



Improving Elementary Students' Reading Skills Through the Cooperative Integrated Reading and Composition Method

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ABSTRAK

Keterampilan membaca sangat penting bagi setiap individu, terutama bagi siswa sekolah dasar. Saat ini, masalah membaca sering dijumpai di mana banyak siswa yang masih mengalami kesulitan dalam membaca, karena kemampuan pemahaman bacaan mereka belum optimal. Penelitian ini bertujuan untuk menguji pengaruh model pembelajaran Cooperative Integrated Reading and Composition (CIRC) terhadap keterampilan membaca siswa. Metode yang digunakan adalah penelitian kuantitatif dengan rancangan eksperimen semu. Rancangan yang diterapkan adalah Non-Equivalent Control Group Design dengan pre-test dan post-test. Partisipan penelitian ini adalah siswa kelas V sekolah dasar, dengan sampel yang dipilih menggunakan teknik purposive sampling sebanyak 37 siswa yang dibagi menjadi dua kelompok: kelompok eksperimen yang berjumlah 20 siswa dan kelompok kontrol yang berjumlah 17 siswa. Pengumpulan data dilakukan menggunakan rubrik penilaian, pre-test, post-test, dan angket terstruktur yang dibagikan kepada siswa untuk mengukur kemampuan membaca dengan model pembelajaran CIRC. Data dianalisis menggunakan statistik inferensial. Hasil penelitian menunjukkan adanya perbedaan yang signifikan antara kelompok eksperimen dan kelompok kontrol. Nilai signifikansi (2-tailed) sebesar $0,000 < 0,05$ menunjukkan bahwa model pembelajaran Cooperative Integrated Reading and Composition (CIRC) memiliki pengaruh positif terhadap keterampilan membaca siswa kelas V SD. Berdasarkan hasil tersebut, dapat disimpulkan bahwa model pembelajaran CIRC efektif dalam meningkatkan keterampilan membaca siswa.

ABSTRACT

Reading skills are crucial for everyone, especially for elementary school students. Currently, reading difficulties are commonly encountered, with many students struggling with reading comprehension due to suboptimal reading skills. This study aims to examine the impact of the Cooperative Integrated Reading and Composition (CIRC) learning model on students' reading skills. The research method used is quantitative with a quasi-experimental design. The design applied is a Non-Equivalent Control Group Design with pre-test and post-test. Participants in this study were fifth-grade elementary school students, with a sample of 37 students selected using purposive sampling. These students were divided into two groups: the experimental group consisting of 20 students and the control group consisting of 17 students. Data collection was carried out using assessment rubrics, pre-test and post-test, and structured questionnaires distributed to students to measure reading skills using the CIRC learning model. Data were analyzed using inferential statistics. The results showed a significant difference between the experimental and control groups. The significance value (2-tailed) of $0.000 < 0.05$ indicates that the Cooperative Integrated Reading and Composition (CIRC) learning model has a positive impact on the reading skills of fifth-grade students. Based on these results, it can be concluded that the CIRC learning model is effective in improving students' reading skills.

1. INTRODUCTION

The transmission of information from a teacher to a student is referred to as learning. Learning is an effort to develop a person's character as a whole, encompassing a representation and values within it (Karakose et al., 2021; Levrini et al., 2021). Learning is a process in which an individual's behavior changes as a result of experiences and social interactions. Learning is conducted so that students can achieve their

