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The Effects of Using CIRC Model on the English Learning Skills among Junior High School Students

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Abstract

This research was aimed at describing the effects of Cooperative Integrated Reading and Composition (CIRC) learning model on the reading and writing skills of junior high school students in learning English. This research applied one group pretest-posttest design. Data were collected by using tests and analysed by using descriptive analysis and t-test. The result showed that: the average score for reading skill before the experiment was 50.00 and the average score for reading skill after the experiment was 65.58. On the other hand, the average score for writing skill before the experiment was 38.21 and the average score for writing skill after experiment was 58.05. The implementation of CIRC learning model had very significant effects on the English reading and writing skills of the junior high school students.

Keywords: *CIRC model, reading and writing skills*

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Introduction

English language subject is a foreign language subject which is compulsory to be taught at schools, starting from the junior high school to the university levels. English plays an important role in the communication, for both the spoken and written communication. Someone is considered to be proficient in English if they are able to use the language well. The assessment of English proficiency can be observed through the person's skills in using the language in both spoken and written ways. English learning is focussed on 4 language skills. In the English language curriculum for junior high school level, there are four skills as follows: listening, speaking, reading, and writing. Students consider English subject as a difficult subject such as Mathematics and Science. The difficulty level of English subject apparently also affects the success level in learning English.

The guidelines of English materials in the National Exam are the reading skill materials. Based on the empirical data, the English learning result of the 8th grade students at MTsN Ipuh Kabupaten Mukomuko showed that the reading and writing skills had average score below 5.0, considered still low and far from the minimum mastery criteria of English subject of 6.5. The result of the National Exam for students at MTs Negeri Ipuh in the last 2 years had not showed any satisfying result. The average score of students' National Exam result in English subject was below 4.0, still far below the exam result standard of 5.5. This problem is a serious problem and has to be a concern for regional government, educators, parents, and the students themselves.

There are some aspects that can affect the low learning results of students. The aspects that affect the students' learning success can be categorized into internal and external aspects. One of the internal aspects is the condition of the student. The external factor is the instrumental input, namely: educator, facilities, and learning process aspect. One of the learning process aspects is the learning method implemented by the teacher. The good learning model has to involve students actively by considering the cognitive, affective, and psychomotor aspects. During the implementation of the learning model, teachers play a great role in designing a fun, attractive learning strategy so students can get motivated to make achievement and comprehend the lessons well.

The teacher's habit that we should not take as an example is implementing conventional learning model such as: lecturing, question-answer, and taking notes. English learning model commonly used by teachers in junior high school or its equivalence focuses more on the teachers' activities so students act only as the teaching object being spoonfed with information. Students are not given opportunities to be active and to show their existence to participate in the learning. The weaknesses on the learning process can result on the decrease of students' motivation to make achievement while learning. At the end, this can lead to the less optimal learning result.

There are many well-known learning models that the teachers can implement in the class to improve students' learning skills. Even so, to know whether a learning model can be effective to improve the English learning skills, a research should be done. One of the learning models implemented through this experimental research is Cooperative Integrated Reading and Composition (CIRC) model.

Developed by Slavin (2011), CIRC was designed for use with specific materials for teaching reading and writing in the upper elementary grades. CIRC is a cooperative learning model that integrate reading and writing skills. Steven and Slavin (in Nur, 2005) had a comprehensive or wide and complete program for the teaching of reading and writing to grade 4,5,6 of primary schools. In the subject learning, CIRC learning model literally has two meanings: the cohesiveness of cooperative groups between students and the cohesiveness of reading and writing skills. The assumption is that the improvement of reading skill through the CIRC learning model is also followed by the improvement of writing skill. There is linear relationship between those skills.

The main goal of the CIRC learning model implementation is to encourage students through cooperative groups that are specially formed to improve the skills in comprehending the texts for improving reading and writing skills. Based on Slavin (2011), the steps in implementing CIRC learning model are: (1) form groups of four heterogeneous students; (2) teachers give texts related to the learning topic; (3) students cooperate with each other to read and find main idea and give feedbacks to the texts and write them on paper; (4) explain/read the group result; (5) teachers and students make a conclusion together; (6) closing. Heterogeneity of the group members promotes the comprehension exchange between students. The variety of the text forms can enrich and promote comprehensive understanding. On the third step, the democratic atmosphere becomes more lively so that the positive character learning process is likely to happen. The skill to explain the group discussion result is used as a tool to practice students' courage to speak in front of public and other students. Having courage in the responsible way academically is the value in the nation character education. Togetherness in formulating the conclusion can also make the students to learn how to appreciate others' opinion.

