# THE EFFECT OF CIRC MODEL ON STUDENT LEARNING OUTCOMES FOR ELEMENTARY SCHOOL

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**Abstract**

*This research is motivated by learning that has not used innovative learning models so that students are less active in learning, not maximal cooperation between students in understanding learning materials. This resulted in student learning outcomes in integrated thematic learning still being low. The research's goal is to see how the Cooperative Integrated Reading and Composition type cooperative model affects student learning results in class V Cluster I, IV Jurai District. The Cooperative Integrated Reading and Composition (CIRC) model approach combines reading and writing assignments. Cooperative learning is a sort of group instruction that allows students more control over their learning and teams, fostering an interdependence that promotes friendly social interaction and supports learning. Each activity in group interaction is carried out using a set of procedures, which include teacher presentations, group practice, individual practice, peer review, additional practice, and testing. Employed a non-equivalent control group design as a quasi-experimental design. Sampling was carried out by purposive sampling technique. Class VA has designated the experimental class, whereas class VB was designated the control class. The t-test revealed that tcount is 2,399 and ttable at the 95 percent confidence level, with a significant level (α) of 0.05, is 2.045. Because tcount > ttable (2,399 > 2,045), we can assume that H1 is acceptable. Based on the research results, by testing the hypothesis using the t test, H1 is accepted. It can be concluded that employing the Cooperative Integrated Reading and Composition (CIRC) model approach has a substantial impact and significant effect on student learning outcomes in Elementary School.*
*Keywords: CIRC model; learning outcomes; student learning*

**Abstrak**

Penelitian ini dilatarbelakangi pembelajaran yang belum menggunakan model pembelajaran inovatif sehingga peserta didik kurang aktif dalam pembelajaran, belum maksimalnya kerja sama antar peserta didik dalam memahami materi pembelajaran. Hal ini mengakibatkan hasil belajar peserta didik pada pembelajaran tematik terpadu masih rendah. Tujuan penelitian adalah untuk melihat bagaimana pengaruh model kooperatif tipe Cooperative Integrated Reading and Composition terhadap hasil belajar siswa kelas V Gugus I IV Kecamatan Jurai. Pendekatan model Cooperative Integrated Reading and Composition (CIRC) memadukan tugas membaca dan menulis. Pembelajaran kooperatif adalah semacam instruksi kelompok yang memungkinkan siswa lebih mengontrol pembelajaran dan tim mereka, menumbuhkan saling ketergantungan yang mempromosikan interaksi sosial yang ramah dan mendukung pembelajaran. Setiap kegiatan dalam interaksi kelompok dilakukan dengan menggunakan seperangkat prosedur, yang meliputi presentasi guru, praktik kelompok, praktik individu, peer review, praktik tambahan, dan tes. Mempekerjakan desain kelompok kontrol yang tidak setara sebagai desain kuasi-eksperimental. Pengambilan sampel dilakukan dengan teknik purposive sampling. Kelas VA ditetapkan sebagai kelas eksperimen, sedangkan kelas VB ditetapkan sebagai kelas kontrol. Hasil uji t diketahui thitung sebesar 2,399 dan ttabel pada tingkat kepercayaan 95 persen, dengan taraf signifikan (α) 0,05 sebesar 2,045. Karena t hitung > ttabel (2,399 > 2,045), maka dapat diasumsikan bahwa H1 diterima. Dapat disimpulkan bahwa penerapan model Cooperative Integrated Reading and Composition (CIRC) memiliki pengaruh yang cukup besar dan signifikan terhadap hasil belajar siswa di Sekolah Dasar.
**Kata Kunci:** hasil belajar; model CIRC; pembelajaran siswa

**Introduction**

The ability to understand the contents of the reading for students needs to be pursued so that students are able to search for solutions to various problems and are able to draw conclusions from what they read. But the reality that is currently happening in the field does not seem as expected, and there is still a lack of willingness to read and a lack of reading comprehension skills in school. Due to this, integrated theme learning outcomes for students are still poor. Based on the observations of researchers do it in class V Cluster I District IV jurai, the researcher discovered the similar occurrence, where the teacher emphasizes the lecture approach over the usage of the learning model, resulting in students who are less engaged in learning since they only rely on the teacher for information proved that only 2-4 people were actively involved in learning. In addition, there is a lack of cooperation between students to improve one another's comprehension of the content being learned while they are learning. Students not participating enough in class. This leads to low learning outcomes that can be seen from the results Middle Semester Assessment (PTS) obtained by students.

