THE IMPLEMENTATION OF LEARNING CELL TECHNIQUE TO IMPROVE STUDENTS' READING COMPREHENSION

KARTINI
Sekolah Tinggi Keguruan dan Ilmu Pendidikan Muhammdyah Manokwari
e-mail: Puangkara@gmail.com

ABSTRAK
Tujuan dari penelitian ini adalah untuk mengetahui Penerapan teknik *learning cell* untuk meningkatkan kemampuan pemahaman membaca siswa dan untuk mengetahui tanggapan siswa dalam menggunakan Teknik learning cell. Desain penelitian ini adalah penelitian tindakan kelas pada siswa kelas kelas VIIA SMPN 2 Tangerang. Peserta penelitian ini adalah 34 siswa. Mereka terdiri dari 17 siswa laki-laki dan 17 siswa perempuan kelas tujuh di SMPN 2 Tangerang.Teknik pengumpulan data dalam penelitian ini adalah tes tertulis, observasi, wawancara dan questionaire. Wawancara dilakukan pada dua puluh siswa dari tiga puluh empat siswa pada siswa kelas VIIA SMPN 2 Tangerang. Data kolektif dan analisis menggunakan data kualitatif yang didukung oleh data kuantitatif. Penelitian ini dilakukan dari bulan Oktober sampai November 2017. Temuan dalam penelitian ini menunjukkan bahwa penerapan teknik learning cell efektif dan dapat meningkatkan kemampuan pemahaman membaca siswa. Hal ini dapat dilihat dari temuan skor siswa dari siklus satu sampai siklus tiga. Data menunjukkan nilai siswa meningkat. Siswa yang lulus standar skor (KKM) pada siklus satu adalah 56.7%, siklus dua adalah 67.7% dan pada siklus ketiga adalah 96.8%.

Kata kunci: *Pemahaman Membaca, Learning Cell Teknik*

ABSTRACT
        The objectives of the research were to know the implementation of learning cell technique to improve students' reading comprehension and to find out the students' perception of using learning cell technique. This research design was classroom action research at the seventh grade students of SMPN 2 Tangerang. The participants of this research were 34 students. They were consisting of 17 male students and 17 female students of seventh grade students at SMPN 2 Tangerang. The data collection techniques in this research were written tests, observation, questionnaire and interview. The interview was done for 20 students of thirty four students at the seventh grade students of SMPN 2 Tangerang. The data collective and analysis used qualitative data which was supported by quantitative data. This research was done from October to November 2017. The finding of the research showed that implementation of learning cell technique could be effective and can improved students' reading comprehension. It can be seen from the finding of students score from cycle 1 to cycle three. The data showed the students' tests score improved. The students who passed the standard score (KKM) in cycle one was 56.7%, cycle 2 was 67.7% and cycle 3 was 96.8%.

Key Word: *Reading comprehension, learning cell technique*

INTRODUTION

Reading is an important skill in English that gives many advantages for students. This skill is substantial to know the way how to read English reading efficiently and optimally. Reading properly can help people gain the information that they need.

Reading skill is very useful because it is integrated to writing skill. Reading a lot can help students to write better and build their vocabulary. Students' writing will be more systematized and rich of new vocabulary. Besides, by having good reading skill, students also can improve their understanding. Read more can gain more knowledge than read less. They can see the part of the world through reading.

Aebersold and Field stated "Reading is what happens when people look at a text and assign meaning to the written symbols in that text" (1997, p.15). In line with the definition, Farrel (2002: ii) mentioned that "Reading is the interaction between the text and the reader that creates meaning." Reading process can happen if the reader can understand what the meaning or the main idea of the reading or the text. Through reading, we can get information and knowledge that we need and also explore the whole world that we never been before.

To be successful in reading, the most important thing is students can understand the main idea of the text. They need to comprehend the idea of the reading. That is why reading comprehension is important. Based on Rakhmawati (2015, p.43) "Reading comprehension is necessary because without it reading is nothing more than tracking symbols on a page with your eyes and sounding them out, it also provides the reader with any information." By comprehend the meaning of the text students can get information and knowledge clearly.