goals efficiently and effectively in their learning activities, thereby producing good learning outcomes for students (Arwen & Haq, 2022; Candra Sari et al., 2022). Reading is the most important subject in education for everyone; it also plays a role in physical and mental health. Reading skills and writing skills are closely related activities. Fundamentally, reading skills are interconnected with writing skills. By reading a person's knowledge will increase, reading will also give rise to new ideas. Knowledge and ideas obtained from reading can be expressed in written form (Kamaluddin & Rusnilawati, 2022). By reading a person can find out what information is available in this part of the world so that it will increase his knowledge and by reading it will make a person wiser (Aloklu, 2018; Supandi & Senam, 2019). Reading comprehension is a crucial skill acquired in elementary school, and it is essential for learning in all academic fields. Someone who understands reading possesses skills in two related areas: word recognition (decoding) and listening comprehension. Reading is the ability to decode symbols, which is crucial for understanding the meaning that has been previously explained (Paynter et al., 2023; Shavshishvili, 2022). Reading can help students develop language skills such as listening, speaking, and writing. Reading is crucial in helping someone reconstruct the real world because challenges at school or in the environment are often addressed in written form (Erkek, 2022; Krawitz et al., 2022). Reading is an active activity in which the reader moves between sources of information, unpacks meanings and techniques, assesses their understanding, and reflects on their responses using social context (Hakim et al., 2023; Norlund, 2020)

Reading is also understood as an integral part of the overall learning process experienced by students throughout their time in school, students will continuously build new meanings based on their prior knowledge to communicate effectively. Reading skills teach students how to use language comprehension to obtain information from reading and how to understand the content of the interlocutor's communication in understanding spoken language (Firdaus & Mayasari, 2022; Haerazi & Irawan, 2020) Reading skills should be honed to the best of their ability so that students are actively responsible for identifying and understanding the content of reading texts as they read. Thus, the reader generates meaning from the material they read by absorbing new information obtained in the text and comparing it with their existing knowledge (Afriani et al., 2020; Monteiro et al., 2019). Someone with good reading skills will also have a strong vocabulary, which aids in expressing ideas or concepts in written form and makes the writing more organized (Afriyanti et al., 2018; Firat & Koyuncu, 2021; Sari et al., 2019). PISA studies around the world encourage the development of reading literacy as the main focus of mathematics literacy and science literacy, because students will have difficulty learning other skills if their reading literacy level is inadequate. Students must first have reading literacy skills to be successful in science and mathematics.

The low reading comprehension of Indonesian students can be seen from the results of a three-year international survey conducted under the Program for International Student Assessment (PISA) coordinated by the OECD in 2018. The PISA program is designed to measure the academic performance of 15 year old students from three strata, school type (Junior High School/Senior High School/Vocational School), school status (public/private), and school achievement (High/Medium/Low) in various countries worldwide, including Indonesia (Afriyanti et al., 2018; Setyowati et al., 2022). According to the national index, the level of interest in reading in the Indonesian society is only 0.01. In contrast, in developed countries, it ranges from 0.45 to 0.62. The low interest in reading among Indonesian students results in the underdevelopment of the quality and standards of education in Indonesia. Unlike reading books, Indonesian society tends to prefer utilizing their leisure time on social media. As can be observed, it's not only adults who use social media, but even elementary school children can use it, leading to a decrease in students' interest in reading (Dewi et al., 2023; Schröter & Bar-Kochva, 2019).

The importance of reading skills for students lies in their ability to comprehend what they read. Based on the results of observations and interviews conducted at Klitren State Elementary School and Bhayangkara State Elementary School, it was revealed that there are still many students who experience difficulties in reading as part of the learning process (Keefe, 2020; Supandi & Senam, 2019). Therefore, the reading comprehension skills of students can be considered less than optimal. The limited reading skills of students regarding what they read indicate that they are still in the process of developing understanding in reading. Problems in the learning process that often occur are: lack of interest, motivation and seriousness of students in learning to read. This can be seen when the learning process takes place. Many students are unable to concentrate, do not read, and prefer to talk to their classmates. Other problems are: the reading materials used by teachers are not interesting so they do not foster students' interest in learning to read, the learning model used by teachers is less effective, does not arouse students' interest and does not motivate students optimally. Students must be able to participate in interactive learning through effective and creative teaching (Miller, 2018; Tegeh et al., 2022). As a result, students can be motivated and engaged. Based on the problems, initiatives are needed to improve the reading skills of Indonesian students to achieve this goal. Low reading levels indicate that the educational process fails to increase students'

potential and enthusiasm for learning, and fails to solve literacy challenges. Skills are very important for the success of Indonesian education.

