

Cooperative Integrated Reading and Composition (CIRC) on Writing Achievement across Self-Efficacy

Heny Setyawati*, Suharmanto, Johannes Anantya Prayogo

English Language Teaching-Universitas Negeri Malang

Jl. Semarang No.5, Malang 65145, Indonesia. E-mail: henystya@ymail.com*

Abstract: This study was conducted to reveal the effectiveness of Cooperative Integrated Reading and Composition (CIRC) implementation on writing achievement by considering the level of students' self-efficacy. The findings revealed that CIRC contribute a better effect on student' writing achievement than conventional method. This also revealed that writing achievement was higher on students who categorized in high self-efficacy than those categorized in low self-efficacy. Furthermore, it was noted that self-efficacy and teaching method had no interaction.

Key Words: cooperative integrated reading and composition, writing achievement, self-efficacy

Abstrak: Penelitian ini dilakukan untuk mengungkap efektivitas penerapan Cooperative Integrated Reading and Composition (CIRC) pada prestasi menulis dengan mempertimbangkan tingkat efikasi diri siswa. Temuan ini mengungkapkan bahwa CIRC berkontribusi efek yang lebih baik pada prestasi menulis siswa daripada metode konvensional. Selain itu, temuan ini juga mengungkapkan bahwa prestasi menulis lebih tinggi pada siswa dengan efikasi diri tinggi daripada siswa dengan efikasi diri rendah. Lebih lanjut, penelitian ini mencatat bahwa efikasi diri dan metode pengajaran tidak memiliki interaksi.

Kata kunci: cooperative integrated reading and composition, prestasi menulis, efikasi diri

INTRODUCTION

In Indonesia, the teaching of writing of English texts is still problematic. Based on the 2013 English Curriculum (K13), students at the secondary level of education are required to have the ability to capture the contextual meaning of many text forms such as recount, narrative, procedure, descriptive, report, and exposition and to have the ability to compose short and simple texts based on the context correctly. However, the reality is writing does not get enough attention. In school, writing skills has not been emphasized firmly and clearly. Moreover, teachers assume that learning writing is not quite important since it does not appear in the national examination (Supriyadi, 2012). On the other side, students' opinion related to writing activity is not always positive. Arif (2015) found that students had difficulty in writing because they did not know the right and appropriate way to write and it gave impact to their lack of interest in writing; besides, the limitation of their vocabulary also made them lack of confidence in writing. Therefore, to help students in better writing ability, they require a

change of writing method in the proper way (Cole & Feng, 2015).

Writing activity does not have to stand alone, it can be integrated with another language skill such as reading. Integrating reading and writing can be effective for language teaching (Almelhi, 2014). Reading can improve students' writing ability because it helps students to learn the writing process. It is strengthened by Brown (1987) who stated that by reading variety of text types, students can receive knowledge about how to write a good quality text and also about the idea or topic that they should be written. Teaching writing through reading activity could become the important pedagogical instrument as the basic of successful writing because the activity of analysing the text can help students in building scheme for their writing and they will compare the reading text with their writing to match the expectation of a good composition (Escribano, 1999). Thus, a method named Cooperative Integrated Reading and Composition (CIRC) is considered as a method that can be properly implemented in writing class.

CIRC is a teaching method that combines reading and writing activity. It is a comprehensive approach for students in upper elementary and middle grades (Slavin, Madden, Farnish, & Stevens, 1995). It is purposely designed to extend other language skills such as reading and writing. It is assumed as the effective and appropriate method for teaching students in writing because it can motivate students in writing activity, creates good learning environment, and also improves students' writing achievement (Parmawati, 2015). CIRC is a continuous action which has several actions to be done such as individual activities, group work, presentation, give responds to others' comments, thus students will get high motivation by working cooperatively. It is an integrated activity between oral language development, reading comprehension, and writing instruction. In CIRC, students learn to organize their idea and make it into their composition. CIRC can be implemented with intention of investigating or improving writing ability through reading comprehension. Therefore, with CIRC, teacher will have chance to teach students how to overcome difficulty in writing by conducting continuous activities in a group.

Some studies showed that CIRC is an effective method in teaching especially in teaching writing. Gupta and Ahuja (2015) found that CIRC gave more chance for the students to write, revise, and rewrite their composition. It was also sharpen their knowledge about essays structure and grammar, content, and organization. Nurista, Rumiri, and Nababan (2015) stated that some activities that students done before doing writing such as discussing the text, answering the questions related to the text, and finding the words meaning help students to compose their writing easily because they write based on what they read. In a more recent study, Nadia (2016) stated that CIRC appeared as a method that could develop students' writing skills positively.