One of the engaging teaching methods that can engage pupils in the classroom is cooperative learning. Cooperative learning creates a connection of interdependence that encourages amicable social relationships in the classroom and creates an environment that supports learning  (Ramadhanti & Permata Yanda, 2018). A series of procedures that includes teacher presentations, group practice, individual practice, peer review, additional practice, and testing are used to carry out each activity in small group interaction (Fariduddin & Parlindungan, 2018; Syam et al., 2020). By utilizing the cooperative learning model, the students will assist one another or use peer tutors, strengthen their critical thinking abilities, and actively engage in the learning process (Artawan, 2020; Ristanto et al., 2020). Work together on various tasks like reading aloud in pairs, determining the key plot point, engaging in vocabulary and summary exercises, and honing your creative writing and reading comprehension skills (A Hasyim et al., 2020). Arikunto (2015) argues that the cooperative learning model is the most suitable model to be applied in integrated thematic learning. There are various cooperative learning models, one of which is the Cooperative Integrated Reading and Composition (CIRC) type.

CIRC is a suitable teaching method to support students in developing metacognitive approaches to text comprehension (Zainuddin, 2015). CIRC is a school-based program emphasizing language skills, writing, and reading (Erlidawati & Syarfuni, 2018; Zarei, 2012). The CIRC learning model is used to increase the capabilities of Higher Order Thinking Skills (Ramadhanti & Yanda, 2021). That analyzes reading as a whole and is divided into several important parts that aim to help students ability to understand reading that can be widely applied (Desma Rosha, R., & Reinita, 2021). According to the learning process, Students receive training on how to actively participate in the learning process through reading, conversation, seeking the main concepts, and rewriting them along with opinion and reflection (Hendi Ristanto et al., 2018). Through engaging activities, CIRC allows students to process the material and select from various groupings (Arwen & Haq, 2021; Mubarok & Sofiana, 2017). The CIRC approach includes several components to aid students in developing their speaking skills. One is the definition of the term, which involves recognizing the challenging words when reading and comprehending them as a group (Khoirunisa et al., 2017). According to (Azhari et al., 2019) the CIRC model is a learning approach in which pupils are separated into groups to read and write summaries, and students are responsible for the assigned tasks. Some of the studies above show that the CIRC model effectively improves concept mastery and critical and creative thinking skills, as well as develops student collaboration and

communication attitudes. However, the research has limitations are only carried out on specific subjects at the elementary school level. In contrast, the elementary school curriculum uses an integrated thematic curriculum that integrates several subjects into one theme. Other researchers have yet to carry out the application of learning models CIRC for thematic learning, so it becomes a novelty for researchers to research the application of the model circ on students' critical thinking skills for thematic learning. In this study, the researchers limited the thematic learning themes for class 5, themes 8, sub-themes 1, and learning 3 and 4 with Indonesian, social studies, and civics lessons. Based on the description above, this study aims to find out the application of the CIRC model to improving students' critical thinking skills Theme 8 Sub Theme 1 Learning 3 and 4 with Indonesian, Social Studies, and Civics lessons.

The Cooperative Integrated Reading and Composition kind have several advantages, including the ability to increase student learning outcomes since students are engaged and conscientious and may collaborate and assist one another in their learning (Behice, 2016; Kesumadewi et al., 2020). Based on descriptions and problems, The Cooperative Integrated Reading and Composition (CIRC) methodology is believed by researchers to have a substantial impact on the thematic learning outcomes incorporated into class V Cluster I District IV Jurai.

**Research Methods**

This study uses an experiment approach and a quantitative research methodology. For this research, a quasi-experimental research approach was utilized. It was chosen to use a quasi-experimental design with a non-equivalent control group in this investigation. According to (Alfiansyah & Ningsih, 2023; Reinita & El Fitri, 2019) An experimental design known as the nonequivalent control group design involves administering a pretest prior to treatment and a posttest following treatment. The population as a whole is the object/subject of study (Putri & Pranata, 2022; Reinita, 2020). The participants in this study were fifth-grade children from SDN Cluster I, IV Jurai District. Nonprobability Sampling, also known as Purposive Sampling, is technique of sampling utilized. Based of statement (Afifah Meiliyana & Ade Hikmat, 2022; Siswanto et al., 2018), purposive sampling is a method of sampling in research conducted based on certain considerations. Based on this technique, the VA class at SDN 26 Painan Selatan was the experimental class and the VB class at SDN 26 Painan Selatan was the control class.