The importance of selecting the right learning model is crucial to ensure success in the learning process. The appropriate use of media assistance should be provided when utilizing innovative learning models. Learning media can play a significant role in enhancing the learning process in the classroom. The CIRC model is a learning approach where students are divided into several groups to read and write summaries, and take responsibility for the assignments given (Azhari et al., 2019; Tamba et al., 2023). By utilizing the cooperative learning model, students will help each other or use peer tutors, strengthen critical thinking skills, and be actively involved in the learning process (Metekohy et al., 2021; Ristanto et al., 2020). One of the important results of the research mentioned above is that students' reading comprehension improved significantly after completing all the CIRC method learning procedures. These results support recent research showing how the CIRC approach improves reading comprehension (Mariana et al., 2020; Muhyidin et al., 2023; Prajogo & S., 2021).

Cooperative Integrated Reading and Composition (CIRC) is a collaborative method aimed at enhancing students' writing, reading, and grammar skills. CIRC is an educational approach that can help students create their abilities and skills, because the learning methods used make it possible to show how the information provided has been created, considered and assessed (Wahyuningsih & Citraningrum, 2019; Wongsuwan & Regiana, 2023). In this way the learning process becomes more effective and student learning outcomes, especially mastery of reading questions, can be improved. Therefore, the use of the Cooperative Integrated Reading and Composition (CIRC) type cooperative learning model in learning, especially reading, for students is very important (Gupta & Ahuja, 2014; Patwa et al., 2021). Research on reading skills is of significant interest to researchers, especially in previous studies that discuss the implementation of Cooperative Integrated Reading and Composition (CIRC) as a strategy for students' reading comprehension (Hasibuan & Afnita, 2022; Hasyim et al., 2020). Teachers are not the only source of learning or knowledge today, they also function as facilitators and motivators in learning. Therefore, educators should take strategic actions or employ creative and innovative methods to achieve learning objectives, such as fostering independent learners and encouraging students to develop their intellectual capabilities.

However, there are still many learning processes that are less effective, less interesting for students and even tend to be monotonous and boring, resulting in less than optimal learning outcomes. Therefore, to improve students' reading skills, an efficient learning model is needed. In this case, researchers try to use the CIRC learning model as a substitute to help students develop their reading skills. Departing from the selected research title, there are several previous studies that are relevant, including Narratives in Cooperative Learning Integrated Reading and Composition (CIRC) in elementary schools to improve reading skills, and the effectiveness of the cooperative integrated reading and composition (CIRC) Method) Regarding Reading Comprehension Ability Based on Reading Interest of Grade IV Elementary School Students (Artawan, 2020; Dewi et al., 2023). Therefore, the novelty of this research lies in how the CIRC learning model is applied to the reading skills of fifth grade elementary school students. Based on the problem description explained, the urgency of this research was carried out with the aim of testing the significant effect of implementing the Cooperative Integrated Reading and Composition (CIRC) learning model on students' reading skills.

2. METHOD

The research method used is a quantitative research method with an experimental design. This type of research is quasi-experimental research (Quasi Experiment) (Thyer, 2012). This type of quasi-experimental research design consists of several designs, one of which is a pre-test post-test with a Non-Equivalent Control Group Design. This type of design requires the use of two sample groups, namely an experimental group that is treated and a control group that is not treated. The effect of an action on the dependent variable is tested using this design by comparing the condition of the dependent variable in the experimental class after being treated with the condition of the dependent variable in the control class without treatment. The sample taken in this research used a purposive sampling technique of 37 students. There were two sample groups in this study, namely the experimental class with 20 students and the control class with 17 students, where the experimental class was given treatment and the control class was not given treatment. Data was collected from research instruments used to measure text reading skills. Reading skills are demonstrated by reading comprehension and the ability to generate creative ideas, as well as the ability to answer questions presented in the form of tests. Data is needed to determine the effect of the CIRC learning method on students' reading skills. The tools used to collect data are pretest and posttest devices. The pretest is given before the learning activity to find out the initial picture of the two classes, while the

posttest is given after the learning activity to find out whether there is an improvement in students' reading skills after participating in the learning activity. What is used in this research is an assessment rubric to see the extent of students' skills in reading the text that has been given. The following stages of the Cooperative Integrated Reading and Composition (CIRC) learning model can be seen in [Table 1](#).