CIRC learning model, as stated by Slavin (in Suyitno, 2005) has eight components. Those components are: (1) Teams: the forming of heterogeneous group consisting of 4 or 5 students; (2)

Placement test: this can be obtained from the average of the previous daily test or from the rapport score so teachers know the students' strengths and weaknesses on certain subjects; (3) Students' creativity: doing tasks in the group by creating situations in which the individual success is determined or affected by the group success; (4) Team study: the learning steps have to be done in groups and teachers give assistance to the groups that need some assistance; (5) Team scorer and team recognition: giving score to the group discussion result and giving appreciation to the brightly successful groups and the less successful groups in completing the tasks; (6) Teaching group: teachers give materials in brief before giving group tasks; (7) Facts test: the implementation of tests or exams based on the facts obtained by students; and (8) Whole-class units: teachers give the summary of materials at the end of the lesson with the strategies for problem solving.

Suyitno (2005) explained that the main activity in the CIRC learning model to complete the problem-solving tasks involving the group specific activities, such as: one of the group members or some groups read the tasks, predict or interpret the content of problem-solving tasks, and also write down what they know, what to ask and to make analogy of questions with some variables, make plans to complete the problem-solving tasks, write down the chronological orders to solve the problem-solving tasks, can do peer-revision. Based on the explanation, it can be seen that the CIRC learning model is also an integrated learning.

This principle of integrated learning is in line with the four pillars of learning formulated by UNESCO in the learning activity. These four pillars of learning are learning to know, learning to do, learning to be, and learning to live together (Depdiknas, 2002). A simple path model of cooperative learning processes, adapted from Slavin (2011). That is, the model assumes that motivation to learn and to encourage and help others to learn activates cooperative behaviors that will result in learning. This would include both task motivation and motivation to interact in the group. In this model, motivation to succeed leads to learning directly, and also drives the behaviors and attitudes that lead to group cohesion, which in turn facilitates the types of group interactions that yield enhanced learning and academic achievement. The relationships are conceived to be reciprocal, such that as task motivation leads to the development of group cohesion, that development may reinforce and enhance task motivation. By the same token, the cognitive processes may become intrinsically rewarding and lead to increased task motivation and group cohesion.

What follows is a review of the basic theoretical orientation of each perspective, a description of the cooperative learning strategies each prescribes, and a discussion of the empirical evidence supporting each (Slavin, 2011). In this model, motivation to succeed leads directly to learning, and it also drives the behavior and attitudes that foster group cohesion, which in turn facilitates the types of group interactions - peer modeling, equilibration, and cognitive elaboration - that yield enhanced learning and academic achievement (Li, M. P. & Lam, B. H, 2013).

CIRC is a school-based program that targets reading, writing, and language arts. The three principle program elements are direct instruction in reading comprehension, story-related activities, and integrated language arts/writing instruction. Each student works with another student. These learning teams work cooperatively on program-related activities (Madden, 2004).

Objectives of the study was aimed at describing the effects of Cooperative Integrated Reading and Composition (CIRC) learning model on the reading and writing skills of junior high school students in learning English.

RESEARCH METHOD

Research Design

This research applied quasi experimental one-group pretest-posttest design (Gall and Gall, 2003). The one-group pretest – posttest design is a research design where one group of participants is pre-tested on the dependent variable and then post-tested after the treatment condition has been administered. In this design, the effect is taken to be the difference between the pre-test and post-test scores.

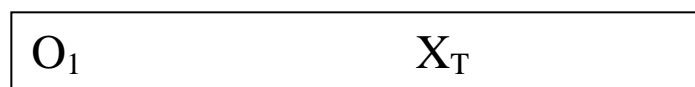


Figure 1. One-group pretest-posttest design in which X_T is the treatment and O₁ and O₂ represent the pre-test and post-test assessment

Sample

The sample was composed of 8th grade students enrolled at MTsN Ipuh Kabupaten Mukomuko, Provinsi Bengkulu during the 2013/2014 academic year. The research sample was selected by using the purposive random sampling technique, with criteria that student's English learning skills had average score below 5.0. The number of the sample was 29 students.

