# THE IMPACT OF COOPERATIVE INTEGRATED READING AND COMPOSITION (CIRC) ON THE STUDENTS' READING SKILL 

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#### Abstract

Reading is one of difficult skill to develop to a high level proficiency. Cooperative Integrated Reading and Composition (CIRC) can be an example of teaching technique that can improve the students' reading skill. This paper presents the experimental research finding which its objectives were to identify (1) the students' reading skills taught with and without using CIRC, (2) the students' reading skills with different learning styles, and (3) the interaction effect between the technique and students' learning styles on their reading skills. The subjects were the tenth grade students of one of Senior High School in Jepara consisting of six classes. Two classes were randomly selected to be an experimental group and a control group. The data were obtained from observation, questionnaire and pretest/ posttest. The findings reveal that, started from the similar level in pretest (all $\mathrm{F}<3.98, \mathrm{p}: .01$ ), the students of the experimental group perform better on reading skill than the control group ( $\mathrm{F}>3.98$ and $\mathrm{p}: .01$ ), indicating that CIRC increases students' reading skill better than the teaching technique used by their teacher. Then, students' learning styles, collaborative and independent students, do not differ significantly from one another in their effect on the students' reading skill ( $\mathrm{F}<3.98$ and $\mathrm{p}: .01$ ). Finally, it was found that there was no interaction between treatments and learning styles.


Key words: CIRC, learning styles, students' reading skill

## 1. Introduction

One of four language skills of English, reading possesses challenges for many students, including Senior High School students. It appears to be the basic tool of education and the most important skill in everyday life [1]. We need to read in the day-to-day lives in order to access the wealth of information. However, reading is also a skill that is one of the most difficult to develop to a high level of proficiency [2] due to some common reasons.

The reading difficulties are caused by the fact that most students have low interest in reading. This condition is influenced by the teacher's technique in teaching. The teacher only gives the reading texts, ask to translate into

Indonesia, answer the questions, discusses the answer, then ends the class. Throughout the technique, the students absorb little knowledge because they only study the texts given by the teacher. They have lack willingness to read because they feel they do not have the obligation to read and to provide themselves with adequate readings. As a consequence, they have very limited vocabulary and little knowledge of English. The students then will get difficulty in gaining the information from any source mostly written in English.

In accordance with the phenomena mention above, Cooperative Integrated Reading and Composition (CIRC) is likely to be one of the techniques that can solve the problems. This
technique is able to make more effective use of follow up time and greatly increase students' opportunities to read aloud and receive feedback on their reading by having students read to teammates and by training them in how to respond to one another's reading [3].

Research on CIRC in a suburban Maryland school district has found that student' scores of the treatment group were significantly higher than control group students of reading comprehension, reading vocabulary, language expression, language mechanics and spelling [4]., [5]., [6]., [7]. In addition, research on CIRC in monolingual English reading classes, grades 2-8, has found consistent positive effects of the program on student reading achievement, especially on measures of reading comprehension and metacognitive awareness [8]., [9].

The present study attempted to evaluate the impact of CIRC on reading skill of the students in which the reading classes were not in pure reading classes but general English classes for the students in the level of senior high school. And the setting of the research was carried out in EFL setting where the students' reading proficiency was mixed.

## 2. CIRC

CIRC is a comprehensive program for teaching reading, writing, and language arts, as in [3]. In CIRC, students are assigned to teams composed of two or four different reading levels. They work in pairs within their teams on a series of cognitively engaging activities, including reading to one another, making predictions about how narrative stories will be resolved, summarizing stories to one another, writing responses to stories, and practicing spelling, decoding, and vocabulary. They also work in their teams to master main idea and other comprehension skills. During language arts periods, students engage in a writer's workshop, writing draft, revising and editing one another's works, and repairing for publication of team or class books.

## 3. Student's Learning Styles

Based on the cognitive approach of learning styles, there are six learning styles that has different characteristics as follows [10].

Table 1. Characteristics of GrashaReichmann Learning Styles

| Styles | Characteristics | Classroom <br> Preference |
| :--- | :--- | :--- |
| Competitive | Compete with <br> other students | Teacher- <br> centered, <br> class <br> activities |
| Collaborative | Share ideas with <br> others | Student-led <br> small groups |
| Avoidant | Uninterested, <br> non-participant | Anonymous <br> environment |
| Participant | Eager to <br> participate | Lectures with <br> discussion |
| Dependent | Seek authority <br> figure | Clear <br> instruction, <br> little <br> ambiguity |
| Independent | Think for <br> themselves | Independent <br> study and <br> projects |

Related to the CIRC, this research only focused on the collaborative and independent learning styles.