Table 1. Stages of the Cooperative Integrated Reading and Composition (CIRC) Learning Model

No	Stages	Teacher	Student
1	Orientation	a. Conduct an apperception before starting the lesson by asking several questions b. Delivering material and learning objectives	a. Answer questions from the teacher b. Pay attention to what the teacher says
2	Introduction Concept	a. Dividing students into several groups b. Distribute reading texts to students	a. Join into one group b. Read the reading text that has been given
3	Presenting	Give each student the opportunity to read the text in front of the class	Read the text in front of the class aloud
4	Reinforcement and reflection	Providing appreciation and reflective feedback with students regarding the learning that has been carried out	Listen to the teacher's final delivery

Apart from the pretest and posttest and assessment rubric, this research also used a structured questionnaire as a measuring tool to determine the effect of the CIRC learning model on students' reading skills. The measuring tool is a Likert scale, which is based on positive (favorable) and negative (unprofitable) statements. The questionnaire includes a total of 20 statements consisting of points: Strongly Agree (SS), Agree (S), Disagree (TS), Strongly Disagree (STS) are the answer choices given to each question. The student assessment rubric as show in [Table 2](#).

Table 2. Rubric for Assessing Students' Reading Skills

Indicator	Maximum Score
The element being assessed	
Accuracy of voicing reading material: Students pronounce reading material clearly and fluently	30
Fairness of pronunciation: Students pronounce the reading well and correctly.	20
Reasonable intonation: Students pronounce words and sentences well and correctly	20
Fluency: Students read all the passages fluently	20
Clarity of voice: Students read clearly and loudly so that all students can hear.	10

The data that has been collected is analyzed using statistical technology. Data analysis was carried out with a computer program. Testing was carried out using Normality Test, Homogeneity, Paired Sample t Test, Independent t-test, and Group Statistics. In this case the data processing technique uses SPSS version 22.

3. RESULT AND DISCUSSION

Result

A normality test is a statistical procedure used to determine if a dataset is well-modeled by a normal distribution, which is also known as a Gaussian distribution. The normal distribution is a common assumption for many statistical analyses because it allows for various parametric tests to be conducted. The basis for decision making states that data can be considered normal if it has a significance value of >0.05. The results of the normality test are shown in [Table 3](#). Based on [Table 3](#), the data is normally distributed, meaning the data follows a symmetrical distribution where most values cluster around the mean, with fewer values appearing as you move away in either direction. The results of the homogeneity test are presented in [Table 4](#).

Table 3. Normality Test Results

Group		Kolmogrov-Smirnov			Shapiro-wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Learning	Pre-Test Experiment	0.178	20	0.095	0.924	20	0.116
Outcomes	Post-Test Experiment	0.193	20	0.050	0.866	20	0.010
	Pre-Test Control	0.173	17	0.189	0.889	17	0.066
	Post-Test Control	0.189	17	0.110	0.897	17	0.060

Table 4. Homogeneity Test Results

Statistical Parameters		Levene Statistic	df1	df2	Sig.
Learning	Based on Mean	2.818	1	35	0.102
Outcomes	Based on Media	1.651	1	35	0.207
	Based on Median with adjusted df	1.651	1	31.012	0.208
	Based on trimmed mean	2.478	1	35	0.124

Table 4 shows that the significance value (sig) is based on an average value of 0.102>0.05, which indicates that the variance of the post-test data for the experimental group and the control group results is the same or homogeneous. As a result, the minimum requirements for an independent samples t test have been met. If p>0.05 then the research conclusion is considered significant. The table of differences in test scores is presented in Table 5.