In forth, the curriculum 2013 that being implemented in SMPN 2 Tangerang, expects students to analyze, find the main idea, and comprehend the reading of the text. They have to determine the various information that they get from the text. These objectives will be reached maximally if teacher understand the needs of the students.

Unfortunately, based on the observation in SMPN 2 Tangerang on June 2017, the teaching learning process in the seventh grade student's still had weakness that need to be fixed. The teaching learning process in the class was dominated by teacher. Teacher became the learning centered in the class. Students did not actively involve in the teaching learning process. They were accustomed to learn reading with the old strategy. The strategy that usually used by teacher was silent reading, with using skimming and scanning technique. Students were given a text from the textbook and tried to answer the question from the text. Only few students did the exercise well, while the other

students were not focused, because they were busy with their businesses, talking with their friends and also disturbed the other students.

Furthermore, the researcher also found that some students did not really like English subject, especially reading. They did not accustom to read English text and did not master enough vocabulary. It made them difficult to find the message or the main idea from the text. Some students also felt hesitate to share their opinion to the teacher. That activity made them did not actively participate to the teaching and learning process. They were less motivated and did not show their interest in reading.

This kind of condition happened because skimming and scanning strategy that teacher used was quite out of date. It sometimes made students did not enthusiastic with the material that being delivered. They will easily get bored and did not focus to do their exercise from the text. This technique might be effective, but teacher need an attractive strategy to interest students attention.

In order to build students passion in learning reading and improve their reading comprehension, teacher needed to use an appropriate technique. There were many techniques that can be used to teach reading. Learning cell strategy was one type of collaborative learning strategy that can be used to teach reading and improved their reading comprehension.

Learning cell technique required students to work in pair. Savage (2016) mentioned that learning cell is peer learning, in which students teach other by working together in small groups or pairs, studying or discussing classroom material. In line with Savage, Goldschmid in Rakhmawati (2015, p.44) also mentioned that "Learning cell or student dyad refers to a cooperative form of learning in pairs, in which alternate asking and answering questions on commonly read materials." Shortly, learning cell technique was a collaborative learning technique that required students to work in pair in order to comprehend the meaning of the text.

Learning Cell was one of the collaborative learning techniques (CoLTs). It was usually named as peer learning or student dyad. Falchicov (2001) stated that the learning cell involves co-operative learning in pairs, in which students alternate asking and answering questions on new set readings. Goldschmid in Marginingsih (2016, p.14) argued that "this method of learning maximizes student responsibility for learning and enhances cooperative and social skills." They also found that the technique attracted good student ratings in terms of morale and experiences of the course. In short, learning cell technique requires students to be active

learner by asking and answering question from their peer.

Barkley, et al in Marginingsih (2016, p.15) stated that "in learning cells, students individually develop questions about a reading assignment or other learning activity and then work with a partner, alternating asking and answering each other's questions." By making questions from the text, students can engage with the text optimally and understand the content of the text maximally. They also can get more information that might be missed from their peer. Another expert from China, Yu Shengguan, Xianmin Yang and Gang Cheng added that learning cell activities promote deep interactions between learners and content, they are process oriented and enable the sharing of learning process, strategies, and activities (2013, p.38). This argument clearly mentioned the main point in this technique was sharing idea with peer to achieve the goal of learning process.

Learning Cell technique had positive relation with reading comprehension. It was an effective technique that can be implemented in reading comprehension class. It was also good technique that can make all students participate in the class and shared their idea or knowledge. Based on the explanation above, the researcher was interest in conducting a research to improve students reading comprehension

by using learning cell technique to the seventh grade students of SMPN 2 Tangerang, so that students can get improvement in reading comprehension.

RESEARCH METHODE

The writer applied classroom action research study. This kind of study conducted in a classroom and saw the process of students' improvement through the research. McNiff (2002) stated that action research is done by a researcher or practitioner with using a practical way to know the result of learning In this case, the writer analyzed the problem of the student's reading comprehension that occurred in the learning process from that class and tried to solve the problem by learning cell technique. This research used action research designed by Kemmis as cited in McNiff (1992, p.27), which divided the research into four main projects, they are; Planning, Acting, Observing and reflecting.

