

## IMPROVING STUDENTS' READING SKILL BY USING LEARNING CELL

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### Abstract

*This research is aimed at finding out whether learning cell can improve students' reading skill and how learning cell can improve class situation at the second grade of SMA N 6 Surakarta. The method used in this research is a class action research. The action research was conducted in two cycles, in which in the first cycle there were 4 meetings and in the second cycle there were 4 meetings including post test. Every cycle consisted of five steps: planning the action, implementing the action, observing and monitoring the action, reflecting the observation, and revising the plan. In collecting data, the researcher used qualitative data which were collected by using observation, interview, questionnaires, and quantitative data by using test. The qualitative data were analyzed using Interactive Model of Data Analysis as propounded by Miles and Huberman. The results of the research shows that Learning Cell Technique is able to improve the students' reading skill. It is proven by the increase of the students' mean score from 6.44 in pre-test to 7.15 in cycle 1, and 7.87 in cycle 2. Furthermore, the class situation also improved. The class became more enjoyable and fun.*

**Keywords:** *reading skill, learning cell, classroom action research*

### Abstrak

*Penelitian ini bertujuan untuk mengetahui apakah learning cell dapat meningkatkan kemampuan membaca siswa dan bagaimana learning cell dapat memperbaiki situasi kelas di kelas II SMA N 6 Surakarta. Metode yang digunakan dalam penelitian ini adalah penelitian tindakan kelas. Penelitian Tindakan dilakukan dalam dua siklus, di mana pada siklus I ada 4 pertemuan dan pada siklus kedua ada 4 pertemuan termasuk post test. Setiap siklus terdiri dari lima langkah: perencanaan tindakan, pelaksanaan tindakan, mengamati dan memantau tindakan, mencerminkan observasi, dan merevisi rencana. Dalam pengumpulan data, peneliti menggunakan data kualitatif yang dikumpulkan dengan menggunakan observasi, wawancara, kuesioner, dan data kuantitatif dengan menggunakan test. Data kualitatif dianalisis dengan menggunakan Model Interaktif Analisis Data yang dikemukakan oleh Miles dan Huberman. Hasil*

*penelitian menunjukkan bahwa learning cell mampu meningkatkan ketrampilan membaca siswa. Hal ini dibuktikan dengan peningkatan nilai rata-rata siswa dari 6,44 di pre-test untuk 7,15 pada siklus 1, dan 7,87 pada siklus 2. Selain itu, situasi kelas juga meningkat. Kelas menjadi lebih menyenangkan dan aktif.*

*Kata kunci: keterampilan membaca, belajar sel, penelitian tindakan kelas*

English as an international language is spoken in most international events and is used as the medium of information flow on science, technology and culture. We understand that learning a foreign language is more difficult than learning a national language or learning a mother tongue because the foreign language has completely different aspects and systems, which should be understood by the students or the learners, such as pronunciation, spelling, and the cultural background of the language. Every human life in society needs language. Language has important role in human life. With language, people can communicate each other.

Learning language is successful when learners can use the language in communication, both oral and written. Based on 'Kurikulum Tingkat Satuan Pendidikan' (KTSP) 2006, teaching and learning English in high school should be based on four language skills, those are: listening, speaking, reading, and writing. It is expected that students can use these skills to prepare them in the higher education level and even in the field of work that demands them to understand

English in communication. Reading is one of the four language skills taught in language teaching.

From *Standar Kompetensi(SK)* dan *Kompetensi Dasar(KD)* above, explain that ideally in reading the students should be able to: (1) identify the word meaning based on the context; (2) identify the main idea of the text; (3) find implicit information of the text; (4) determine the explicit information, and (5) determine the referent of pronoun.

Brown (2004: 185) says that reading is likewise a skill that teachers simply expect learners to acquire. When the writer asked about the students' reading ability, the teacher said that the students were weak in reading skill.

The writer made an observation, interview, pre-test, questionnaire to the English teacher and the students at the second grade of SMA N 6 Surakarta. From the result of the interview, pre-test, questionnaire, and observation, it revealed that the second grade of senior high school students have problems in reading English text. The problem that researcher found are: (1) Students had difficulty to

identify the word meaning based on the context; (2) Students had problem to identify the main idea of the text; (3) Students had problem to find implicit information of the text; (4) Students had difficulty to determine the explicit information, and (5) Students had difficulty to determine the referent of pronoun.