Table 5. Paired Samples Statistics

Paired Group	Mean	N	Std. Deviation	Std. Error Mean	
Pair 1	Pre Test Experiment	63.25	20	7.122	1.593
	Post Test Experiment	88.00	20	6.959	1.556
Pair 2	Pre Test Control	51.76	17	9.004	2.184
	Post Test Control	67.29	17	4.687	1.137

Based on Table 5 average value of learning outcomes, there was an increase of 24.75 with a total of N 20 in the experimental group pre-test, namely 63.25 and post-test 88.00. Based on a comparison of the pre-test and post-test results of the experimental group that received treatment from the CIRC learning method, it can be seen that students from the experimental group experienced increased changes after being given treatment. The next data provides evidence of information, namely from the group statistical results it can be seen that the average post-test score in the experimental group was 88.00, while in the control class it was 67.29, which was lower than the score in the experimental group which was given treatment in the form of the CIRC learning method. Meanwhile, in the control class there was an increase of 15.53 with a total of N 17 seen in the pre-test control, namely 51.76 and posttest 67.29. The results of the data hypothesis test (t-test) are shown in Table 6.

Table 6. Hypothesis Test Data Results (t-test)

Paired Group	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		T	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 Pre Test Experiment - Post Test Experiment	-24.750	6.584	1.471	-27.832	-21.668	-16.810	19	0.000
Pair 2 Pre Test Control -Post Test Control	-15.529	7.358	1.785	-19.313	-11.746	-8.702	19	0.000

Based on Table 6, if the sig (2-tailed) value is 0.000<0.05. Because the t test value is P<0.05, namely 0.000<0.05, this research shows that there is a significant influence of the CIRC learning model on students' reading skills. Independent sample t test results is show in Table 7.

Table 7. Independent Sample t-test Results

Statistics	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Results Equal variances Assumed	2.818	0.102	10.414	35	0.000	20.706	1.988	16.669	24.742
Equal variances not Assumed			10.745	33.398	0.000	20.706	1.927	16.787	24.625

Based on Table 7 at a sig (2-tailed) value of $0.000 < 0.05$. This shows that there are differences between the experimental group and the control group after being given treatment. The findings of this research show that the average post-test score of the experimental group was 88.00, while the average post-test score of the control group was 67.29, lower than the average post-test score of the experimental group which used the CIRC in the learning process.

Discussion

Reading is the main focus of learning in the world of education. Reading is important for everyone, where reading is also physical and mental. Reading requires thinking activities that involve investigation, evaluation, and problem solving (Dewi et al., 2023; Rahmasari & Swasti, 2022). The purpose of reading is to obtain information or knowledge, as well as knowing the author's ideas or writing style. A person may also read to relax and have fun, or he may read to learn. In short, whatever the purpose of reading, a person must be able to understand the text after reading so that the purpose of reading can be achieved (Arwen & Haq, 2022; Prajogo & S., 2021). Reading skills are the easiest to acquire, both traditionally and through technological media (Anggita et al., 2021; Anwar & Sailuddin, 2022). Reading skills have a significant influence on students' ability to participate in learning and increase their knowledge. However, many students in the class still have difficulty reading and complain about their challenges in understanding sentences in a text (Al Adawiyah, 2023; Muhyidin et al., 2023). To overcome this problem, it is important to choose an efficient method of teaching how to read. If a teacher uses an appropriate teaching approach, students will not only understand the subject matter while gaining as much relevant knowledge as possible, but they will also be interested and comfortable in learning. Therefore, the CIRC (Cooperative Integrated Reading and Composition) learning method was used to help students who had difficulty reading in this study (Artawan, 2020; Wongsuwan & Regiana, 2023).

The CIRC learning model combines reading and writing, this development is based on expert knowledge. The CIRC method also helps students become more motivated and improve their understanding of reading and writing skills (Arwen & Haq, 2022; Niati & Rasyidah, 2020). Reading skills learned through the Cooperative Integrated Reading and Composition (CIRC) learning model will help students improve their academic achievement, especially in learning to read and write, because it is very important to combine writing and reading (Gupta & Ahuja, 2014; Telaumbanua, 2021). The CIRC reading teaching method makes the classroom environment more conducive to students being more active and learning more enthusiastic. The CIRC strategy creates an educational environment where students collaborate in groups and perform based on their skills. Students can study in groups with their peers (Erkek, 2022; Gupta & Ahuja, 2014). Students' reading comprehension increases when the CIRC method is used as a learning tool. It is known that after using CIRC teaching techniques, students or students become more effective in reading (Firat & Koyuncu, 2021; Maruf & Anjely, 2020).

