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Enhancing Reading Comprehension through the Cooperative Integrated Reading and Composition (CIRC) Strategy

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Abstract

This study explores the transformative potential of the Cooperative Integrated Reading and Composition (CIRC) learning strategy in enhancing student engagement and learning outcomes. Through two carefully executed cycles, the study delves into the dynamic interplay between educators and students and its impact on the learning landscape. Drawing from constructivist principles, the CIRC strategy emphasizes collaborative discourse and active knowledge construction, fostering cognitive and affective growth. The research reveals a significant shift in student engagement, with average scores climbing from 3.37 to 4.12 across cycles, substantiating the strategy's efficacy in promoting meaningful learning experiences. Furthermore, applying the CIRC strategy demonstrated a notable increase in post-test scores, from 69.64 to 75.04, along with a rise in the proportion of students mastering the subject matter, from 60% to 80%. While the strategy boasts transformative potential, its implementation challenges include time investment and creating conducive group discussion environments. This study underscores the importance of dynamic learning approaches that empower students to actively construct knowledge and apply it in real-world contexts, reinforcing the role of educators in catalyzing this evolution. The CIRC strategy is powerful in bridging theory and practice, offering a holistic educational experience that resonates far beyond the classroom.

Keywords

CIRC Strategy, Learning Outcomes, Reading Comprehension, Student Engagement, Constructive Principles.

1. Introduction

Reading, as one of the receptive skills, plays a crucial role in shaping individuals' perceptions and knowledge. Reading gives people valuable information to enhance their thinking, skills, attitudes, and knowledge. Van Woudenberg (2021) emphasizes that "reading can provide people with knowledge, understanding, insight, and other epistemic goods." Reading involves comprehending the author's intended message conveyed through written language. Anderson (2003) further elaborates that "reading is a fluent process of readers combining information from a text and their background knowledge to build meaning." This understanding aligns with Linse's (2005) assertion that reading is a skill set involving deriving meaning from printed words.

In light of the above explanation, reading entails comprehending the implicit and explicit ideas within a passage, allowing readers to grasp the conveyed information's significance. Consequently, comprehension is the output evaluated through reading activities rather than physical performance. Given that the primary objective of reading is comprehension, it is imperative to teach this skill from the outset. Kendeou et al. (2015) highlight that "reading comprehension is essential for successful functioning in our society." This enhances the enjoyment and productivity of reading and extends its benefits beyond academics to positively impact personal and professional aspects. Without comprehension, reading remains meaningless in word recognition, rendering readers incapable of understanding the content. Elleman & Oslund (2019) stress that reading comprehension is a multifaceted task requiring the coordination of diverse cognitive skills. Therefore, a fundamental goal of reading instruction is to equip learners with the necessary information, abilities, and experiences to become proficient and enthusiastic readers (Wiratmoko et al., 2023).

Spector et al. (2001) assert that the goals of reading in class should mirror real-life purposes, such as obtaining specific information (scanning), grasping the author's main idea (skimming), achieving a comprehensive understanding (thorough comprehension), and evaluating information critically. However, achieving these objectives is challenging, necessitating considerable effort from teachers. Kasim and Raisha (2017) point out various issues related to reading comprehension, including lack of cultural knowledge, text length, absence of reading strategies, difficulty in differentiating, working memory constraints, trouble connecting ideas, speed reading, and insufficient background knowledge.

These challenges resemble the situation faced by students in the first semester of the 2022/2023 academic year in the Computer Science Study Program at Universitas Pattimura. Classroom observations revealed that many students lacked reading comprehension skills, struggling to identify themes, formulate questions, or draw conclusions. Consequently, they exhibited reduced engagement in reading, and their interest in reading instruction waned. This issue was particularly evident when the lecturer posed reading-related questions; only a handful of students responded accurately, while most had difficulty drawing meaningful conclusions. This observation was supported by the students' test scores in reading comprehension, which indicated a mean score of 63.54 for the English course. Specifically, only 12 students achieved A and B grades, with 18 scoring below B.