The problems of class situation are: (1) Low attention to the teacher's explanation; (2) Students tended to be passive learners. The students were silent when their teacher asked them about the difficulties and response to the material they had learned; (3) Students were noisy in teaching and learning reading; (4) Students were lazy to do homework. They argued that they forgot to do it.

The causes of the problems came from the teacher, the students, and class situation. From the teacher's side: (1) the teacher's way of teaching reading affected the students' reading skill like speaking too fast, unclear explanation and monotonous technique; (2) the teacher still used ordinary way in almost everyday teaching and learning process. He just asked the students to read certain text in the book or students' exercises book (LKS), and then he asked them to do the task following the text.

From the students' side: (1) Students had low motivation to read English text; (2) From the students' reading knowledge, there were some

causes: the limited vocabularies, sentence construction within paragraph, difficulties in finding the main idea and difficulties in making conclusion of the text; (3) Students' reading habit, they did not try to discuss the text and it made them face their own difficulties; and (4) The students had a little allotment of time to read English text. There were many students that still did not use chance to read English text either at school or in English lesson it self.

In <http://www.yourdictionary.com/skill>, skill is great ability or proficiency; expertness that comes from training, practices, etc. In <http://dictionary.reference.com/browse/skill>, skill is the ability that comes from one's knowledge, practice, aptitude, etc., to do something well. So, it can be concluded that skill is the great ability that comes from one's knowledge, practices, aptitude to do something well. From the definition of reading and skill above, it can be concluded that reading skill is great ability of the readers to use their knowledge, skills, and strategies to determine the meaning and find the required information from the written text, in order to communicate with the writer.

Learning cell is taken as the technique to be implemented. It is a type of collaborative learning that might overcome the problem. learning cell is an effective

way for a pair of students to study and learn together. The learning cell was developed by Marcel Goldschmid of the Swiss Federal Institute of Technology in Lausanne (Goldschmid, 1971). A learning cell is a process of learning where two students alternate asking and answering questions on commonly read materials. To prepare for the assignment, the students will read the assignment and write down questions that they have about the reading. At the next class meeting, the teacher will randomly put the students in pairs.

Barkley, et al. (2005: 141) state there are five steps of learning cell technique:

- a. Ask students to individually develop a list of questions and answers dealing with the major points raised in a reading or other learning assignment.
- b. From student pairs, or simply ask students to collaborate with a student sitting nearby.
- c. Explain the process by which you want partners to alternate asking

and answering each other's questions.

- d. Student A begins by asking the first question and students B answers the question. Student A offers corrections and additional information until a satisfactory answer is achieved.
- e. Student B asks the next question and student A answers, and the process repeats until all questions have been asked and answered.

The process begins by designating one student from each group to begin by asking one of their questions to the other. Once the two students discuss the question, the other students will ask a question and they will alternate accordingly. During this time, the teacher is going around the class from group to group giving feedback and answering questions. This system is also referred to as a student dyad. ([http://en.wikipedia.org/wiki/Active\\_learning](http://en.wikipedia.org/wiki/Active_learning))

Below are characteristics of learning cell technique:

Characteristics	
Group size	pairs
Time on task	15-30 minutes
Duration of groups	Single session, multiple or all term
Online transferability	moderate

Table 2.1 The characteristic of Learning Cell

Barkley, et al. say that learning cell is an activity to engage students actively in thinking about

content, to encourage students to generate thought-provoking questions, and to teach students how

to check their understanding (2005: 140).

Based on the theoretical above, it is assumed that students' reading skill can be improved by using learning cell. Learning cell is one activity to make students active with their partner and by making analysis question stems, the student will automatically understand deeply the content of the text. Then, the researcher makes hypothesis that by using learning cell, the students' reading skill can be improved.

## **RESEARCH METHODS**

In this study, the researcher conducted the research at the second grade of SMA N 6 Surakarta. It is located in Mr. Sartono street No.30 Surakarta.

