CIRC Strategy: Its Effectiveness in CIRC for the Fifth Grade Students at MI Hijriyah II Palembang

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ABSTRACT

The Cooperative Integrated Reading and Composition (CIRC) strategy's efficacy in improving fifth-grade students' reading comprehension abilities at MI Hijriyah II Palembang is examined in this study. Students were separated into control and experimental groups using an experimental research design. Conventional methods were used to teach the control group, while the experimental group was instructed using the CIRC strategy. Pre- and post-tests were used to measure the progress made in reading comprehension. The results showed that, in comparison to the control group, the experimental group's students' reading comprehension had significantly improved. According to this, the CIRC strategy successfully improves students' comprehension of texts by encouraging group projects, conversations, and organized reading exercises. The study emphasizes CIRC's potential as a cutting-edge teaching strategy that encourages participation and teamwork from students during the learning process. For teachers looking for practical ways to raise students' literacy levels, especially in elementary school, the findings offer insightful information. The long-term effects of CIRC and its use in various educational contexts may be investigated in future studies.

Keywords: Cooperative Integrated Reading and Composition (CIRC); Reading Comprehension; Elementary Education

INTRODUCTION

A key ability that supports both academic achievement and personal growth in students is reading comprehension. Understanding, interpreting, and critically analyzing texts go beyond simple word recognition to help students derive meaning, think critically, and broaden their knowledge. All subjects require this ability because it enables students to follow directions, understand difficult ideas, and interact with the material more deeply. Problems with reading comprehension are apparent in the Indonesian educational system, especially at schools like MI Hijriyah II Palembang. Many students have difficulty understanding complex texts

and giving thoughtful answers to questions, according to national assessments like the Computer-Based National Assessment (ANBK) and the Indonesian Madrasah Competency Assessment (AKMI). This problem is made worse by a dearth of organized and interesting reading techniques, which makes students less motivated and interested in reading.

The reduction in reading skills is not specific to Indonesia. Students all across the world have seen a discernible decline in their reading proficiency. In the United States, for example, a record-low percentage of fourth and eighth-grade students had below-basic reading skills, according to a report from the National Assessment of Educational Progress (NAEP). Experts blame a number of factors for this decline, such as the COVID-19 pandemic's effects, rising screen time, and a disregard for basic reading skills. Teachers are investigating efficient teaching methods to improve students' reading comprehension skills in order to address these issues. The Cooperative Integrated Reading and Composition (CIRC) model is one such strategy. CIRC is a cooperative learning approach that uses group activities, peer discussions, and structured reading exercises to enhance reading comprehension. Students actively interact with texts, debate interpretations, and assist one another's learning processes in this collaborative learning environment.

The efficacy of the CIRC model in raising students' reading proficiency has been shown by research conducted during the last five years. Simarmata's (2023) study examined the use of CIRC in instructing high school students on narrative texts. According to the results, students' reading comprehension significantly improved, and group activities revealed higher levels of motivation and active participation. Similarly, Patty's (2023) study investigated how the CIRC strategy can improve learning outcomes and student engagement. The study found that average scores increased over cycles, indicating a significant shift in student engagement and supporting the effectiveness of the strategy in fostering meaningful learning experiences. When the CIRC strategy was used, post-test scores significantly increased, and the percentage of students who mastered the material increased as well. Additionally, a study by Forsia (2018) examined how students' writing abilities were affected by the CIRC technique and conventional teaching methods. According to the research's findings, students who were taught the CIRC technique demonstrated a notable improvement in their writing skills, indicating that CIRC's advantages go beyond reading comprehension to other language skills.

Several important factors have contributed to the CIRC model's success. First off, students are encouraged to actively participate and support one another's learning because of the cooperative nature of the approach, which cultivates a sense of community and shared responsibility. Second, students are better able to concentrate and interact with the content thanks to the CIRC model's structured reading and writing exercises, which offer precise instructions and goals. Finally, by combining reading and writing assignments, students can use their comprehension abilities in a variety of settings, which strengthens their learning and fosters the growth of higher-order thinking abilities.

In summary, students' academic performance and lifelong learning are greatly impacted by their ability to comprehend what they read. The difficulties students have comprehending difficult texts emphasize the necessity of efficient teaching methods. The Cooperative Integrated Reading and Composition (CIRC) model, with its collaborative, structured framework, presents a promising way to improve reading comprehension. Reviving students' interest in reading and promoting their general academic development are two benefits of putting such creative and research-based tactics into practice.