To address these challenges, lecturers must enhance the learning process by implementing effective and efficient teaching models. One such model is the Cooperative Integrated Reading and Composition (CIRC) strategy. Developed in 1983 by Robert Slavin and Nancy Madden at the Center for Social Organization of Schools at Johns Hopkins University. CIRC is a collaborative approach to literacy and composition. It involves dividing learners into groups to develop reading, writing, vocabulary, and language comprehension skills. The core principle of the CIRC strategy is efficient time utilization. Students work in cooperative teams, aligned with reading group instruction, to achieve objectives like reading cognition, decoding, and phrasing. The primary aim of CIRC is to foster teamwork in helping students acquire broadly applicable reading comprehension skills. This is corroborated by several previous studies highlighting the positive impact of the CIRC strategy on reading comprehension improvement (Aziz, 2020; Aziz & Cahyani, 2022; Maruf & Anjely, 2020).

2. Literature Review

2.1 The Concept of Reading

Reading is indispensable for EFL (English as a Foreign Language) learners. Anderson (2003) aptly asserts that it is crucial for their English proficiency and a fundamental requirement for comprehending content lessons taught in English. This need arises due to the prevalent requirement of English-based reading across various subjects. Enhanced reading abilities ensure success in English language learning and facilitate progress in other learning domains.

When readers read, they absorb the author's communicated information through words and language. Horner (2002) illuminates that reading is a multifaceted activity, as proficient readers operate on multiple levels simultaneously. The complexity emerges from the interplay of external and internal factors influencing the reading process. Internally, factors like intelligence, interests, attitudes, abilities, motivations, and reading goals shape the reading experience. Externally, stimuli encompass reading resources, texts, environmental conditions, social status, reading practices, and habits. This intricate interplay of stimuli contributes to coordinated efforts to achieve comprehensive reading comprehension.

Harrison et al. (2002) highlights the dynamic nature of the reading process. Readers bring their experiences and cognitive schemata to the reading process, where predictions, assumptions, and inferences are continuously formed, challenged, and invalidated. This portrayal underscores readers as active and enthusiastic participants in constructing meaning. Their analytical habits are scrutinized and revised through reading, leading to a deeper understanding of the text and fostering self-awareness.

Filderman et al. (2022) emphasize that the necessity of reading skills varies based on the specific context and reading objectives. Linderholm (2006) categorizes reading purposes into two main types: reading for leisure and reading for academic study. Readers who read for enjoyment tend to form loosely structured connections to textual ideas, engaging transiently with the text. In contrast, academic reading involves coherent inferences and paraphrasing, resulting in a more profound understanding of the content.

Teachers can employ various activities when teaching reading, such as reading aloud, silent reading, reading comprehension exercises, and independent reading (Febriyanto, 2016). Among

these activities, reading comprehension is a pivotal element for academic achievement. As Anderson (2003) noted, comprehension is integral to successful reading, involving monitoring processes like verifying predictions and making necessary adjustments when understanding falters. Given its significance, effective reading comprehension instruction must be prioritized.

2.2 Teaching Reading Comprehension

Reading cognition, commonly called comprehension, encompasses grasping an author's intended concept or message, whether explicit or implicit, conveyed through written language. This type of reading is aimed at understanding the content within the text. Operating at an advanced level, reading comprehension strives to swiftly and accurately apprehend the textual material. However, optimal reading comprehension cannot be achieved without a strong foundation in reading skills. Therefore, teachers need to impart this skill to their students.

Anderson (2003) underscores the dual aspects of teaching reading: catering to beginners just embarking on their reading journey and aiding learners who already possess reading skills in their native language. Those who have mastered reading in their first language do not need to start anew when reading in a foreign language. Instead, they need to adapt the strategies they have already honed to the novel context of the second language. Strengthening reading comprehension abilities significantly enhances the learning process, enabling students to navigate the complexities of acquiring new skills. However, students who fail to recognize the importance of reading might overlook the value of acquiring such skills.