Data was gathered using instruments that were either objective or multiple-choice in the form of a test and follow-up test questions. To assess the viability of the questions generated by the evaluation of the level of validity, reliability, discriminating power, and difficulty index, the test instrument was originally examined on classes outside the sample. 30 items were obtained after the test instrument was examined and tested, and they were utilized for the pre-test and post-test questions. The variable test instrument test questions used consist of 13 indicators that are: (1) questions refer to basic competencies, (2) The meaning of the question is clearly defined, (3) questions according to the cognitive domain being measured, (4) truth of the question (5) easy questions to follow (6) questions contain operational words (7) Instructions for questions are written clearly (8) clarity of question intent (9) questions using language that is in accordance with the rules of Indonesian (10) the formulation of the question sentence using language that is simple and easy to understand (11) the question sentence does not contain a double meaning (12) the answer choices do not repeat the word (13) general assessment of test questions.

The analytical prerequisite exam, specifically the normality and homogenity test, will be used to assess the students' results of pre-test and post-test. If the analysis requirement test is passed, the hypothesis testing using the t-test can proceed. The competing hypothesis (H1) in this study is that the use of Cooperative Integrated Reading and Composition (CIRC), a type of cooperative learning methodology, has a significant effect on students' learning outcomes in class V Cluster I, District IV Jurai.

## Results and Discussion
*Description of Research Result Data*
Pre-Test

The experimental and control classes' pre-test values. The most outstanding score in the experimental class, which had 16 persons, was 73. The lowest score was 20, with a mean of 48, a standard deviation of 16.3, and a variance of 266. While in the control class, which consisted of 15 people, the score of the highest value was 80, the lowest value was 20, the mean was 50, the standard deviation was 17.3, and the variance was 299.
Post-Test

Post-test results for the experimental and control classes. The experimental class received the maximum score of 100 and the lowest score of 73, score of mean is 86, standard deviation score is 8.7, and variance of 77, as shown in Table 2. The highest score was 87, and the lowest was 47, with a mean score of 65, a standard deviation score of 11.7, and a variance of 137 in the control group.

*Comparison of Pre-Test and Post-Test Results of Experiment Class with Control Class*

According to the pre-test and post-test analysis in learning outcomes data onintegrated thematic learning in the two sample groups, it is well recognized that the two classes have different rates of learning outcomes acquisition. The class Of experiment got an average score of 48, whereas the control class got an average score of 50, according to the pre-test results. Meanwhile, According to the post-test results, the experiment class received an average score for learning outcomes. The average was 86, while the control group only received 65. The pre-test value and the average post-test value for the experimental and control classes are shown in the following graphic in comparison,
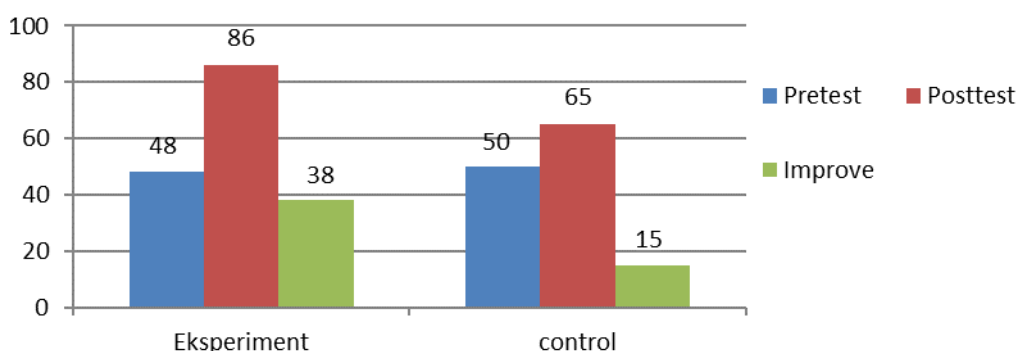


**Figure 1.** Comparison chart showing the outcomes for the experimental class and control group before and after testing

*Analysis Pre-test*
Normality test

The normality of the pre-test and post-test of the two sample classes was examined using the liliofers test. The preconditioning test results are shown in table 1 as a normality test.

**Table 1.** Pretest Data Normality Test Results for the Experiment Class and the Control Class

|  | Experiment Class | | Control Class | |
|---|---|---|---|---|
|  | *Pre-est* | *Post-test* | *Pre-test* | *Post-test* |
| $L_0$ | 0.0772 | 0.1331 | 0.1157 | 0.1295 |
| $L_{table}$ | 0.213 | 0.213 | 0.220 | 0.220 |
| Information | $L_0 < L_{table}$ | $L_0 < L_{table}$ | $L_0 < L_{table}$ | $L_0 < L_{table}$ |
| Conclusion | Normal | Normal | Normal | Normal |

The normality test's findings of the data using the Liliofers test on the value of pre-test and post-test in the class of experiment and class of control produced the value of $L_0 < L_{table}$, as shown in Table 1. As a result, It is reasonable to presume that the sample class's data are regularly distributed.