## 4. Method

The study took place in SMA Negeri 1 Welahan Jepara. It employed a quantitative method, with 2 by $2(2 \times 2)$ factorial design. The population was all students of tenth grade, consisting of six classes. By simple random sampling, two classes were taken as samples: X5 (control class) and X6 (experimental class), 36 students in each class. The instruments were observation and questionnaire to determine the students' learning styles, and the test to determine the students' reading skill. The test was in the type of multiple choices reading comprehension with four options. Both pre and post
test had been empirically tested to be valid ( $\mathrm{r}=$ 0.95 for pretest, $\mathrm{r}=0.90$ for posttest) and reliable ( $\mathrm{r}=0.72$ for pretest, $\mathrm{r}=0.80$ for posttest). The treatment for both control and experimental group can be described as follows.

Control Class. By examining the lesson plan made by the teacher and how the lesson was carried out in the classroom, it is found that she taught the students to read the text simply by asking the students to discuss the topic or the text before reading; reading it aloud and translating during reading; discussing and answering its related questions after reading. Therefore, the technique used by the researcher in teaching control class was the same as the teacher did in teaching.

Experimental Class. The students in the experimental class were taught by using CIRC in teaching as follows.
a. Reading Groups and Teams

The teacher assigned the students into two reading groups according to their reading level. Then, they were assigned again into teams consisting of four students, two students from higher reading group and two from the lower one.
b. Story-Related Activities

On the first day, the teacher conducted a brainstorming activity by introducing a reading passage to the whole class (narrative story). The teacher first read the passage aloud two times while modeling the pronunciation. The students were also encouraged to read silently. After that, the students are asked to write some difficult words. They, then, discussed the meaning of each word. The result of this discussion became the words bank that would be used during reading and discussion.
After introducing the story, the teacher gave a story packet which consists of a series of activities as follows.

1. Partner Reading and Story Grammar The students took turns reading the story aloud with their partner,
alternating each paragraph, after reading the story silently. And the listener corrected any errors made by the reader. The teacher circulated and listened in as students read to each other to assess the students' performance. After partner reading, the students are given questions related to the story that emphasized to the story gram-mar-key elements of narrative-main idea, characters, sequence of events, conclusion, as in [4]. In this activity, the students in their teams discussed the answers for each question. They had to work together and help each other in answering the questions. They were not allowed to write the answer. Therefore, each member of the teams had to make sure that everyone in the team knew the answer of each question because the teacher would conduct Numbered Head Together activity. It is one of the games in which the students in each team got number in their head from one to four. In this game, the teacher asked a question and called out a number-one, for example. The students who got number ones should stand up and the teacher would choose one of them to answer the question orally. The best team got reward from the teacher.
2. Word Meaning, Word Out Loud, and Spelling
In the next day, the activities were focused on mastering meaning, vocabulary, and spelling. First, the students were asked to match the words bank with its definition provided by the teacher. Then, they had to practice writing a sentence for each that shows the meaning of the word (for example, " A buffalo gored the farmer with its backward-curving horns," rather than "He has a buffa-
lo"). After word meaning, the students read aloud the words bank correctly within their teams until they could read smoothly. In the last session, the students played the Hangman game in which one student in pairs taught a word and the other tried to guess it by suggesting letters.
3. Story Retell

After all activities were finished, it was the time for the students to summarize the story main points and retell it to their teams. They have to evaluate their verbal performance.
Then the teacher called out the number of the students and asked them to be a representative of each team to retell the story to the whole class. The best story teller got the reward from the teacher.
c. Partner Checking

As students completed all activities of story packet, each member of the teams should check each other whether they had completed and/or achieved criterion on the task given by giving initials on a Students Assignment Form.
d. Test

At the end of the class periods, students were tested by the teacher. They were asked to write meaningful sentences for each vocabulary word, and asked to read the word list aloud to the teacher. Students are not allowed to help one another on this test. The test score became the students' weekly team scores.
e. Independent Reading and Book Report Students are asked to read the reading texts compilation provided by the teacher in their free time. This compilation consisted of some narrative texts. They could choose one reading text that they were interested in every evening. The parents were also encouraged to give initials in the students' book report indicating that the students had read the texts. If each member of the teams completed the reading on time, they would contribute bonus points to their teams.