This research is classroom action research. Action research consists of five fundamental steps. Those steps are planning, implementing, observing, reflecting and revising. In this research, the qualitative data were collected using some techniques, namely: interview, observation, and questionnaire. The quantitative data of the research were collected by tests: pretest and post test. To know the instrument used in pre-test and post-test is valid and reliable, the researcher tried out the test. The researcher used the objective test type. The tests were pre-test and post-test. The result of the tests is analyzed to know the students' skill in reading. The data

were collected by using reading test. A test is a systematic procedure for observing one's behavior and describing it with the aid of numerical device or category system. The researcher was tested the students by written test consisting of pre-test and post-test (1 and 2).

Before giving pre-test, the researcher firstly was conducted try-out test. It was done to know whether or not the instruments for pre-test and post test were valid and reliable. The tryout was done twice. The first try out was done before the research. The valid items got from tryout test 1 was used as test items for pre-test and post test 1. Then, the valid items got from tryout 2 were for post test 2.

After the data have been collected, they have to be analyzed. In this research there are two types of data that were analyzed, namely quantitative data and qualitative data. Related to the technique of analysis data in action research, Burns (1999: 156-160) proposes 5 steps in analyzing qualitative data. The process of analysis data are: assembling the data, coding the data, comparing the data, building the data, reporting the outcomes.

## **RESEARCH FINDING AND DISCUSSION**

Considering the research findings elaborated above, the researcher conducted discussion by justifying the findings with the relevant theories given by experts.

In more detail, the findings are discussed below.

#### 1. Learning cell technique improves reading skill

The finding of this research showed that learning cell technique could improve the students' scores in all reading indicators. The improvement could be achieved since the researcher (as required in the implementation of learning cell) asked the student to make list of questions and answers. 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 question. The questions covered all reading indicators including main idea, explicit information, implicit information, word meaning, and reference. The questions gave practice to the students and made the students accustomed to having comprehension questions. Thus, it can be concluded that the questioning step in learning cell can improve students' reading skill and ability in answering questions covering reading indicators.

Barkley, et al. (2005: 140) say that learning cell technique motivates students to practice interpersonal skill such as giving feedback in nonthreatening ways, maintaining focus, and developing and sustaining mutual task. Students learn to question, explain, admit confusion, and reveal miss-

conceptions something that they are more likely to do with a peer than with the instructor.

Goldschmid states that learning cell is a process of learning where two students alternate asking and answering questions on commonly read materials ([http://en.wikipedia.org/wiki/active\\_learning](http://en.wikipedia.org/wiki/active_learning))

Besides, the improvement in reading indicator can be specifically discussed in the following:

- a. Learning cell improves ability in finding main idea

After the research, the researcher found that the students could find main idea easily. They are making questions about main idea with reading strategy like skimming. Focusing on certain paragraph in a time made the students easy in getting the main idea. Thus, it can be concluded that learning cell improves ability in finding main idea. The finding is in line with the theory given by Barkley, et al. (2005: 140). They state that the purpose of learning cell is to engage students actively in thinking about content, to encourage students to

- generate thought-provoking questions and check their understanding
- b. Learning cell technique improves ability in determining word meaning based on the context

In learning cell steps there is step of developing a list of questions and answers dealing with the major points raised in a reading (the five indicator of reading include determining word meaning based on the context) so learning cell makes students always learn about how to determine word meaning based on the context through making list of questions. It is in line with the theory proposed by Research (Goswami and Bryant 1990) indicates that the use of collaborative learning including learning cell for readers are more able to access repeated experiences with continuous text, shared reading provides children with the opportunity to work with words and parts of words in secure meaningful

contexts.(<http://www.pbs.Org/teacherline/courses/rdlal45/docs/elp4sharedread.pdf>)

- c. Learning cell improves ability in finding explicit information within text

After research, the students' scores in the indicator of finding explicit information improved. Learning cell helps them find explicit information by making list of questions and answers related to the text. Making list of questions and answers its needed critical reading to the text. It is in line with the theory proposed by Johns (1995) that states collaborative theory including learning cell is helpful in identify, process, and comprehend crucial information in a text.([http://arapaho.nsuok.edu/~ORA/CD%20Contents%2011-146/12\\_1\\_6\\_pm/Collaborative%20Strategic%20Reading.pdf](http://arapaho.nsuok.edu/~ORA/CD%20Contents%2011-146/12_1_6_pm/Collaborative%20Strategic%20Reading.pdf)).