Andrews (2015) elucidates that reading comprehension is a multifaceted skill dependent on general cognitive processes like working memory, inferential abilities, and specific reading-related knowledge and techniques. "Good readers know what to do when encountering difficulties" (Anderson, 2003). Proficient readers possess the capacity to assess their cognitive approaches and are open to sharing the methods they employ to comprehend the information they are reading. Adequate comprehension hinges on extracting and constructing information from the text, whether autonomously or collaboratively. This process engages readers' cognitive and metacognitive faculties, facilitating purposeful and skillful reading activities (Anderson, 2003; McEwan, 2004).

2.3 CIRC Strategy in Cooperative Learning for Reading Comprehension

Integrating practical and effective learning activities is paramount to enhancing the quality of learning outcomes and cultivating positive student attributes, such as cooperation, creativity, and innovation. In this educational endeavor, teachers hold a pivotal role and serve as the linchpin for shaping intelligent and character-rich individuals who are poised for a successful future. Achieving this goal necessitates the seamless implementation of appropriate learning models or methods. Selecting a suitable learning model and medium that resonates with students significantly contributes to the triumph of learning endeavors.

Among the various teaching methodologies available, cooperative learning holds promise. Slavin (2011) elucidates that cooperative learning involves organizing students into small groups, where collaborative efforts are channeled toward learning academic content. This pedagogical approach emphasizes shared attitudes and behaviors, fostering cooperation within structured group settings based on constructivist principles. It serves as a framework where two or more individuals collaboratively engage to achieve expected learning objectives. Cooperative learning

caters to various aptitude levels and entails group members collectively tackling assignments to ensure comprehension. Successful group outcomes hinge on the comprehensive understanding of each member.

Kagan & Kagan (2009) outline the fundamental principles of cooperative learning through the acronym "PIES": positive interdependence, individual accountability, equal participation, and simultaneous interaction. Positive interdependence underscores the mutual reliance between individuals to meet their respective demands. This interdependence not only cultivates a supportive environment but also nurtures personal growth.

As emphasized by Laal et al. (2013), individual accountability ensures that each student is responsible for their learning performance. This element, intrinsic to cooperative learning, fosters active participation within the group's educational pursuits and mitigates the phenomenon of "social loafing." "Individual accountability dramatically increases student participation and motivation to achieve" (Kagan & Kagan, 2009). Pair and group activities, though favored by students, demand careful assessment of equitable participation. Cooperative learning addresses this by compelling all members of a pair or group to contribute equitably. Collaborative learning strategies strive to create simultaneous interactions to facilitate a more engaged and inclusive learning environment. This approach promotes active engagement among students, regular processing of information, and collaborative learning among peers.

The Cooperative Integrated Reading and Composition (CIRC) strategy is a powerful tool within cooperative learning, promoting collaborative learning through the synergy of reading and writing. Asrifan & Octaberlina (2021) detail the CIRC strategy, where students work in cooperative teams of four members. This approach combines speaking, reasoning, and communication, offering students a holistic learning experience by reading, discussing, and composing. CIRC enhances reading comprehension by encouraging students to express themselves and collaboratively solve problems.

CIRC's objective extends to improving both reading comprehension and writing skills. Its effectiveness is underscored by Rahmasari and Swasti (2022), who highlight benefits such as enhanced understanding, a more enjoyable classroom atmosphere, and heightened student focus. Similarly, Nurhalisa, (2022) emphasizes CIRC's role in addressing writing challenges and enhancing learning outcomes.

Slavin (2016) expounds on four major theoretical perspectives that underpin the CIRC strategy. These perspectives include motivational aspects, cognitive considerations, developmental dimensions, and the significance of social cohesion. Each perspective fosters an effective cooperative learning environment that emphasizes group dynamics, cognitive growth, and the cultivation of essential life skills.

