikan Karakter*. Bandung: Refika Aditama

Abidin, Y. dkk. (2015). *Pembelajaran Literasi dalam Konteks Pendidikan*

Multiliterasi, Integratif dan Berdiferensiasi. Bandung: Rizqi Press.

Ahuja, P. & Ahuja, G.C. (2010). *Membaca Secara Efektif dan Efisien*. Bandung: Kiblat

Aryani, S., Samadhy, U., & Sismulyasih, N. (2012). Peningkatan Keterampilan Membaca Pemahaman Melalui Strategi Know-Want-Learned (KWL) Pada Siswa Kelas IVa SDN Sekaran 01 Semarang. *Joyful Learning Journal*, 1(1).

Azizifar, dkk. (2015). *The Effect of Pre-reading Activities on the Reading Comprehension Performance of Islami High School Students*. *Procedia-Social and Behavioral Sciences*, 192. 88 – 194

Daryanto, & Karim, S. (2017). *Pembelajaran Abad 21*. Yogyakarta: Gava Media

Fajrudin, L., Hartati, T. (2019). *Improving Reading Skills Using Media Compic (Computer Picture) in Elementary Schools*. *The 2nd International Conference on Elementary Education*. 2. 1071-1078.

Hartati, T. (2017). Multimedia dalam pengembangan literasi Di sekolah Dasar Terpencil. *Sekolah Dasar: Kajian Teori dan Praktik Pendidikan*, 25(1), 47-54.

Helmawati. (2019). *Pembelajaran dan Penilaian Berbasis HOTS Higher Order Thinking Skills*. Bandung: PT Remaja Rosdakarya

Hopkins. D. (2008). *A Teacher's Guide to Classroom Research*. New York: Open University Press

Kumnuansin, J & Khlaisang, J (2014). Development of A Model of Thai



- Literature Hypermedia Electronic Books with Social Media Based on The Reader-Response Theory to Enhance Reading Comprehension of Elementary School Students. *Procedia-Social and Behavioral Sciences*, 174. 1700-1706
- Maryani, N., Sujana, A., Sopandi, W., & Rahman (2019). Students' Literacy Abilities in Reading Comprehension through Cooperative Integrated Reading Composition (CIRC) Model. *The 2nd International Conference on Elementary Education*. 2. 1799-1809
- Nurchayanti, B. (2018). Peningkatan Keterampilan Membaca Pemahaman Melalui Metode KWL Pada Siswa Kelas V. *Jurnal Pendidikan Guru Sekolah Dasar*. 3(7)
- OECD. 2019. *PISA 2018 Insight and Interpretation*. Diakses dari: <https://www.oecd.org/pisa/PISA%202018%20Insights%20and%20Interpretations%20FINAL%20PDF.pdf>
- Rahman. (2018a). *Media Audio Visual Sebagai Penunjang Pembelajaran Dalam Konteks Keterampilan Guru Abad 21*. Bandung: Universitas Pendidikan Indonesia.
- Rahman. (2018b). *Keterampilan Guru Abad 21 Dalam Variable Penguasaan Media dan Elektronik*. Bandung: Universitas Pendidikan Indonesia
- Rahman, dkk. (2019). *Menyimak dan Berbicara Teori Dan Praktik*. Bandung: Alqaprint Jatinangor.
- Rahman, Widya, R, N., & Yugafianti, R. (2020). *Membaca dan Menulis Teori dan Praktik di Sekolah Dasar*. Jatinangor: Alqaprint.
- Satrijono, H., Badriyah, I. F., & Hutama, F. S. (2019). Penerapan Strategi Know, Want to Know, Learned (KWL) Untuk Meningkatkan Hasil Belajar Membaca Pemahaman Siswa Kelas IVB Tema Indahnya Keragaman di Negeriku di SDN Jember Lor 02. *Jurnal Profesi Keguruan*, 5(1), 102-107.
- Slavin, R.E. dkk. (2014). *Membaca Membuka Pintu Dunia, Program "success for all": Model Yang Jelas dan Kuat Untuk Meningkatkan Kemampuan Membaca Anak Sekolah Dasar*. Yogyakarta: Pustaka Pelajar