## 5. Result

### 5.1 The Students' Reading Skills Taught with and without Using CIRC

Compared to their initial level as indicated in pretests, both experimental and control groups score better in their posttest. Experimental group average score has increased from 62.81 in pretest to 84.17 in posttest. Control group average score has increased from 63.97 in pretest to 66.78 in posttest. In other words, the experimental group has gained 21.36 point (from 62.81 in the pretest into 84.17 in the posttest) while the control group has gained 2.81 (from 63.97 in the pretest to 66.78 in the posttest). Regarding the effectiveness of CIRC technique, posttest scores have revealed that the reading comprehension of the students learning under CIRC technique and those learning under teacher's technique differs significantly ( $\mathrm{F}>3.98$ and $\mathrm{p}: .01$ ). It can be concluded that CIRC improves students' reading comprehension better.


Figure 4.1 The Students' Reading Skill Taught with and without Using CIRC

It confirms earlier studies that CIRC specifically improves students' reading comprehension, as in [5]., [6]., [7]., [8]., [9]., [10]. It is due to the two facts that the students' score in reading has increased and they have responded well to CIRC technique.

If CIRC is compared with the teacher's technique implemented to control class, it is clearly seen that they are different in term of the reading teaching principles. Firstly, the teacher's technique provides very little oral reading for students. To the readers, the teacher does not give equal opportunity to read aloud the passage because of the time limits and the students' number. Secondly, no reading strategies taught to the students so that the students are not then becoming effective readers. Thirdly, it failed to improve students' motivation because they felt frustrated as they translate the
texts. Students, therefore, are not interested and get bored in joining reading class.

### 5.2 The Students' Reading Skills with Different Learning Styles

Compared to the mean scores of collaborative students, 75.79 , with that of the independent students, 75.04, it can be found that the difference between these means is only .75 point. Therefore, it cannot be concluded that one learning style is more effective than the other; the students' learning styles have little effect on the students' reading skill. Statistical analysis also has revealed that there is no significant difference between the reading skill of collaborative and independent students (all $\mathrm{F}<3.98, \mathrm{p}: .01$ ). In other words, the difference between the reading skills of the students with different learning styles is not significant


Figure 4.2 The Reading Skills of the Collaborative and Independent Students

### 5.3 The Interaction Effect

This section examines the interaction effect between the reading skills of the students with different learning styles taught with and without using CIRC. Compared to the mean score of the two groups taught by using CIRC, 84.17, with that of the two groups taught by using teacher's technique, 66.78 , it can be see that the former is somewhat higher. Therefore CIRC appears to be more effective than teacher's technique. The difference between the
means for thecollaborative and independent students is 75; that is, 75.79 versus 75.04 . Regardless of treatment, the collaborative students perform better that the independent students. The data reveal no interaction between treatments and learning styles. CIRC appears to be more effective regardless of the learning styles. In other words, treatments and students' learning styles are independent of each other. The lack of interaction is illustrated graphically in fig. 4.3.


Figure 4.3 Illustration of a lack interaction between techniques and students' learning styles

## 6. Conclusion and Recommendation

The findings reveal that, started from the similar level in pretest (all $\mathrm{F}<3.98, \mathrm{p} .01$ ), the students of the experimental group perform better on reading skill than the control group ( $\mathrm{F}>3.98$ and p : .01), indicating that CIRC increases students' reading skill better than the teaching technique used by their teacher. Then, students' learning styles, collaborative and independent students, do not differ significantly from one another in their effect on the students' reading skill ( $\mathrm{F}<3.98$ and p . .01 ). Finally, it is found that CIRC, teacher's technique and students' learning styles, do not have a combined effect on the reading skill of the students. In other words, there is no interaction between treatments and learning styles.

Considering the process and the results of this research, I suggest that the English teacher use the CIRC as a model of teaching and learning. The students should be motivated to be good readers and improve their comprehension when they read by using this technique. For further research, a similar research needs to be conducted with a longer duration. Besides, research to test the effect of CIRC on learning other skills in a foreign language (vocabulary, writing, speaking, etc) can also be conducted.

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