Durukan (2011) outlines the CIRC strategy as a multi-stage process for successful implementation. It begins with the teacher's introduction of new concepts or ideas, building upon students' prior knowledge. Subsequently, students are grouped into smaller teams, where they collaborate on assignments with provided coursework and resources. The assessment phase involves evaluating both individual and group performance, focusing on the course content. To acknowledge the most successful groups, performance evaluations for individuals and teams are recorded on a class leaderboard.

In conclusion, cooperative learning, exemplified by the CIRC strategy, offers a promising path toward effective learning. Educators can facilitate an environment where students actively engage, collaborate, and comprehend their subjects more deeply by adhering to positive interdependence, individual accountability, equal participation, and simultaneous interaction. This approach not only fosters knowledge acquisition but also nurtures critical social and cognitive skills, preparing students for success in both academic and real-world contexts.

3. Methodology

3.1 Research Design

The chosen research design for this study was Classroom Action Research (CAR). As defined by Bell and Aldridge (2014), "teacher action research" refers to research conducted by educators within their classrooms. Pelton (2010) further emphasizes that this includes activities related to creating a conducive learning environment, fostering student interaction, planning lessons, assigning homework, and other routine teaching tasks, all of which constitute the core of action research. Classroom Action Research embodies a problem-solving methodology characterized by practical interventions and reflective analysis of their outcomes. This approach aligns with Bell and Aldridge (2014), who argue that action research aims to enhance educators' professional roles and identity, as well as the quality of teaching practices. Such research holds particular relevance when striving to improve the quality of the subjects under examination. The present study focused on enhancing students' English learning experiences through the application of the CIRC strategy.

The procedural framework for this classroom action research followed the model proposed by Kemmis et al. (2014), which involves a cyclic process of planning, acting, observing, and reflecting. In the planning phase, meticulous preparation was carried out for the implementation of the classroom action research. This included the development of learning scenarios, instructional media, and relevant materials. Tasks encompassed crafting lesson plans, designing observation sheets, generating worksheets, and formulating examination questions. During this stage, consultation with students was conducted to understand their reading preferences, and lesson plans were created that integrated the CIRC strategy as the chosen learning approach. Research instruments such as student observation checklists, test questions, and field notes were also developed to facilitate data collection.

Moving on to the acting phase, the plans devised were put into action, guided by the learning implementation strategy utilizing the CIRC approach. The researcher, who also functioned as the classroom instructor responsible for facilitating the learning process, executed the learning plan. The observing phase involved systematic observation to evaluate the impact of the interventions. Student interactions and behaviors associated with the CIRC strategy were closely monitored and assessed throughout the learning process. Finally, the reflecting phase centered on evaluating the changes or outcomes resulting from the implemented actions. This stage included a critical assessment of the collected data to gauge the effectiveness of the designed interventions. Reflection aimed to identify the strengths and limitations of the learning process, with the insights gained serving as a basis for adapting and modifying actions in subsequent research cycles.

3.2 Research Participants

The study involved 40 students in their first semester in the Computer Science program at Universitas Pattimura during the 2022/2023 academic year. This particular group of students was chosen to examine how the Cooperative Integrated Reading and Composition (CIRC) strategy could enhance their learning outcomes in English. As they embark on their academic journey in Computer Science, the first semester marks a critical stage for these students, making it an ideal time to explore innovative teaching approaches that could improve their comprehension skills. By focusing on this context, the study aimed to assess the effectiveness of the CIRC strategy in facilitating a deeper grasp of English language materials, thereby enhancing their overall educational experience.