LITERATURE REVIEW

Previous Related Study

The effect of the CIRC strategy on students' reading comprehension and general literacy development has been investigated in recent studies:

1. In her study "Enhancing Reading Comprehension through the Cooperative Integrated Reading and Composition (CIRC) Strategy," Patty (2023) examined how CIRC affected learning outcomes and student engagement. The results demonstrated the strategy's efficacy in creating meaningful learning experiences by showing a notable rise in student engagement and improved reading comprehension scores.
2. Simarmata (2023): The use of CIRC in teaching high school students narrative texts was the main focus of this study. The findings showed that students' reading comprehension skills had significantly improved, and group activities had seen an increase in motivation and active participation.
3. The study "Implementing Cooperative Integrated Reading and Composition (CIRC) Method to Enhance the Reading Comprehension of Indonesian EFL Learners," conducted by Nur in 2021, looked at how CIRC affected junior high school students studying English as a foreign language. The study found that CIRC successfully raised students' reading comprehension, and it credited the strategy's collaborative and structured nature for its effectiveness.
4. The study "Effects of Cooperative Integrated Reading and Composition (CIRC) Technique on Reading-Writing Skills" by Moerni (2023), albeit a little older, discovered that CIRC improved students' reading and writing skills. The study showed that students in the CIRC group performed better than those in conventional classroom environments, proving the effectiveness of the approach in improving literacy.

The efficacy of the CIRC strategy in enhancing reading comprehension and associated literacy skills is demonstrated by these studies taken together. Structured reading and writing exercises combined with cooperative learning concepts create a nurturing atmosphere that encourages student motivation, engagement, and academic success.

Definition and Concept of the CIRC Strategy

Through organized cooperative learning activities, Cooperative Integrated Reading and Composition (CIRC) is a comprehensive instructional approach created to improve students' writing and reading abilities. In the 1980s, Slavin and associates created CIRC, a cooperative learning approach that incorporates writing practice, vocabulary growth, and reading comprehension. Students in this model participate in a variety of activities in small, diverse groups, such as reading aloud to one another, predicting texts, summarizing information, and giving feedback on one another's writing. The objectives of this cooperative framework are to encourage peer support, encourage active participation, and enhance general literacy abilities.

The CIRC approach is based on a number of educational theories that support interactive and cooperative learning settings:

1. Social Constructivism: Fer (2016) places a strong emphasis on the role that social interactions play in cognitive development. Learning happens when people engage in meaningful interactions with one another and work together to create knowledge, according to Fer (2016). This idea is embodied by CIRC, which promotes group collaboration, idea sharing, and comprehension building.
2. Cooperative Learning Theory: According to this theory, students can learn more when they collaborate with one another as opposed to working alone. Positive interdependence, individual accountability, and promotive interaction are among the essential components of successful cooperative learning, according to Johnson and Johnson (2020). By planning cooperative activities, making sure everyone takes responsibility for their work, and encouraging positive interactions between students, CIRC integrates these components.
3. Cognitive Development Theory: According to (Susilo, 2021), students build their knowledge via experiences and active participation. This viewpoint is supported by CIRC, which engages students in active reading and writing assignments, pushes them to think critically, and helps them create new knowledge via discussion and introspection.

METHOD

Design and Samples

This study employs a factorial experimental design to evaluate the effect of the Cooperative Integrated Reading and Composition (CIRC) strategy on students' reading comprehension. A factorial design enables researchers to assess the main effects and potential interactions of multiple independent variables on a dependent variable, offering a comprehensive understanding of the instructional methods being tested. In this study, the instructional methods—CIRC strategy and conventional teaching—serve as the independent variables, while students' reading comprehension performance is the dependent variable. The participants are fifth-

grade students at MI Hijriyah II Palembang during the 2024–2025 academic year, with a total population of 136 students distributed across four classes. Due to the impracticality of studying the entire population, cluster random sampling is employed. This involves randomly selecting two out of the four existing classes, with one class assigned as the experimental group (using the CIRC strategy) and the other as the control group (using conventional methods). Random assignment of the selected clusters ensures that each group has an equal chance of receiving either treatment, thereby enhancing the internal validity of the study by minimizing selection bias. To determine an appropriate sample size, considerations are made for the expected effect size, a standard significance level of 0.05, and a power of 0.80. Given the use of cluster sampling, the design effect is also factored into the calculation to account for potential variance inflation due to intra-cluster correlation. While this design is robust, it is important to note several limitations. Cluster sampling may introduce bias if the chosen classes differ systematically from the others, and the findings may have limited generalizability beyond the specific context of MI Hijriyah II Palembang. Additionally, variability in teacher implementation and student engagement with the CIRC strategy could influence the results. Despite these limitations, this study offers a rigorous assessment of the impact of the CIRC strategy on reading comprehension among fifth-grade students.