Data Collection

English skills as the research variables are categorized into two skills, namely: reading skill and writing skill. Data were collected with test technique using an English skill test in reading and writing. Measures of CIRC learning model were administered at pre-test, post-test, and achievement test.

Data Analysis

Data obtained from the pre-test, post-test and achievement-test of the treatment were analysed by using SPSS software program. T – Test technique was used in the analysis of the data obtained from reading skill and writing skill so as to find if there was a statistically significant difference between pre-test, post-test, and achievement test. Study findings were analysed at (p) 0.05 significance level.

RESEARCH FINDINGS

Findings related to reading skills

As can be understood from Table 1, the average score for reading skill pre-test was 50.00 and the average score post-test was 65.57. The t-test result of reading skill before and after treatment stated that the t_{count} was 7.730, higher than the t_{table} of 2.048 with the significance level as more than 95%. It means that there were significant differences on the reading skill average score before and after the implementation of CIRC learning model. Reading skill in learning English after implementing CIRC in the learning showed better results compared with the previous learning.

Table 1. The average score for reading skill pre-test and post-test

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre RS	50.0000	29	10.85620	2.01595
	Post RS	65.5748	29	4.80828	.89288

Paired Samples Test		Paired Differences						t	df	Sig. (2-tailed)
		Mean	Std. Dev	Std. Error Mean	95% Confidence Interval of the Difference					
					Lower	Upper				
Pair 1	Pre – Post Reading Skill (RS)	-1.55748	10.84081	2.01309	-19.69845	-11.45120	-7.7301	28	.000	

Findings related to writing skills

The average score for writing skill pre-test was 38.21, and the average score for writing skill post-test was 58.05. The t-test result of writing skill before and after treatments stated that the t_{count} was 13.815, higher than the t_{table} of 2.048 with the significance level as more than 95%. It means that there were significant differences on the writing skill average score before and after the implementation of CIRC learning model. Writing skill in learning English after implementing CIRC in the learning showed better results compared with the previous learning.

Table 2. The average score for writing skill pre-test and post-test

		Mean	N	Std. Deviation	Std. Error Mean				
Pair 1	Pre WS	38.2069	29	6.03193	1.12010				
	Post WS	58.0472	29	4.46742	.82958				

		Paired Differences		95% Confidence Interval of the Difference			t	df	Sig. (2-tailed)
		Mean	Std. Dev	Std. Error Mean	Lower	Upper			
Pair 1	Pre – Post Writing Skill (WS)	-1.98403	7.84694	1.4571	-22.8251	-16.8555	-13.8154	28	.000

Findings related to achievement test

Table 3 shows that the average score for achievement test/ English learning skill was increased. Before treatment, the average score for achievement test was 44.00, and after treatments, the average score for achievement test was 61.81. The t-test result of achievement test before and after treatments stated that the t_{count} was 15.875, higher than the t_{table} of 2.048 with the significance level as more than 95%. It means that there were significant differences on English learning skill average score before and after the implementation of CIRC learning model. English learning skill after implementing CIRC in the learning showed better results compared with the previous learning.

Table 3. The average score for achievement test

		Mean	N	Std. Deviation	Std. Error Mean				
Pair 1	Pre Ach-test	44.0014	28	5.95152	1.12473				
	Post Ach-test	61.8113	28	2.45861	.46463				

		Paired Differences		95% Confidence Interval of the Difference			T	df	Sig. (2-tailed)
		Mean	Std. Dev	Std. Error Mean	Lower	Upper			
Pair 1	Pre – Post Ach Test	-1.76316	6.09703	1.15223	-19.99579	-15.26742	-15.8753	27	.000

DISCUSSION

The improvement on English reading and writing skills was the result of CIRC learning model. The finding has shown the significant improvement from the three tests given for the students. Obviously, this finding has proven the statistically significant difference in the pre-test, post-test, and achievement test scores for English learning skills. Regarding the findings obtained in relation to

reading skill: pre-test mean was 50.00. It rose to 65.57 in the post-test. According to these findings, an increase was recorded in the mean scores of both pre-test and post-test. Findings obtained in the present study in relation to the effect of CIRC on reading skill are similar to the results produced by some other studies (Safitri, 2011; Durukan 2011). CIRC learning model can improve students' reading skill in English subject. This research finding supports the finding in Safitri (2011) who proved that there was a significant difference between the implementation of CIRC learning model and the improvement of students' reading skill compared with the conventional learning model. Durukan (2011) supports too, the CIRC technique and traditional method are effective on reading comprehension and writing expression skills; however, CIRC technique used in the experimental group is more effective for achievement and retention level than the traditional method.

