

# MODIFIED COOPERATIVE INTEGRATED READING AND COMPOSITION TO PROMOTE STUDENTS' READING COMPREHENSION ACHIEVEMENT

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## Abstract

Tujuan penelitian ini adalah untuk mengetahui: 1) efektifitas teknik DBCIRC untuk meningkatkan kemampuan pemahaman membaca; 2) persepsi mahasiswa terhadap penerapan teknik DBCIRC. Peneliti menggunakan *one class pre-test post-test design*. Sampel penelitian terdiri atas 16 mahasiswa STKIP Muhammadiyah Kotabumi yang dipilih secara *purposive*. Dalam mengumpulkan data, peneliti menggunakan tiga instrumen yaitu test pemahaman membaca, angket dan pedoman wawancara. Data dianalisis secara kuantitatif dan kualitatif. Hasil analisis data menunjukkan bahwa (*p*) *value* yang diperoleh dari perhitungan *paired t-test* adalah 0.000. Dapat dilihat bahwa (*p*) *value* (0.000) lebih kecil dari taraf signifikan (0.05). Artinya adalah  $H_0$  ditolak dan  $H_a$  diterima. Disamping itu, hasil angket dan wawancara menunjukkan bahwa persepsi mahasiswa terhadap penerapan teknik DBCIRC adalah positif. Jadi dapat disimpulkan bahwa penerapan teknik DBCIRC sangat efektif untuk meningkatkan kemampuan pemahaman mahasiswa dalam membaca.

This study aimed to examine: 1) the effectiveness of DBCIRC technique to promote students' reading comprehension achievement; 2) the students' perception about the implementation of DBCIRC technique. This study employed one class-pre test post-test design. The sample consisted of 16 students of STKIP Muhammadiyah Kotabumi who were selected purposively. To gather the data, the researcher used reading comprehension test, questionnaire and interview guideline. The data were analyzed both quantitatively and qualitatively. The results show that (*p*) value gotten from paired t-test was 0.000. It can be seen that (*p*) value (0.000) is less than significant level (0.05). In other words,  $H_0$  is rejected and  $H_a$  is accepted. Besides, the result of students' questionnaire and interview reveal that students' perception about the implementation DBCIRC technique was positive. Therefore, it can be concluded that DBCIRC technique was effective to be used to promote students' reading comprehension achievement.

**Keywords:** digital media, CIRC technique, reading achievement, students' perception.

## INTRODUCTION

Of the four skills, reading is considered as the crucial skill to be mastered by English as a foreign language (EFL) learners. McNamara (2007) claim that reading is much more than just recognizing the words on a printed pages; it involves the ability to interpret what is read—recognizing the writer's intention, perceiving what is implied but not stated and drawing conclusions. One of the important aspects in reading skill is reading comprehension.

Reading comprehension is one of the important ways for students in order to become literate people. In addition, in a country in which English is seen as a foreign language (EFL) it is mostly believed that reading comprehension is the central means for learning new information and it is the most important skill needed for the students' success. Thus, in order to be classified as a successful reader, the students should have those skills in reading. However, the students at STKIP Muhammadiyah Kotabumi Lampung still face some problems related to reading comprehension ability. Automatically, it causes low achievement in reading comprehension.

This study attempts to investigate these problems by experimenting one of cooperative learning namely Cooperative Integrated Reading and Composition (CIRC) technique. CIRC technique was firstly introduced by Madden et al. during 80's era. Mustafa and Samad (2015) highlight that in CIRC teachers use basic reading texts and traditional reading groups but assign pairs of students from different reading groups to meet and work on specialized tasks.

There have been similar previous research deal with reading and CIRC technique. First, the study about CIRC technique carried out by Durukan (2011). He applied the research in the seventh grade of students primary school at the centre of Giresun Province. This research was experimental study in which the sample were assigned into two groups; experimental and control group. After having received the treatments, the achievements of students' reading comprehension and writing skill in experimental group was superior than control group. It showed that CIRC technique was effective to improve students' reading comprehension.