Instrument and Procedure

The primary research instrument used in this study is a Reading Comprehension Test, consisting of 30 multiple-choice items designed to measure students' reading comprehension abilities both before and after the instructional treatment. The test evaluates several key skills: literal comprehension (understanding specific information from the text), inferential comprehension (drawing logical conclusions), critical comprehension (evaluating and forming judgments about the text), and vocabulary knowledge (understanding word meanings in context). To ensure the validity and reliability of the test, several procedures were undertaken. Content validity was established by having a panel of experts in educational assessment and reading comprehension review the test items to confirm their alignment with curriculum standards (Anggara & Abdillah, 2023). Construct validity was assessed through a pilot study with a small sample to ensure that the test accurately measured the intended reading comprehension skills (Halder, 2023). Reliability was tested using Cronbach’s Alpha coefficient, with a value of 0.70 or higher considered acceptable for internal consistency (Taber, 2018). In addition, an item analysis was performed, including evaluation of item difficulty, discrimination indices, and distractor effectiveness, to refine the quality of the test items (Rezigalla, 2022).

The research procedure was conducted in three main phases: pre-test, treatment, and post-test. In the pre-test phase, both the experimental and control groups were administered the reading comprehension test to assess their baseline performance. The test was conducted under standardized conditions in a quiet and distraction-free environment, with students allotted 40 minutes to complete it. The collected

test papers were then scored for further analysis. During the treatment phase, which lasted several weeks, the experimental group received instruction through the Cooperative Integrated Reading and Composition (CIRC) strategy, while the control group was taught using conventional reading methods. The CIRC strategy, developed by Notanubun et al. (2024), is a cooperative learning method aimed at improving reading comprehension through structured peer interaction. Students were grouped based on reading proficiency and engaged in activities such as shared reading, discussion and summarization, writing tasks with peer review, vocabulary exercises, and regular feedback from the teacher through formative assessments. Finally, in the post-test phase, both groups took the same reading comprehension test used in the pre-test. The administration procedures and timing mirrored those of the pre-test, with students given 40 minutes to complete the exam under standardized conditions. The resulting scores were collected and analyzed statistically to evaluate the effectiveness of the CIRC strategy on students' reading comprehension development.

Data Analysis

The data collected from the pre- and post-tests were analyzed using SPSS with several statistical methods to ensure accurate interpretation of the results. First, descriptive statistics were used to summarize the students' test scores, providing insights into the central tendency and distribution of the data. To confirm that the data met the assumptions necessary for parametric testing, homogeneity and normality tests were conducted. These tests ensured that the data were suitable for further inferential statistical analysis. To compare the mean differences between the experimental and control groups, an Independent Sample t-Test was employed, allowing the researchers to determine whether the use of the Cooperative Integrated Reading and Composition (CIRC) strategy led to statistically significant improvements in reading comprehension. Additionally, a Paired Sample t-Test was conducted within each group to analyze changes in students' performance from the pre-test to the post-test, thereby assessing the internal impact of the instructional method applied to each group.

RESULT AND DISUSSION

The results show that students who received instruction utilizing the Cooperative Integrated Reading and Composition (CIRC) strategy outperformed those who received traditional instruction in terms of reading comprehension. The post-test results demonstrated a significant improvement in the experimental group's reading comprehension performance, demonstrating this improvement. The results of the post-test show a significant difference between the experimental and control groups. This implies that CIRC's structured, cooperative learning methodology improves students' reading skills by encouraging participation, teamwork, and a deeper understanding of texts. The findings support the usefulness of cooperative learning techniques in enhancing reading comprehension abilities and are consistent with earlier studies.

The Process That Makes CIRC Effective Through several mechanisms, the CIRC strategy improves reading comprehension:

a. Cooperative learning improves text comprehension by having students collaborate, talk, and help one another.
b. Structured Activities: CIRC improves cognitive engagement with reading materials by incorporating questioning, summarizing, and making predictions.
c. Peer-assisted learning combined with teacher guidance strengthens comprehension and memory of important reading concepts.

According to recent research, students' reading comprehension can be enhanced by using the Cooperative Integrated Reading and Composition (CIRC) strategy. According to a study by Patty (2023), CIRC promotes meaningful learning experiences because it increases engagement, post-test scores, and subject mastery. These studies support past research showing the advantages of cooperative learning techniques like CIRC in teaching reading. Because CIRC is collaborative, students are more likely to actively participate, discuss, and support one another, which improves reading comprehension and retention. The experimental group's reading comprehension significantly outperformed the control group, according to the results in Tables 1 and 2.