The choice of the 2022/2023 academic year provides insight into how modern teaching methods can align with the evolving needs of students within the fast-paced field of Computer Science. Integrating the CIRC strategy within this timeframe offers an opportunity to evaluate how language comprehension skills can complement their technical knowledge. By concentrating on first-semester students in the Computer Science program at Universitas Pattimura, the study aimed to shed light on the potential benefits of incorporating the CIRC strategy, contributing to both their linguistic capabilities and future success in the dynamic world of technology.

3.3 Research Instruments and Data Analysis

The research process employed field notes to document all occurrences, encompassing lecturer and student activities. Field notes were utilized due to their capability to capture diverse facets of the classroom environment, including classroom dynamics, interactions between the lecturer and students, classroom management, the overall atmosphere, and related activities. Meanwhile, the observation checklist served as a record of student participation throughout the learning journey. Specifically, implementing the CIRC strategy was observed and documented by closely monitoring students' actions during English teaching and learning sessions. In this study, the observation checklist consisted of a Likert scale ranging from 1 to 5 with the following descriptions: 1 (Extremely Poor), 2 (Poor), 3 (Adequate), 4 (Good), and 5 (Excellent) for each scale with the total number of statements is seven. To assess the effectiveness of the learning process, a multiple-choice test with thirty questions was administered after each cycle.

In this study, data analysis took on both qualitative and quantitative dimensions. Qualitative analysis encompassed interpreting observations from the classroom learning process conducted by researchers and students. Field notes were translated into coherent statements and subjected to qualitative scrutiny. This approach aligns with Miles et al.'s (2014) analytical framework, which involves data condensation, data display, and conclusion drawing/verification as its three core components. Descriptive statistics were employed to analyze classroom observations and test results.

The students' scores, aligned with predetermined learning objectives, indicate their grasp of the instructional materials. Successful learning is indicated by students attaining the targeted learning objectives, as guided by achievement indicators (Jusmawati et al., 2018). Consequently, in this study, the criteria for success were set as follows: achieving a 70 score by at least 75% of the class (equivalent to 23 students). This criterion signaled the study's success in effectively fostering student achievement in alignment with the designated learning goals.

4. Findings

4.1 The Result of Cycle I

The initial implementation cycle of the CIRC strategy commenced in September 2022, focusing on enhancing comprehension skills related to expository texts. The subject matter covered encompassed the comprehension of texts discussing computers and electronic devices. A structured sequence of activities was executed throughout this first learning cycle, encompassing pre-, while-and post-activity stages, all meticulously designed according to the lesson plans. As the primary facilitator, the researcher assumed the role of the instructor during the entire process of implementing the CIRC strategy.

The pre-activity phase was dedicated to preparing students for effective learning engagement. It involved initiating the learning process by assessing students' readiness, providing an overview of the lesson's objectives, and gauging their prior knowledge of the subject matter. Subsequently, core learning activities unfolded, entailing the formation of five-member groups categorized by aptitude levels (high, moderate, and low). Within these groups, students were assigned texts for analysis. The critical steps of this phase are as follows:

Students were divided into groups of five, each group receiving reading materials. The lecturer encouraged students to examine the text, sharing their perspectives and opinions critically. Questions regarding the texts were welcomed, with both posing and answering questions fostering collaborative engagement among students. The lecturer played a pivotal role in clarifying responses to prevent any misconceptions. The text materials were explained, and students read through the assigned texts as a group. Worksheets were then distributed to each group, accompanied by clear instructions. Collaboratively, students worked on the worksheets and subsequently crafted summaries of the texts. Each group presented their findings to the entire class, with fellow students offering constructive feedback.

Transitioning to post-activity proceedings, the instructor concluded that the material covered and reinforced vital concepts. The learning activity sequence culminated with administering a post-test to evaluate students' comprehension levels after experiencing the CIRC strategy. This comprehensive learning cycle encompassed all the pre-requisite stages essential for effective knowledge assimilation, collaborative exploration, and individual assessment of comprehension improvements.