Second, Jayanto (2011) carried out a collaborative action research using CIRC technique to improve students' reading comprehension. The research was conducted in SMA N 2 Karanganyar at the class of X Immersion 1. The result of the study revealed that CIRC was effective to be used to improve the students' reading comprehension ability and the teaching learning process. Third, Zarei and Keshavarz (2011) did a comparative study in which they

compared the impact of the Students' Teams Achievement Division (STAD) and Cooperative Integrated Reading and Composition (CIRC) technique on reading achievement and vocabulary learning of Iranian learner. This experimental study showed that the implementation of CIRC technique had statistically significant effects on reading comprehension and vocabulary learning. It means that the score of the students' reading comprehension those who were taught by CIRC technique is superior than those who were taught by STAD technique.

The technique in this research, however, has been modified to meet the students' need. The modification is mainly in the usage of digital media. Theoretically, there are two reasons why the researcher modified this technique. First, Setiyadi et.al (2007) states that "if properly used, pictures, charts, maps, slides and records will certainly make the reading lesson more interesting, more colorful and more interesting". From this statement, it is clear that using media is really appropriate for teaching reading. Second, Gunter and Kenny (2008) claim that

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Besides, the logical assumptions are 1) this technique was firstly introduced in 80' era, then it would not be suitable for the students who are living in the present era; 2) due to the students now are living the digital age, so digital media is expected to be suitable for students to help their problems in learning. Therefore, the researcher incorporates the digital media into the implementation of CIRC technique. Hence, he named this technique as Digital-Based Cooperative Integrated Reading and Composition (DBCIRC) technique.

This article, therefore, examines the effectiveness of DBCIRC technique to promote students' reading comprehension achievement. Besides, the students' perception about the

implementation of this technique is needed to be investigated since this is new innovation in education especially in teaching reading. Eventually, the students' perception about the implementation of this technique was measured as well.

## **RESEARCH METHOD**

In this research, the researcher used quasi experimental designs and chose one class pretest-posttest design. In quasi experimental, the samples were not chosen randomly (Cresswell, 2009). So, the researcher did not random the sample in this research. In this design, it comprised of pre test, treatment and post test. The sample consist of 16 students, they were taken purposively from the third semester of STKIP Muhammadiyah Kotabumi Lampung.

Besides, to explore the second research question the researcher employs the descriptive qualitative method. Descriptive qualitative is used when the researcher needs to explore the topic which is investigated. It was in line with Fraenkel, Wallen and Hyun (2009) who state that "qualitative study is selected because the topics need to be explored". The topic that would be explored was the students' perception about the implementation of DBCIRC Technique. In short, the current research employs two kinds of approach: quantitative and descriptive qualitative.

There are three research instruments used to collect the data. First, reading test to measure the students' reading comprehension achievement before and after the treatments. Second, questionnaire and interview to gather the students' perception data. Before collecting the data using those instruments, the researcher conducted try out instrument to measure the validity and reliability of the instruments for quantitative data—reading test and questionnaire.

In term of validity, the researcher used expert judgement to validate the instruments. The result shows that there was positive judgement from the expert for both reading test and questionnaire. In addition, in measuring the reliability, the researcher used iteman program for

reading test and cronbach alpha formula for questionnaire. The result reveals that the alpha coefficient gotten from iteman is 0.746 while alpha coefficient obtained from cronbach formula is 0.775. From the coefficient, it can said that those instruments have high reliability. Therefore, the instruments can be used as a tools to collect the data.

In line with the design of the research, the data analysis was done through both quantitatively and qualitatively. In analyzing quantitative data, the researcher used paired-sample t-test to see whether there is difference of students' achievement on reading before and after the treatments. Meanwhile, for qualitative data, the researcher employs descriptive qualitative to describe the students' perception.

## RESULTS AND DISCUSSIONS

As stated previously, the quantitative data was analyzed by paired sample t-test through SPSS Program. The result is displayed in the following table.