Regarding the findings obtained in relation to writing skill: pre-test mean was 38.21. It rose to 58.05 in the post-test. According to these findings, an increase was recorded in the mean scores of both pre-test and post-test. Findings obtained in the present study in relation to the effect of CIRC on writing skill are similar to the results produced by some other studies (Zarei, 2012; Susanti, 2011).

The result of CIRC implementation in this research is effective to improve students' writing skill in English subject, as stated in a research by Susanti (2011) who concluded that CIRC learning model was effective to improve writing skills of college students. This research relevant with Zarei (2012) that CIRC requires the learners to write a summary or story about each reading, and this improves their reading comprehension and vocabulary. While cooperative learning was not found to be more effective than non-cooperative learning with respect to advanced students' reading comprehension and vocabulary learning in this study, the literature suggests there may be additional reasons to use cooperative learning. Certainly, the ability to work with others within a group and to develop interpersonal skills may be justifications for using cooperative learning strategies.

CIRC learning model in junior high school apparently can improve the reading-writing skill in English subject. The improvement of reading skill is linear with the improvement of writing skill. Before treatment, the average score for achievement test was 44.00, and after treatments, the average score for achievement test was 61.81.

The linearity between reading skill and writing skill supports the existence of curriculum structure for English subject in junior high schools (SMP), not only in primary schools (SD).

CIRC implementation not only can improve students' reading-writing skill in the high grades of primary schools as stated in a program by Steven and Slavin (in Nur, 2000) about comprehensive program for reading-writing teaching for grade 4,5,6 of primary schools and also junior high schools. It was also found that the implementation of CIRC learning model has to be designed well in order to achieve the expectation and reach maximum results. This is in line with Trianto (in Safitri, 2011) who stated that learning model is a plan or pattern used as a guidance in planning the learning in class or tutorial learning and to determine learning equipment sets that include books, movies, curriculum, etc. To achieve good learning results, it needs plan in the learning model that suitable with other supporting equipments. The improvement on learning process has to be done by teachers so the expected learning result can be achieved well and can be improved.

The achievement tests are used in this research to find if there was a statistically significant difference between pre-test and post-test before. Wichadee (2005) used a reading achievement test and a questionnaire asking students' opinion towards classroom atmosphere. The results showed that the English reading comprehension achievement of the experimental group was higher than the control group. The Cooperative Integrated Reading and Composition (CIRC) helped low achievement students improve their ability and the opinions towards classroom atmosphere were positive.

The research finding shows that CIRC learning model can improve students' learning motivation. CIRC learning process prioritizes the cooperation that can develop skills in appreciating others' opinions, telling opinions, practicing patience in waiting for the turn, speaking skill, active listening skill, asking skill, and checking precision. For this reason, the role of motivation and concentration is very essential. It was proven by the improvement of reading-writing skills from the first, second, and third treatment. In English subject, reading skill is given so much priority. Reading materials can be story script, articles in magazine, or etc. The improvement of reading-writing skill as the result of this research supports the result of research by Yuliana and Sukoriyanto (2013) who concluded that CIRC learning model can improve students' skills in finishing story exercises.

CONCLUSION AND RECOMMENDATION

The implementation of CIRC learning model had very significant effects on the English reading and writing skills of the junior high school students. In light of these results, it is suggested that CIRC and other cooperative teaching methods (such as Jigsaw, Cooperative Learning, Team-Game-Tournament, etc.) benefit language acquisition.

Finally, the recommendation can be given based on the results of this research are the implementation of Cooperative Integrated Reading and Composition (CIRC) can effectively improve students' English reading and writing skills. It should be aware that the steps implemented in the CIRC model have to be explicit and well-structured to clearly distinguish it with other learning models.

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