Table 1. Pre-Test and Post-Test Scores of Experimental Group

Group	Mean (Pretest)	Mean (Posttest)	Std.Deviation	Improvement
High Interest (CIRC)	71.24	88.88	8.13	**24.7%**
Low Interest (CIRC)	72.76	85.12	7.45	**17.0%**

Table 2. Pre-Test and Post-Test Scores of Control Group

Group	Mean (Pretest)	Mean (Posttest)	Std.Deviation	Improvement
High Interest (Conventional)	70.10	78.45	7.98	**11.9%**
Low Interest (Conventional)	68.90	74.22	6.89	**7.7%**

The pre-test and post-test results were compared using a paired sample t-test. The experimental group's reading comprehension improved statistically significantly, as indicated by the p-value of $p < 0.05$. The CIRC approach is more dynamic and engaging because it incorporates cooperative comprehension techniques, organized group discussions, and peer-assisted learning. The more individualized learning that characterizes conventional teaching may not be as successful in promoting improvements in reading comprehension.

When it comes to enhancing students' reading comprehension, the data unequivocally shows that the Cooperative Integrated Reading and Composition (CIRC) approach is far more successful than traditional teaching techniques. The experimental group continuously performed better than the control group, improving comprehension overall and gaining greater gains on post-test scores. According to the results, using CIRC in reading instruction can be very helpful, especially for students who are very interested in reading, but it can also mean significant improvements for students who are not as interested. Compared to traditional methods, CIRC is a superior instructional approach because of its collaborative and structured nature, which promotes greater engagement, deeper comprehension, and better retention of reading material.

The findings show that the Cooperative Integrated Reading and Composition (CIRC) strategy greatly improves students' reading comprehension when contrasted with conventional teaching techniques. When compared to the control group, which was instructed using traditional methods, the experimental group, which was taught using CIRC, demonstrated significantly greater gains in their post-test scores. The structured and cooperative learning environment of CIRC is one of its main benefits. Students collaborate in pairs or small groups to evaluate texts, highlight important concepts, and give helpful criticism to their peers. Students are able to express their understanding, interact more fully with reading materials, and improve their problem-solving abilities thanks to this cooperative approach, which promotes active participation. Additionally, through combining writing and reading exercises, CIRC strengthens vocabulary growth, reinforces comprehension techniques, and raises students' general literacy levels.

Furthermore, CIRC promotes teamwork, communication, and critical thinking—all of which are necessary for success in school and in life. Students are motivated by this cooperative approach, which makes reading more engaging and pleasurable. The results are consistent with earlier studies, showing how cooperative learning techniques can help students become more proficient readers. As a result, using CIRC in reading instruction can be a very effective way to improve literacy results in a variety of learning environments.

Recent research has empirically demonstrated how well the Cooperative Integrated Reading and Composition (CIRC) strategy works to improve students' reading comprehension. The use of the CIRC technique, for example, greatly increased students' achievement in reading narrative texts, according to Simarmata's (2023) classroom action research with tenth-grade students. During group projects, the study found that students were more engaged, motivated, cooperative, and enthusiastic, which improved comprehension results. Similarly, Nur (2021) found that the CIRC method significantly improved reading comprehension among Indonesian EFL students. According to the quasi-experimental study, students who were taught the CIRC method performed better than those who were taught traditional instruction, demonstrating the method's ability to promote greater comprehension of reading materials.

Consistently emphasizing the benefits of cooperative learning techniques like CIRC in reading instruction, these studies support earlier research. Students' motivation and engagement are increased by the structured and collaborative nature of CIRC, which also fosters deeper text comprehension and critical thinking. Therefore, using CIRC in reading instruction can be a very effective way to improve literacy outcomes in a variety of educational settings.

CONCLUSION

The study concludes that fifth-grade students at MI Hijriyah II Palembang have much improved reading comprehension skills thanks to the Cooperative Integrated Reading and Composition (CIRC) strategy. In addition to enhancing students' comprehension of texts, CIRC's structured and cooperative format encourages motivation, active engagement, and participation in the learning process. Working in groups helps students strengthen their comprehension skills by teaching them to summarize important concepts, think critically, and give constructive criticism to their peers. The cooperative learning strategy fosters a love of reading in addition to raising academic achievement, which makes literacy development more pleasurable and significant. According to the results, CIRC can be an effective teaching tool for educators who want to raise their students' literacy levels, especially in classrooms with a diverse student body. Since CIRC has been shown to have a positive impact, teachers are strongly encouraged to use it as a useful and efficient way to enhance reading comprehension. Nonetheless, additional investigation is advised to examine its enduring impacts on various student demographics, such as those with diverse learning styles and skill levels. A more thorough grasp of CIRC's advantages could be ensured by future research that looks at how it affects writing abilities, vocabulary development, and general academic performance over time.

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