**Paired Sample Test**

	Paired Differences							
	Mean	Std. Dev	Std. Error Mean	95% Confidence Interval of the Difference		T	Df	Sig. (2- tailed)
	Lower	Upper	Lower	Upper	Lower			
Pair 1 Pre – Post	-20.1562	9.8093	2.45235	-25.3833	-14.9292	8.219	15	.000

Based on the table above, the sig. (p) value earned through SPSS was 0.000.

Meanwhile, the significant level used in this research was 0.05. The hypothesis acceptance criteria was if sig. (p) value is less than sig. level, it means that Ho is rejected. From the table above, it is seen that sig. (p) value (0.000) was less than sig. level (0.05). Hence, in other

words, it could be said that there was difference achievement between pre test and post test. Furthermore, it can be said that the students' reading comprehension achievement increase positively.

There are five aspects which were measured in students' perception: perception on teacher's preparation, presentation, method, teacher-students interaction and students' satisfaction. The results shows that the students' perception about the implementation of DBCIRC technique is positive. It can be seen from the result of students' perception questionnaire which has been answered by the students. First, there are 60.41% of students stongly agreed that the teacher had prepared the lesson well. Meanwhile, 39.59% of the students agreed with the statements about teacher preparation. In another side, the percentage of students who disagreed nor strongly disagreed was 0%. It means that the students have positive perspective toward the teacher's preparation. Second aspect is teacher's preparation. Based on the the students' responses, there are 50% of the students strongly agreed that teacher gave a very good presentation to the students. Likewise, 50% of them agreed. Similar to the previous aspect, there was 0% student who disagreed. The next aspect is students' perception on method. The result shows that 53.47% students gave positive responses to the statements. They strongly agreed that the method employed by the teacher was good even very good. The number of students who disagreed and strongly disagreed was 0%. Eventually, it can be known that students have positive perspective toward the method. Students' perception on the interaction in the classroom shows that from 100%, there were 42.85% students were having very good perspective. Additionally, 57.15% students had good perspective. Those were indicated from their answer which strongly agreed and agreed with the statements provided in the questionnaire. Hence, it was seen that students had positive perspective toward the process of interaction during the learning process. The last is students' satisfaction, amazingly, all the students satisfied with the learning process. It was seen from their answer in which 75% of

them strongly agreed and 25% agreed. Those facts show that all the students satisfied. In the other words, the technique which was applied gave good impact for the students so that they were all satisfied with it.

As stated previously in the background of the research, DBCIRC technique was the combination of CIRC technique with digital media. The researcher modified the technique by incorporating digital media into the implementation CIRC technique. He designed the teaching materials within one-interesting-package materials. It was designed by utilizing some newly applications such as i-spring, aurora 3D dimension presentation, and microsoft power points. Thus, the materials were more interesting since they felt like work in the their world. Additionally, the teaching learning process ran in the computer laboratory. So, it possibly made the teacher applied this kind of teaching technique.

During the teaching learning process, the students were active and anthusiastic in following the lesson. It could be seen from their effort and activity in the class. The researcher saw that the utilization of digital media in this technique made the students easy in comprehending the reading materials which is provided by the teacher. Besides, they have been familiar with the use of digital application. Hence, they are able to receive the treatments well.

Moreover, students were more free in delivering their ideas and their difficulties in the learning process. It might be caused by the atmosphere of the learning process. The stages of DBCIRC technique provided a lot of chances for students to work together in their group and interact directly among the members. Unconsciously, they enjoyed the process and positive atmosphere was created, then. Besides, they were helping each others among the members and they were really interactive. Eventually, those facts above made the students success in promoting their reading comprehension achievement through DBCIRC technique. The discussions above was in line with the statements from Kenny and Gunter (2008). They declare that

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From the statement above, it can be interpreted that as an educator, the teachers are free to modify or incorporate certain media into certain technique based on the condition of the students. The researcher assumed that the university students now were living in the digital era so that the researcher incorporated the digital media into the teaching technique. It turned out, then, by incorporating the digital media into the teaching technique employed in this research, the students' reading comprehension achievement was different between pre test and post test. It can be seen from the average score of students in the pre test and post test of reading comprehension. Where in the pre test the average score was 51,25 meanwhile in post test the average score improved positively into 71,40. Thus, it can be said that the students' ability in reading comprehension improved positively.