The data presented in Table 1 assesses how students engage and participate in the learning process, using a 5-point scale to measure their involvement in various aspects. The goal is to understand how well students apply the CIRC strategy. Students are notably attentive during lessons, earning a "Good" (4) rating for their active listening. They also exhibit moderate engagement by asking questions to clarify unclear concepts, receiving an "Adequate" (3) rating. Additionally, students show satisfactory involvement in responding to lecturer and peer questions, earning them "Adequate" (3) ratings in both cases.

Table 1. Students' Learning Activities in Cycle 1

No	Aspects	Scale					Descriptions
		1	2	3	4	5	
1	Students carefully listen to the subject being taught.				√		Good
2	Students ask questions if they do not comprehend a concept.			√			Adequate
3	Students respond to questions presented by the lecturer.			√			Adequate
4	Students respond to queries posed by their classmates.			√			Adequate
5	Groups of students discuss reading passages.			√			Adequate
6	Groups of students respond to questions regarding reading passages.				√		Good
7	Students read the outcomes of group projects.					√	Excellent
8	Students evaluate the work of other groups.		√				Poor
	Total		**27**				
	Mean		**3,37**				**Adequate**

When working in groups, students moderately participate in discussions about reading passages, earning an "Adequate" (3) rating. Moreover, they respond well to questions about these reading materials within groups, achieving a "Good" (4) rating. Notably, their engagement level excels when students read the outcomes of group projects, earning an "Excellent" (5) rating. However, their involvement declines when evaluating other groups' work, marked by a "Poor" (2) rating. The "Total" sum of checkmarks across aspects is 27, and the "Mean" average score is 3.37, falling within the "Adequate" range. This suggests that student participation and engagement during the CIRC strategy implementation are moderate and satisfactory.

Table 2. Students' Learning Achievement in Cycle 1

Students' Frequency	Category	Score
6	Excellent	85-100
12	Good	70-84
8	Adequate	55-69
3	Poor	40-54
1	Extremely Poor	0-39
	Mean Score	**69.64**

Table 2 outlines the distribution of students' performance scores across various categories, each defined by a specific score range. These categories serve as indicators of the student's level of achievement within the assessment.

Six students have attained scores falling within the "Excellent" category, corresponding to a score range of 85 to 100. This category denotes exceptional performance on the assessment, showcasing a high level of mastery of the evaluated material. Twelve students are categorized as "Good," reflecting scores ranging from 70 to 84. This signifies a commendable level of achievement, indicating a solid understanding of the subject matter. Eight students fall into the "Adequate" category, encompassing scores between 55 and 69. This suggests a satisfactory

performance, indicating a reasonable grasp of the assessed content. Three students' scores place them within the "Poor" category, ranging from 40 to 54. This category implies performance that needs improvement, indicating a limited understanding of the material.

Furthermore, one student's score falls within the "Extremely Poor" category, ranging from 0 to 39. This category signifies a significant need for improvement and a limited grasp of the assessment content. Regarding the overall performance, the mean score calculated across all students is 69.64. This mean score provides an average measure of the student's performance and indicates the overall achievement level. With a mean score falling within the "Adequate" range, the assessment results suggest moderate student understanding and performance.

After implementing the CIRC strategy and conducting the first cycle of reflection, it became evident that the students' engagement had improved but remained at an adequate level. This observation can be attributed to not all students having comprehensively grasped the strategy's procedures. Throughout the learning process, it was apparent that certain students lacked a high level of motivation to collaborate with their group members actively. Furthermore, some students encountered difficulties in effectively responding to their peers' presentations within the group setting.

In this study, the attainment of learning mastery scores reaching 70 was established as the criterion for assessing the research's success. This criterion determined whether the research should proceed to the subsequent cycle. Of the total students, 18, accounting for 60%, successfully achieved the benchmark score based on the stipulated learning outcomes. However, the remaining 12 students, constituting 40% of the group, did not attain the required level of learning achievement. While these results indicate a notable enhancement in learning outcomes compared to the initial test, the research must progress to the next cycle to address these challenges further. This decision is warranted since the research success indicator's threshold, which requires a minimum of 75% or 23 students, has not been met.