Self-efficacy interpreted as someone's belief that he/she is capable of completing or performing certain actions (Bandura, 1977). It was believed that high level of self-efficacy mostly have better competence because they feel confident to solve the problems, while students with lower level of self-efficacy mainly give up easily in completing the task. In similar vein, Pajares (2002) states that self-efficacy significantly influence students' motivation and achievement since the high-efficacious students have willingness depend on their beliefs to completing the action and will lead to successful result. On the other hand, for those low-efficacious students, there is no encouragement to

make efforts for success when they face difficulties. The term of self-efficacy seem to be over general and might be found in all majors in education. Therefore, a more specific term is needed related to writing. Hashemnejad, Zoghi, and Amini (2014) defined what is called writing self-efficacy as the beliefs that students have pertaining to their capabilities in performing or completing the writing task. When students have high self-efficacy of their capabilities in writing, they might feel better to write.

Many investigations were conducted concerning to students' writing achievement seen from their level of self-efficacy. Jalaluddin, Paramasivam, Husain and Bakar (2015), Chea and Shumow (2014), Flores (2013), Hetthong and Theo (2013) found strong relation in the midst of writing self-efficacy and writing performance. They concluded that the writing performance depend on the self-efficacy that students have. The higher the students' self-efficacy in writing, the better their writing performance is because they tend to be more focused on learning and improve their understanding when learning writing skills. Recent investigation was done by Wening (2016) who investigated the eighth grade of senior high school students. It was found that self-efficacy in writing affects their performance. That supported the findings obtained by Tanyer (2015), Flores (2013), Raooft, Tan and Chan (2012) who also stated that self-efficacy in writing worked as a strong predictor of foreign language task and performance. The better writing performance is in consequence of the higher writing self-efficacy.

This study's objective aimed at investigating the effectiveness of CIRC implementation on writing achievement by considering their self-efficacy levels. There were three research problems that were formulated. The first was regarding to the differences between CIRC and conventional method. The second was concerning to the high and low level of self-efficacy. The third was regarding to interaction between self-efficacy and teaching method.

METHOD

This study used quasi-experimental design, involving two groups, experimental and control. The quasi factorial design with a 2x2 factorial design was also employed (Ary, Jacobs, & Sorensen, 2010). The participants of this study were the tenth graders of SMAN 8 Balikpapan. By having the pre-test, the research sample was selected based on consideration

of the writing achievement. Thirty five students were placed in the experimental class while 36 students were in the control class.

The data collection before giving the treatment were classification of students' writing self-efficacy level, while the process of data collection after giving the treatment was the post-test. Writing Self-Efficacy questionnaire was designed according to Bandura (2006) to classify the students into high and low level of self-efficacy. The post-test was delivered to all students in both groups by asking them to write a simple descriptive text with a chosen topic. The post-test was scored by two ratters using the scoring rubric. Then, the results of the students' post-test scores were analysed. In analysing the differences between CIRC and conventional method, Independent sample t-test was run. Meanwhile, to know about high and low self-efficacy was analysed using Kruskal Wallis. The criterion of acceptance and rejection of the null hypotheses was at significance level .05 ($p=.05$).

RESULTS

This study revealed the effectiveness of CIRC compared with conventional teaching method on writing achievement across self-efficacy level. The descriptive data obtained from students' writing achievement scores in post-test are presented and the results of hypothesis testing are disclosed.

Difference of Writing Achievement of Students Taught Using CIRC and Conventional Method

The students' scores displayed in Table 1 presents the mean scores from the experimental group's post-test with 78.80 while the control group's post-test score was 68.69. It informs considerable range about the mean scores obtained from both groups which was 10.11 points. Therefore, the mean score

that the experimental group obtained exceed the mean score of control group.

The analysis of Independent t-test displayed in Table 2. It can be seen that the Independent t-test statistic generated was 2.797 with obtained p value of .007. It showed that p value (.007) < significant value (.05). Thus it means that there was significant distinction based on the mean scores from both groups. In conclusion, students taught using CIRC had better writing achievement that those taught using conventional method.