Besides, in measuring the students' perception toward the implementation of DBCIRC technique, there were five indicators to be considered; first, teaching preparation; second, teaching presentation; third, teaching method; fourth, teacher-students interaction; and fifth, learner satisfactions.

Students' perception on the teaching preparation was 25% of them strongly agreed and 75% of the them agreed. It indicates that the students' perception on the preparation was positive. The students assumed that the teacher had prepared the teaching and learning process well. Presentation stage is really important in the teaching and learning process. Barnes and Lock (2013) claim that good preparation builds an atmosphere of mutual respects and motivates the students. The preparation include the way how the teacher prepare the class before teaching, review the previous material before moving to the new material, and explaining the goal of



learning materials (Rihards, 2007). When the teaching preparation is good, the students would be motivated in joining the lessons. Briefly, preparation is the key whether the teaching learning process runs smoothly.

On the teacher's presentation, the result of questionnaire showed that 31.25% of the students strongly agreed and 68.75% of the students agreed. Seeing that, the presentation was good so that the students mostly agreed with the statements provided in the questionnaire. During the teaching and learning process, the teacher should use an interesting way in presenting the materials. In addition, Harmer (2007) confirms that in presenting or demonstrating the materials the teacher might use some physical means such as bringing two hands or using the finger technique. Besides, in explaining the direction, the teacher must explain it clearly so that the students know what they are going to do. In addition, the steps of teaching and learning should be systematically ordered in order to lead the students to complete all the tasks given. In this research, the way how the teacher presents the materials is good. It can be seen from the students' answer about this aspect.

Method which is employed by the teacher was really important for the students in the classroom. Regarding to Harmer (2007) method is type of activities, role of teachers and learners, the kinds of materials which will be helpful. In the implementation of DBCIRC technique, the teaching method got positive perspective from the students. It was seen from the percentage of this aspect. There were 62.5% strongly agreed and 37.5% students agreed. It indicates that the teacher has done his best in employing the method in teaching reading using DBCIRC technique. This aspect covers the way how the teacher takes his role in the class. Moreover, it also relates to the teaching media used by the teacher. In this research, the researcher used digital media in which is sophisticated and suitable with the students' characteristic. Based on the students' answer percentage, it can be said that students have good perception in this indicator.

Next aspect was teacher-students interactions. The students who strongly agreed with the questions about it was 56,25%, and 43,75% of them agreed. In building the interaction with the students, the teacher pay attention to all the students in the classroom. So, the interaction between teacher and students was good. Thus, this aspect covers the teacher's way in giving correction, controlling the group activities and giving a chance for the students to ask, deliver or argue something in their mind. Those can be happened if the teacher create such a fun situation. From the result it can be said that the teacher has completed this aspect well.

Learner's satisfaction is the last aspect which was measured. There were 75% students strongly agreed and 25% agreed. That percetages indicated that the students satisfied with the teaching technique which was applied. The learner's satisfaction covers the four aspects mentioned previously. In the teaching and learning process, learner's satisfaction is really important to reach in order to make the students enjoy the process of learning. If they satisfy, then the learning atmosphere is positive and eventually, it can promote the students achievement in all the skill.

From the five indicators, all of them had good positive perceptions from the students. It can be seen from the percentages obtained through each indicators. To sum up, the students' perception about the implementation of DBCIRC technique was positive. Seeing that, Choy, Cheung and Li (2006) declare that students' perception is an influential factor in the successful of adoption of educational technology. Further, since the perception is positive, it was recomended for the teacher to use Digital-Based Cooperative Integrated Reading and Composition (DBCIRC) technique to teach reading comprehension.

Besides, to strengthen the data of students' perception about the implementation of DBCIRC technique, the researcher conducted interview toward several students. Then, it was found that it turned out they have good perception about the technique especially the digital media used in this research. It can be seen from the following students' statements.