4.2 The Results of Cycle II

Embarking on Cycle II, the application of the CIRC strategy commenced in November 2022, marking the continuation of the research journey. The focus of this cycle remained dedicated to enhancing students' comprehension of expository texts. In alignment with the previous cycle, the topics explored were still centered around technology and social media. Within the framework of Cycle II, learning activities were meticulously structured into three distinct stages, mirroring the structure observed in Cycle I. These stages encompassed pre-, while-, and post-activity phases, serving as a consistent framework for the learning process.

The pre-activity phase sets the foundation for productive learning interactions by preparing students for engaged participation. This phase involved priming students with an overview of the upcoming learning material and objectives. Students' prior knowledge was harnessed to facilitate a seamless transition into the core learning activities. The while-activity phase formed the core of the learning process, where students were organized into designated groups to delve into the reading passages. The engagement with technology and social media-related content provided the context for meaningful group discussions, enabling students to extract critical insights and grapple with relevant concepts.

The culmination of Cycle II was marked by the post-activity phase, a pivotal stage for wrapping up the learning process. Here, the instructor provided students with a synthesis of the covered material, reinforcing their understanding and connecting the dots between different topic components. This phase also entailed administering a post-test to gauge the extent of students' comprehension growth following their engagement with the CIRC strategy. By adhering to the established pre-, while-, and post-activity structure, the research aimed to ensure consistency and thoroughness in implementing the strategy across both cycles, fostering an effective and progressive learning environment.

Table 3. Student Learning Activities in Cycle 2

No	Aspects	Scale					Descriptions
		1	2	3	4	5	
1	Students carefully listen to the subject being taught.				√		Good
2	Students ask questions if they do not comprehend a concept.				√		Good
3	Students respond to questions presented by the lecturer.				√		Good
4	Students respond to queries posed by their classmates.				√		Good
5	Groups of students discuss reading passages.				√		Good
6	Groups of students respond to questions regarding reading passages.				√		Good
7	Students read the outcomes of group projects.					√	Excellent
8	Students evaluate the work of other groups.				√		Good
	Total			**33**			
	Mean			**4,12**			**Good**

The data in Table 3 evaluates how students actively engage and participate in the learning process, using a scale of 1 to 5 to measure their involvement in different aspects. This assessment aims to understand how well students participate using the CIRC strategy. The data shows that students are actively engaged in various aspects of learning. They consistently show a good level of involvement, with ratings of 4 (out of 5) in aspects like listening attentively, asking questions when they do not understand, responding to both the teacher's and classmates' questions, participating in group discussions about reading materials, and answering questions related to those materials. Additionally, students show excellent engagement when reading the outcomes of group projects, indicating a high level of interest and involvement.

Table 4. Students Learning Achievement in Cycle 2

Students' Frequency	Category	Score
8	Excellent	85-100
16	Good	70-84
3	Adequate	55-69
3	Poor	40-54
	Extremely Poor	0-39
Mean Score		**75.09**

When students evaluate the work of other groups, their engagement is still good, scoring four on the scale. Overall, the total count of active participation across different aspects is 33, and the mean score is 4.12, indicating a consistently good level of student engagement throughout the learning process using the CIRC strategy. This data showcases that students are actively involved and engaged in their learning, contributing positively to the effectiveness of the CIRC strategy.

The data in Table 4 shows how well students performed in their learning. Among the students, eight achieved excellent scores (85-100), demonstrating a solid understanding of the material. Another 16 students fall into the good category (70-84), indicating they performed well and understood the subject. Two students received adequate scores (55-69), meaning they did reasonably well but have room for improvement. Three students scored in the poor range (40-54), showing some challenges in their performance but growth potential. Fortunately, no students scored extremely poorly (0-39). The students' average mean score is 75.09, indicating a relatively good overall performance. This data shows how the students fared in their learning journey, with many achieving commendable results.