The three main components that make up CIRC are story-centered activities, clear teaching of reading and language skills, and deep creativity. Students participate in different study teams for each assignment given. Students can work in groups to describe the concepts found in the reading, create a composition framework containing the ideas of the reading paragraph, then present it (Frimaulia &

Suprayetno, 2021; Venkatesh, 2003). The advantages of using the CIRC learning model are that it helps students with reading problems, motivates them to increase their interest in reading, students can learn how to work together with their groups, learning becomes more effective and enjoyable (Arwen & Haq, 2022; Rahmasari & Swasti, 2022).

Students use the Cooperative Integrated Reading and Composition (CIRC) method to collaborate with their partners when studying, outlining, creating stories, predicting, and describing related narratives. Students receive instructions on how to understand the text in the reading assignment and complete it, in this case students complete it in groups. Small group interaction strategies associated with cooperative learning techniques have been proven to be an effective CIRC method for increasing reading comprehension levels, cooperative learning requires students to work together to complete tasks that they cannot complete alone (Azhari et al., 2019; Gupta & Ahuja, 2014). Students who receive learning using the CIRC learning model have better reading comprehension abilities than students who are taught using the conventional model, and their skills are more than adequate and adequate. The difference in understanding the text is caused by the learning model used in the two study groups. The CIRC learning model is very effective in improving reading comprehension skills, while the conventional model is less effective (Hakim et al., 2023; Hasibuan & Afnita, 2022). To be effective, teaching reading using the CIRC method requires several steps in the learning process. Ultimately, students will be more motivated to learn how to improve their reading skills so that they can easily understand the knowledge contained in their learning.

This research is strengthened by previous research showing that the CIRC (Cooperative Integrated Reading and Composition) strategy has a significant influence on students' understanding in the reading process. The higher CIRC is applied in learning, the better the learning experience will be for students (Akhiruddin, 2022; Awan et al., 2021). Supported by research conducted by other study shows that there is a significant difference in reading skills between the group of students taught using the Cooperative Integrated Reading and Composition (CIRC) learning model assisted by fairy tales and the group of students taught using conventional learning in class V elementary school students in Cluster X, Buleleng District, Buleleng Regency, 2017/2018 Academic Year (Kesumadewi et al., 2020).

The implication of this research is the importance of CIRC learning in the classroom because it is truly beneficial for students, improves reading comprehension, and facilitates the teacher's ability to guide students. When students attempt to read a paragraph, CIRC Strategies provides an oral model to assist them in reading fluency (Kamdideh et al., 2019; Wahyuningsih & Citraningrum, 2019). In the learning process, a student and a teacher will be paired to use the CIRC model as a form of student practice in reading in front of the class. At the independent reading level each student and teacher will read aloud together. Teachers can also utilize material that has been read previously by their students. To keep students interested in a book during the reading period, teachers must ensure the book interests them. The limitation of this research is that currently it is only carried out on students at Klitren State Elementary School and fifth grade students at Bhayangkara State Elementary School so it requires a sample to compare students' skills in reading comprehension. The suggestions or recommendations from this research should be taken into consideration for conducting future research or development related to the CIRC learning method on elementary school students' reading skills.

4. CONCLUSION

Based on the research findings and discussion, it can be concluded that there are significant differences in reading skills between students who are taught using the Cooperative Integrated Reading and Composition (CIRC) learning model and students who are taught using the conventional learning model in fifth grade elementary school students. The reading skills assessment in the experimental group was higher than the control group based on posttest scores. This means that the experimental group that used the Cooperative Integrated Reading and Composition (CIRC) learning model was better than the control group that was taught using conventional learning.

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