- d. Learning cell improves ability in finding implicit information

The result of the research showed that the

students got improvement in finding implicit information. Thus, it can be concluded that learning cell technique can help them make conclusion in order find implicit information within text. By using intensive reading the students easily find implicit information. Because the students are forced to make list of questions and answer, so automatically, the students read the text intensively. It makes the students easier to find implicit information. It is in line with the theory proposed by Johns (1995) that states collaborative theory including learning cell is helpful in identify, process, and comprehend crucial information in a text.

([http://arapaho.nsuok.edu/~ORA/CD%20Contents%2011-14-6/12\\_1\\_6\\_pm/Collaborative%20Strategic%20Reading.pdf](http://arapaho.nsuok.edu/~ORA/CD%20Contents%2011-14-6/12_1_6_pm/Collaborative%20Strategic%20Reading.pdf))

- e. Learning cell method is able to improve ability in determining reference

After the implementation of

learning cell technique in reading class, the students were able in determining reference. Their scores in the indicator got improvement. Thus, it is proven that learning cell technique can improve students' ability in determining reference. Using scanning when they are making list of questions and answers automatically makes the students easily find the reference. Barkley, et al.(2005: 140) state that learning cell provides an opportunity for students to think analytically, assessing, discussing and knowing figure on the text.

2. Learning cell technique improves class situation

- a. Learning cell improves students' learning motivation

Learning cell is able to improve students' motivation and interest towards English lesson. Learning cell can improve the students' motivation. This technique motivates students to practice interpersonal skill such as giving



feedback in nonthreatening ways and maintaining focus. Therefore, during teaching learning process, they follow all of activities conducted in the class well. Barkley, et al. (2005: 140) state that exchanging questions and answers with a peer can motivate students and challenge them to pursue deeper levels of thought.

b. Learning cell technique makes students active and confident

The improvement of the class situation was the students were more active and confident when they were asked to report their work in front of the class. They did their reading without being asked many times and did not complain anymore. The students were not noisy in English teaching learning. The student paid more attention and tended to be active learners; and not lazy in doing the homework. Besides, the positive improvement can be seen in the activeness

of the students during the teaching learning process. The finding is in line with the theory given by Barkley, et al. (2005: 140). They state that the purpose of learning cell is motivating students to practice interpersonal skills such as giving feedback in non threatening ways, maintaining focus, and developing and sustaining mutual task. Finally, an effective partner can act as role model for useful learning strategies.

## CONCLUSION AND SUGGESTIONS

There are some findings resulted from this research. Based on the findings, it can be concluded that learning cell technique can improve both students' reading skill and class situation. Firstly, learning cell technique is able to improve students' reading skill. Question and answer section conducted in text phase was really helpful for making the students accustomed to having comprehension questions. Since the students are always trained to discover answers for comprehension questions covering indicators of main idea, explicit information, implicit information, word meaning, and reference, their ability in reading got

improvement. Secondly, learning cell technique can improve the reading class condition. Through the implementation of learning cell technique in reading, the students become more active and confident. Learning cell technique also improves students' learning motivation. Being trained to discover correct answers by themselves, the students become independent and actively involve in the teaching and learning process. They are not much dependent on the teacher in doing any activities in reading class. Besides, during reading class, the students are motivated and interested in doing some activities that are the parts of learning cell technique implementation. The interesting activities include building knowledge through predicting activity, group discussion, oral presentation, and relating text to students' life and experiences. Besides, the use of videos as teaching media is also attractive for the students. Since the students are interested in learning, their boredom decreases. As a result, their attention to the teacher improves. During the class, most students give their attention to the researcher. They keep their focus on the lesson. Based on the conclusion and the implication, the researcher would like to give some suggestions dealing with reading class.

#### 1. For Students

The students should motivate themselves to read.

They should get actively involved in the activities during the lesson.

#### 2. For teacher

English teacher should realize that providing appropriate teaching technique or method is really helpful for the students.

#### 3. For school

SMA N 6 Surakarta should support the teachers to teach well. It is needed for schools or other educational institutions to conduct educational trainings.

#### 4. For other researchers

Other researchers can use the research findings of this study as additional reference for their further research and it is better for them to read more available references in order to get more information about learning cell technique.

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