The study conducted in the first semester of the academic year of 2017/ 2018, from October to November 2017. Further, this study conducted in SMPN 2 Tangerang which is located at Jl. Siswa No.3 Kel. Suka Asih Kec. Tangerang, Kota Tangerang.

The Participants of this research were the students of Grade VIIA in academic year 2017/2018. This class consists of 34 students, 17 Male students and 17 female students. This class was chosen as the subject of research because most of the

students still have low of achievement in English subject. This information researcher got from interview with English teacher and from the result of pre cycle test.

This research followed the action research design suggested by Kemmis as cited in McNiff (1992). The action involved four major steps, as follows:

a. Planning

In this first step, the writer developed a plan of action in order to bring improvement in students reading comprehension. The researcher made three lesson plans. One lesson plan designed for three meetings. Construct teaching materials about descriptive text. The text was described person, places and students' family. Researcher also prepared the time schedule of meeting, which was on Thursday and Friday, based on school schedule. Descriptive text was the teaching topic that used in the research, because this topic was taught in the seventh grade of students in the school.

b. Acting

The researcher started the research with implemented the learning cell strategy in teaching reading. The research used three cycles, and each cycle consists of three meetings. At the end of the meeting of every cycle, the researcher gave test to measure students' achievement.

c. Observing

The researcher observed the students during teaching learning process in the classroom. The researcher observed students' understanding, participation, and activities in the teaching learning process.

d. Reflecting

In reflecting section, the researcher analyzed the data of the cycle, and identified the result of the cycle. After that researcher made a conclusion and compared the students' score between cycle I, cycle II and cycle III to find out how far the improvement of students' ability in comprehending the text. Data collection technique was needed to help the writer to find the result of the study. In this research, the writer used qualitative and quantitative data. The act of collecting data is presented as follows:

a. Observation

Observation in this research was needed to saw the phenomenon that happened during the research. Beside the quantitative data that conducted through the test, observation provided qualitative data that described the information which researcher got during the research. That information was the condition of the students when they treated with the learning strategy, how they learnt, what were the difficulties that they faced, etc. overall, the researcher observed how the process of the

implementation of learning cell technique in improving students reading comprehension.

b. Questionnaire

Beside observation, the researcher used the result of questionnaire as qualitative data. The researcher provided some questions to found out their perception of learning cell technique. Based on Burges (2001), there were three elements to design the questionnaire, they were:
a) Determined the questions to be asked,
b) Selected the question type for each question and specify the wording
c) Designed the question sequence and overall questionnaire layout
Before gave a questionnaire, researcher had to select the questions that were based on the topic that being researched. The researcher also had to make the questions explicitly so that did not confuse the participants.

c. Interview

The interview was used to get the information from students about their perception in implementing learning cell technique in their class. It was used to find out the problem that they faced during the action. The students' interview was about their perception of the technique, teaching material, and the difficulties. The teacher' perception was about the difficulties that she faced during

the implementation of the technique. It was also about Students' reading ability, the technique, and students learning improvement.

d. Test

The researcher used test to know the result of the implementing the learning strategy. The test divided into two tests, Pretest which was held before the treatment to know the students ability in reading comprehension. Posttest which was held after the treatment to measure students' achievement after got the treatment.

e. Documents

Documents were needed to enrich the data of the research. It included lesson plan, teaching materials, attendance list, etc. Besides that, the researcher also used photograph as the documentation of the research

After collecting the data, the next section was analyzed the data to see the result of the research. The research can be categorized as successful if the participants can understand the test and expressed it into their own language. The improvement also can be seen from the score that students got in the post test. Quantitative data obtained from the comparison of the score of test (pretest and posttest) from each cycle. Before compare the score of pretest and posttest.