Homogeneity Test

The Fisher (F) test was used to determine the homogeneity of the pre-test data and the second sample class after the test, based on the formula stated by Lestari and Yudhanegara (2017:249)

$$F_{count} = \frac{The\ Biggest\ Variance}{The\ Smallest\ variance}$$

The formula for calculating of F a price that includes a substantial amount of a = 0.05 from the F table of distribution, It turns out that the F price is not as high as it appears in the pre-test data is $F_{count} < F_{table}$, namely 1.12 < 2.42. $F_{table}$ is 1.78 < 2.42. Therefore, the sample has a homogeneous variance.

*Hypothesis testing*

After performing the necessary test, the analysis was completed, and it was determined that the data had passed both the homogeneity and normality tests, which was proven from the data that the variance was homogenous, and the data were normally distributed. Furthermore, to put the theory to the test, the t-test formula proposed by Sugiyono (2018). From the distribution list t with the level of significance is 0.05 and dk = n1 +n2 – 2 = 16 + 15 – 2 = 29, we get $t_{table}$ = 2.045 while $t_{count}$ =2.399. Based on the above calculation, $t_{count} > t_{table}$, which is 2,399 > 2,045, denotes that hypothesis $H_1$ is accepted. As a result, the cooperative learning model Cooperative, integrated reading and composition have an impact on student learning outcomes in class V elementary school's integrated theme learning.

The purpose of this study is to investigate if the Cooperative Integrated Reading and Composition (CIRC) cooperative learning paradigm may improve student learning outcomes in integrated education. Theme learning for students in class V at SDN Gugus I in the Jurai district was conducted from April 18 to 21, 2022, with two sessions using the identical content. These sessions included Theme 8 Sub-Theme 1 Learning 3 and 4 with Indonesian language lessons, IPS, and PPKn.

In actual reality, the two sample courses were given a pre-test before learning for the two classes. The pre-test seeks to determine the starting points of the two sample courses' pupils as well as serve as a foundation for future adjustments in learning results. 30 objective questions that have previously undergone testing and analysis for validity, reliability, distinguishing power, and difficulty index were used in the pre-test.

According to the pre-test findings, the control group's average was 50, whereas the average for the group trial was 48. These two graphs show a distinction between the experimental group of 2 and the control group. This would suggest that the values of the two groups are roughly equivalent. The pre-test data of the two normally distributed sample classes underwent homogeneity and normality tests, and the findings show that the two sample classes have homogeneous variance.

A session using the cooperative learning style Cooperative Integrated Reading and Composition (CIRC) was taught to the experimental class after both classes took a pre-test. The control class, on the other hand, learned the traditional way. In order to execute CIRC in heterogeneous groups, students are partnered in reading groups and given feedback on how they are progressing with fundamental abilities such oral reading, contextual guessing, asking questions, summarizing, and writing (Ramadhanti & Yanda, 2021). Based on the research conducted by (Sawitri, 2018; Sujana, 2018), there is an influence of cooperative learning models integrating reading and composition on students' knowledge competence in social studies learning content. Research conducted by (Sudiarni & Sumantri, 2019), claims that in class V's Indonesian language learning topic, there is a substantial difference in the reading comprehension abilities of students who are taught utilizing the Cooperative Integrated Reading and Composition (CIRC) learning model and students who learnt not to utilize it.

The research studies are equally examining the learning model of Cooperative Integrated Reading and Composition. The distinction between this study and prior studies is that this study focused on integrated thematic learning, which is created by merging a number of disciplines into one theme that serves as the primary emphasis. Thus, learning using the Cooperative learning model of Integrated Reading and Composition (CIRC) has The advantage that it can arouse students' enthusiasm for learning in integrated thematic learning and awaken students' thinking abilities because Students are given the chance to discuss their ideas with friends in a group and voice their thoughts.

### Conclusion

According to the hypothesis testing results, the implementation of the cooperative learning model stands for Cooperative Integrated Reading and Composition (CIRC) have a significant effect on student learning outcomes. We can know in the variations in learning outcomes between the experimental class can be determined, which uses the Cooperative Integrated Reading and Composition (CIRC) learning model, and the class of control, which uses conventional learning, based on the experimental class's value of average of 86 versus the control class's average of 65. This is because the Cooperative Integrated Reading and Composition (CIRC) cooperative learning model can increase student learning outcomes make students' skills in solving problems increase and more conscientious in their work due to working in groups so that learning is meaningful and fun. Even though the content is the same, the control class using the traditional learning model did not receive as much value as the experimental class using the Cooperative Integrated Reading and Composition (CIRC) cooperative learning model.

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