T.5.[5]: Oke [ee] tadi berbicara masalah media, bagaimana dengan media yang kita gunakan selama ini?

S.5.[5]: Media yang digunakan ini memang karena medianya canggih, baru, dan modern. [ee] Jadi siswa-siswa lebih mudah untuk menyerap pengetahuan yang memang berkaitan dengan materi reading sehingga siswanya itu dengan adanya gambar-gambar [ee] kami lebih mengerti, lebih memudahkan kami untuk memahami dan juga tidak monoton.

T.6.[5]: Oke lalu [ee] bagaimana dengan media yang digunakan?

S.6.[5]: Medianya sangat menarik, interesting, terus juga pastinya kekinian. Seperti sekarang kan lagi booming yang media-media gitu yang lagi [ee] booming sama [ee] remaja-remaja zaman sekarang dan kita kan ee rata-rata siswanya itukan masih remaja ya [ee] sangat butuh sekali dengan media-media yang sifatnya modern, yang sifatnya terbaru gitu kan. Itu itu semua dipakai disitu, jadi interesting.

From the statements above, it can be said that the students have good assumption about the technique especially the digital media employed in this research. They asserted that the teaching media is interesting and up to date. In addition, they need the modern teaching media which is suitable with their characteristics. By seeing the discussions from both sides—questionare supported by interview—it can be interpreted that the students have positive perception about the implementation of DBCIRC technique. Thus, the researcher assumes that this technique is suitable to be used to promote the students' ability in reading comprehension achievement.

## CONCLUSIONS AND SUGGESTIONS

### CONCLUSIONS

In accordance with the results of the data analysis and the discussions of the current study, the researcher draws the following conclusions.

1. The current research focuses on reading comprehension achievement through DBCIRC technique in which this technique is the corporation between CIRC technique and digital media. The result reveals that there is difference between students reading comprehension achievement before and after being treated by DBCIRC technique. In brief, it can be concluded that DBCIRC technique can be used to promote the students' reading

comprehension achievement in the third semester of the students in STKIP Muhammadiyah Kotabumi-Lampung. It might be caused by two reasons; first, the stage which provide a lot of chance for the students to read and practice in a group. Second, the utilization of digital media which can motivate the students to highly involved in the learning process since this media is suitable with their condition. Eventually, the implementation of this technique can be used to promote the students' reading achievement.

2. From the questionnaire of students' perception, it was revealed that the students' perception about the implementation of DBCIRC technique is positive. Since this is new technique for them, at the same time the process of teaching and learning ran in the computer laboratory, so they enjoy the process and feel fun. Therefore their perception about the implementation of this technique is positive.

## SUGGESTIONS

In line with the result and conclusions of the research, the researcher would like to propose some suggestions both for teachers and further researcher:

For the Teachers

1. The technique used in this research was really effective to be applied in reading class. It can be seen from the improvement of the students' reading comprehension achievement after the treatments. However, the teachers of reading subject still have not used this technique for teaching reading. Hence, it was suggested for the teachers to apply this technique in reading class for its' advantages.
2. In applying this technique, it was suggested for teachers to concern in improving each aspects in reading especially those which are difficult for students to master. Making inference, for instance. In the current research, the lowest improvement in reading

happens in this aspect. So, the teacher should focus on each aspects in reading comprehension so that the improvement of each aspects is balance.

#### For Further Researchers

1. Since the researcher modified the technique used in this research with digital media, it was suggested for further researcher to develop the similar area of research with something new for students by considering the learners' condition. So that the teaching technique in education field especially for tertiary level is developed following the development of science and technology.
2. The study limits on the utilization of digital-based cooperative integrated reading and composition to promote students' reading comprehension achievement and students' perception. Meanwhile, since this is new teaching technique especially in reading, there might be hindrances faced by the teacher in applying this technique due to several reasons such as the teacher's qualification in designing media, the facilities and so on. Therefore, it was suggested for further researcher to find out the hindrances which might happen during the implementation of DBCIRC technique.

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