Next, researcher compared the mean score of pretest and posttest using

average score from each cycle. It used the formula as follows:

$$M = \frac{\Sigma X}{N}$$

M = Mean
ΣX = the amount of students'
score N = number of SS

Further, if the mean score already calculate, researcher compare the result of the mean score of pre-test and the result of the main score of post-test in each cycle, to see the improvement of subjects' achievement in reading comprehension. To strengthen and to saw the improvement more clearly, researcher also present the score difference into percentage form. The formula used to know the class percentage, as follows:

$$P = \frac{F}{N} \text{ X } 100 \text{ \%}$$

P = the class percentage
F = Frequency are being found
N = Number of students

The qualitative data that obtained from interview, questionnaire and observation, will be analyzed descriptively. The researcher followed the model of data analysis by Miles and Huberman as cited in Hartini (2012, p.49-50). This model has four processes: data collection, data reduction, data display, and conclusion.
a. Data reduction is the process of selection, simplification, and transformation from source of data into coherent transcription.
b. Data display, is an organized information that leads to conclusion and interpretation
c. Data verification is generally the conclusion of the data.

Overall, the researcher used these data analyzing technique to see the result of implementing learning cell technique to improve students reading comprehension.

RESULT AND DISCUSSION
Researcher collects all the data and analyzed it based on the result of the test from each cycle. The score from each cycle then compared to see the improvement from students achievement. The result of the research arranged as follows;
Before start the treatment using the teaching technique, researcher used pre-test to measure students' ability in reading comprehension especially from reading descriptive text. The test was taken on 6 October 2017. Researcher gave 25 questions from five short texts. The result of the test was not satisfied. The average score of the test was only 54.5 (using mean score). This score still not achieved the score standard from the school. By seeing this phenomenon, the researcher tried to use the learning cell technique to improve their understanding of how to comprehend the text with more interesting way.

The data showed that the average of students score in pretest was 54.5, and the score presentation of students who passed the standard score was only 20.6%. It means that the result was still low. Because of that, researcher want to implement teaching technique called learning cell technique to improve students reading comprehension.

In the first cycle, the mean score of the cycle 1 test was 70.5 while the score of pretest was 54.5. It means that there was an improvement from students' achievement. The students' improvement looked big enough, however researcher still need to continue the research into next cycle because there were some students that got bad score. That score also did not pass the school passing grade which is 71. Further, based on the researcher' observation, some students still did not focus to did their task and did not understand what should they did. Researcher should revise the teaching plan for the next cycle based on the reflection in the cycle 1, in order to get maximal result from the action.

The result from second cycle showed that the mean score from the students cycle two test was 78.03. Since the score of cycle 1 test was only 70.5, there was an improvement from the cycle 1 to cycle 2. It is also already achieve the minimum passing grade of the school which is 71. Based on the result, can be said that the research has succeed and satisfied enough, because has shown improvement from the students' skill. However, researcher still continue the research into cycle 3 to strengthen the argument that teaching reading by using learning cell technique can improve students reading comprehension.

The table from third cycle showed that the mean score of the last cycle was 81.7. It means that the result of the last cycle was better than 2 previous cycles. Thus, almost all of the students score reached the standard score of the school (KKM) which was 71. Even though there was one student whose score below the school standard, researcher considered to stop the research because students who passed the score already 75%.

The data analysis was obtained from the score in each cycle then compared to see the improvement from students' achievement. The result of the research arranged in the table above;
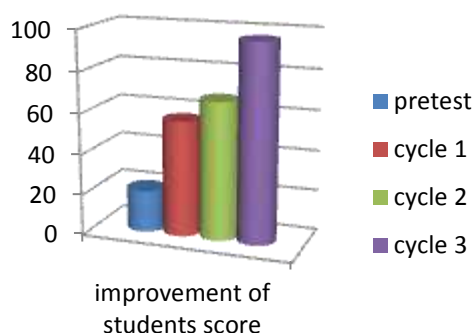
Table 1. Percentage of students score

	Pre-test	Cycle 1	Cycle 2	Cycle 3
Sum	1852	2115	2419	2700
Mean	54,5	70,5	78,03	84,3
Lowest score	24	30	40	55
Highest score	84	95	97	100
%	20,65	56,7	67,7	96,8

Beside this table, researcher also provide chart to show the improvement of students score from pretest to cycle 3 tests. The chart can be seen below:

Chart 1. Improvement of students score

The diagram above showed that students score significantly improved. It can be said that the use of learning cell technique in teaching reading can help students to improve their reading comprehension. Students were active and interest to follow the activity in the class. Based on the data that researcher collected and the result of students' score, this technique succeeds to improve students reading comprehension. This research also already answers three research questions;

1. **The learning cell technique improve students reading comprehension**

    According to the data that researcher got from the research, this technique proven to improve students reading comprehension. It can be seen from students' mean score from pre cycle until last cycle test. The score was 54.5 for pre cycle test, 70.5 for cycle 1 test, 78.03 and 84.3 for the last cycle test. Students showed their progress in every cycle. Not only for students' score. They also showed improvement in the classroom activity. Students were active and enthusiastic to follow the teaching learning process.

2. **Students perception of learning cell technique**

    To know the students perception of this technique, researcher used interview and questionnaire. Researcher had interviewing half of the students in class VIIA. They were chosen randomly. Based on the interview, they like to learn reading with their peer than learn alone. Next, almost all of the students like to teach by using learning cell technique. They agreed that using learning cell technique in teaching reading was very interesting and can improve their reading skill.

3. **Teacher problem during implementing the research**

    Since this teaching technique applied collaborative learning, the classroom situation became noisy, because students' communicate with their partner intensively. Students' prefer to choose their own partner to do the activity. They do not want to be paired who are not familiar with them. Teacher need to work hard with students who have low vocabulary to help them arranged their sentence.

CONCLUSION

This research was about improving students reading comprehension through learning cell technique. Based on the

research that had been conducted, it can be concluded that learning cell technique can improve students reading comprehension.

Learning cell is an effective teaching technique to improve students reading comprehension. It was proven by the increasing of students mean score for every cycle. The result of the test score revealed that they had shown a significant progress.

This teaching technique also can make classroom situation more interesting and enjoyable. Students were active and free to ask question to teacher and their pair. In this technique students trained to learn by themselves. Teacher's role only to be a helper and observer of students' activity. Students' jobs were to understand the text and make question based on the text. Then, their partner will try to answer the questions.

This research showed that learning cell technique is one of the teaching techniques that can be used by teacher to teach reading. This research is useful for not only students, but also English teacher.

REFERENCES

Aebersold, A. J., & Field, L. M. (1997). *From reader to reading teacher: issues and strategies for second language classroom*. Cambridge: Cambridge University Press

Burges, F.T. (2001). *A general introsduction to the design of questionnaires for survey research*. England: University of Leeds

Farrel, S. T. (2002). *Planning lessons for a reading class*. Singapore: SEAMO Regional Language center

Falchikov, Nancy. (2001). *learning together: peer tutoring in higher education*. Rout ledge Falmer: London. Available in: https://pendidikanmatematik ausn.files.wordpress.com/20 15/11/nancy_falchikov_learn ing_together_peer_tutoringb ookfi-org.pdf

Hartini, S. (2012). *The use of learning Cell technique to improve students'reding comprehension*. Retrieve in May 2017. Available on: https://Vol-1-5-2016-the-effectof-authentic-material-to-improve-students'-reading-marginingsih-1.pdf

McNiff, J. (2002). *Action Research (Principle and Practice)*. London: Routledge

McNiff, J. (1992). *Action Research: Principle and Practice*. London: MacMillan Education Ltd

Marginingsih. (2016). *the effect of authentic material to improve students' reading comprehension based on*

learning cell method. Retrieve in May 2017. Available on; http://www.poltekindonusa.ac.id/wpcontent/uploads/2016/05/Vol-1-5-2016-the-effectof-authentic-material-to-improve students%e2%80%99-reading-Marginingsih-1.pdf

Rakhmawati, D. (2015). *Learning cell technique toward reading Comprehension of narrative text*, 1(2), 42-59

Savage, L. (2016). *Teaching Strategies: Peer and Collaborative Learning.* Retrieve in May 2017, available on: https://blog.cengage.com/teaching-strategies-peer-collaborative-learning/

Yu, S., & Yang, X., & Cheng, G. (2013). *From learning object to learning cell: a resource organization model for ubiquitous learning.* Retrieve in august, available on: http://www.ifets.info/journals/18_2/16.pdf