Difference of Writing Achievement of Students across High and Low Level of Self-Efficacy

The descriptive statistics seen in Table 3 indicated that the mean scores of high self-efficacy students taught using CIRC was 84.81 while the mean scores of students with low self-efficacy taught using CIRC was 61.44. Furthermore, the mean scores of students with high self-efficacy taught using the conventional method was 79.17 while the mean scores of students with low self-efficacy taught using the conventional method was 50.15 with standard deviation of 9.831. It was revealed from the results of mean scores, it could be deduced that students categorized in high self-efficacy outperformed those categorized in low self-efficacy. Nevertheless, the difference of mean scores between high and low self-efficacy level in each group was far enough. Overall, from both groups, those who included in higher level of self-efficacy obtained the mean score of 82.16. Meanwhile, those students who were included in lower level of self-efficacy in both groups obtained 54.77 as the mean score.

Table 4 informs different results among groups across the level of self-efficacy resulted in Chi-Square of 46.344 with p value of .000. It was known that p value (.000) < sig .05. Therefore, it could be stated

Table 1. The Descriptive data of post-test scores

Group	N	Range	Min.	Max.	Mean Scores	Standard Deviation
Experimental	35	43	53	96	78.80	12.433
Control	36	63	33	96	68.69	17.506

Table 2. The Analysis of Independent Sample T-test

Variables	Group	N	Mean	Obtained T-value	df	Sig.
Writing Achievement	Experimental	35	78.80	2.797	69	.007
	Control	36	68.69			

Table 3. Descriptive Data of Post-test Scores in both Groups across Writing Self-Efficacy

Group	WSE level	N	Range	Min.	Max.	Mean Scores	Standard Deviation
Experimental	High	26	22	74	96	84.81	7.365
	Low	9	17	53	70	61.44	5.593
Control	High	23	33	63	96	79.17	10.811
	Low	13	26	33	59	50.15	9.831
Both groups	High	49	33	63	96	82.16	9.481
	low	22	37	33	70	54.77	9.971

Table 4. The Kruskal Wallis Test

Variables	Group	N	Mean	Chi-Square	df	Sig.
Writing Achievement	High self-efficacy in experimental group	26	64.30	46.344	3	.000
	Low self-efficacy in experimental group	9	47.22			
	High self-efficacy in control group	23	62.30			
	Low self-efficacy in control group	13	41.30			

that significant differences were present in the effect of CIRC and conventional method across the level of self-efficacy on writing achievement.

To determine the differences on writing achievement seen from level of self-efficacy which were notably different, Bonferroni test was used as the Post Hoc test. The criteria of acceptance were if p value d'' level of significance (.05) then it would be stated that there is valuable difference on writing scores among students with high and low level of self-efficacy. The Bonferroni analysis results are displayed in Table 5.

Table 5. The Results of Bonferroni Analysis

Group	Mean	Sig.			
		HE	LE	HC	LC
HE	64.30		.000	1.000	.000
LE	47.22	.000		.000	.064
HC	62.30	1.000	.000		.000
LC	41.30	.000	.064	.000	

Note:

HE: high self-efficacy taught using CIRC

LE: low self-efficacy taught using CIRC

HC: high self-efficacy taught using conventional method

LC: low self-efficacy taught using conventional method

The results show that in experimental group, the writing achievement of those who belong to high level of self-efficacy significantly different with those who belong to low level of self-efficacy (p value .000 < sig .05). Furthermore, in control group, the writing achievement of those who belong to high level of self-efficacy was also found significantly different with those who belong to low level of self-efficacy (p value .000 < sig .05). The p value was known as lower than the level of significance (p value .000 < sig .05). As the conclusion, the higher self-efficacy students gain higher writing achievement compared with the lower self-efficacy students.

Interaction between Self-Efficacy and Teaching Method

Bonferroni analysis revealed the interaction between self-efficacy and the teaching method clearly. The criteria of acceptance were if p value d'' sig .05 then the interaction between CIRC as teaching method and self-efficacy exists. The analysis results in Table 5 revealed that the writing achievement of students categorized in higher level of self-efficacy in both groups was not significantly different (p value 1.000 > sig .05). Similarly, the writing achievement of students categorized in lower level of self-efficacy in both groups was not significantly different too (p value .064 > sig .05). By seeing the p value that was greater compared the significance level (p value .000 > sig .05), it was concluded that the interaction did not exist among the level of self-efficacy and the teaching method.

DISCUSSION

The investigation on the effect of CIRC on students' writing achievement as considered from their self-efficacy levels unveils few findings. It revealed that those taught using CIRC surpassed those taught using the conventional method. This is evidenced from the analysis results that show the mean difference in the post-test between the students taught using CIRC and those taught using the conventional method was statistically significant. The finding obtained related to the effectiveness of CIRC on writing achievement is relevant with some previous studies. Sidabutar (2017), Fibriani, Regina, and Husin (2016) and Krisdayeni (2016) concluded that CIRC is highly effective to be applied in learning writing. It showed that there was improvement in writing ability made by stu-

dents after applying CIRC. Hutabalian (2016) and Rahmawati (2016) also witnessed that students' writing scores increased significantly after implementing CIRC. They also add that CIRC provides opportunity for the students to work in small group and do discussion which could help the EFL students in acquiring the language. As it is known that CIRC method is interesting and attractive, the students' motivation and confident will increase so that those taught using CIRC could get better results in writing than those taught using conventional method (Nadia, 2016).

Regarding to the difference of writing achievement across the level of self-efficacy, it was different significantly. This is proven by the differences in the mean scores of high self-efficacy students who overpowered low self-efficacy students. Some studies provide clear explanation about this case. Chea and Shumow (2014) and Kurniawati (2014) stated that those who belong to high level of self-efficacy were more interested with any writing task without take it as a burden. They are more confident to challenge the task when they feel that they have enough capability related to the task. Since they trust their own capabilities, it would be portrayed on their achievement score. On the other side, those who belong to low level of self-efficacy have no confident because they feel they lack of capability to solve the task. Hence, their achievement score tend to be low. Rahmati (2015) explained that self-efficacy affect students' emotional reaction. The calm responses that high self-efficacy students have in dealing with the difficult tasks could help them to produce better result in their achievement. Oppositely, depression, stress, pressure and weak in overcome the problem to those who deal with low self-efficacy could hide their ability and passion to obtain better result in their achievement. Therefore, students who believe that they can write and are confident in their skills will perform better and vice versa. Furthermore, this also proves that self-efficacy played a role as a predictor of students' writing achievement as Flores (2013) and Hetthong and Teo (2013) claimed.

Concerning to the interaction between self-efficacy and teaching method, the finding showed that there was no interaction between the teaching method (CIRC) and self-efficacy levels on the writing achievement. It means that even though the students were given different teaching method, those with high self-efficacy would still get high scores in writing achievement as well as those with low self-efficacy that still gain low scores. The similarity in both CIRC

and conventional method could be a reason of the absence of interaction between self-efficacy and teaching method. The brainstorming activity that was given to both groups fortunately could attract the students' interest by having class discussion using pictures. The Students were also asked to share their idea through the pictures so that they feel challenged to be actively involved in this stage. It also related to the criteria of self-efficacy as one of learning factors. Since the high self-efficacy has criteria that tend to challenge the activity, they would still get great scores and as the criteria of low self-efficacy which tend to avoid the activity, they would still get the low scores.

CONCLUSIONS

CIRC could help students in getting better writing achievement. When he students are taught using CIRC, they could reach better score especially in writing. The organized and continues activity is considered as a factor that give contribution to the positive effect of CIRC on students' writing achievement. The comparison between high and low level of self-efficacy revealed that the higher self-efficacy, the better their writing achievement. The tendency of the nature based on categorization of self-efficacy affects their way in facing the task. They who have good confidence in finishing the task and calm in responding the task would gain higher achievement than those who have lack of confidence with their ability to accomplish the task given. It leads them to have less interest in accomplishing the task and feel stress and depression. Thus, their achievement is affected from their emotional state while doing the task. The interaction between level of self-efficacy and the teaching method unfortunately did not exist. Regardless of the method given, the students with high self-efficacy still get high score in writing achievement and those with low self-efficacy still get low score in writing achievement. Thus, even though they were given the different teaching method, their nature of self-efficacy levels would not change.

In the implementation of CIRC, teachers should have sufficient knowledge about CIRC and its process. The way of grouping students also need to get attention. Teachers should group students wisely and objectively based on the achievement of each student. Teachers should provide explicit instructions to students and assist with the goal of allowing students to know and understand what they need to do in implementation of CIRC to avoid misunderstanding.

For the future researchers, an in-depth analysis is also needed to find out how far self-efficacy level could affect students' writing achievement. Future researchers also could investigate students' behaviours and perceptions toward the implementation of CIRC. This present study used descriptive text as the type of the text. Then, future researchers might fill in the gap by using different type of text such as exposition so students' writing performance could be explored more. Moreover, the number of sample and the ratter used in future studies should get more attention so the results could be more general and the reliability could be higher.

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