5. Discussions

At the core of an engaging and enriching educational voyage lies a vital and mutually advantageous partnership between educators and students. This concept supports the ideas put forth by Zalyaeva and Solodkova (2014), who assert that collaborative learning facilitates the natural acquisition of language, nurturing students' creativity, personal growth, and emotional investment in education. This approach emphasizes informal communication between teachers and students, as well as among students. Additionally, Guthrie and Klauda (2014) underscore the significance of collaboration between teachers and students, as well as among students, which empowers students to grasp literacy practices and the accompanying cognitive proficiencies. This collaborative alliance forms the foundation for fostering intellectual growth and emotional maturity. The present study delves into the intricacies of the CIRC learning model, a fusion of cooperative learning and literacy development. Executed meticulously across two distinct cycles, the outcomes unveil a noteworthy and tangible improvement in student engagement and achievement.

The transformation witnessed in this study is best exemplified by tracking the progression of student performance in learning activities. In the initial cycle, students achieved an average score of 3.37, establishing a solid starting point. However, it was the second cycle that truly showcased the potential of this symbiotic educational approach. With educator involvement at an unprecedented level, a noticeable shift occurred in the learning landscape, resulting in a remarkable mean score of 4.12. This surge in scores is evidence of heightened dedication and proactive participation from educators, a commitment that reverberates through the student body, triggering a chain reaction of improved learning outcomes.

This resurgence in educational excellence underscores a universally acknowledged concept: genuine and meaningful learning occurs when students are not passive recipients but active architects of their knowledge. As Herrington et al. (2014) state, authentic learning pedagogy allows students to engage in practical tasks using real-world resources and tools, providing them with opportunities to learn purposefully by thinking and behaving like professionals as they tackle real problems. The CIRC model encourages such engagement by promoting collaborative

activities in reading and composition. Students now actively participate in their learning, enhancing their learning outcomes and reading comprehension skills (Hasjaya et al., 2022). Through collaboration, students acquire knowledge and refine their communication, critical thinking, and problem-solving abilities. Simultaneously, the process of reading and composition nurtures their creativity, enabling them to explore new ideas and express themselves eloquently. The learning process gains vitality through collaborative activities, such as discussion activities aimed at solving everyday problems. Collaborative learning significantly improves students' creative and critical thinking skills (Rahman et al., 2022).

At its core, the CIRC strategy seamlessly aligns to nurture critical thinking and foster dynamic engagement in the learning process. This approach mirrors the fundamental principles of constructivism. The underlying philosophy of the CIRC model harmonizes well with the constructivist ideology, which posits that learners actively construct knowledge, shaping their understanding through collaborative discourse, as proposed by Vygotsky and Cole (1978). The effectiveness of the CIRC strategy becomes evident when examining the outcomes of a comprehensive post-test consisting of a carefully crafted set of 30 multiple-choice questions. This assessment tool serves as a litmus test for the strategy's effectiveness. The trajectory of scores follows an encouraging trajectory, with average scores increasing from 69.64 in the initial cycle to a notably robust 75.04 in the subsequent cycle. This upward trend signifies a significant advancement in students' comprehension and application of the subject matter.

Moreover, concurrent data analysis reveals an even more compelling aspect of the strategy's success. The proportion of students achieving mastery over the subject matter witnessed a remarkable surge, escalating from an initial 60% to a commendable 80%. This substantial increase in mastery levels underscores the profound impact of the CIRC strategy in achieving predefined educational benchmarks and learning objectives.

Within the framework of the CIRC strategy, the learning experience gains depth and contextual relevance, forming a seamless connection between academic knowledge and real-world application (Cole, 1990). Furthermore, this approach imparts crucial skills such as embracing insights from peers, cultivating mutual respect, and fostering collaborative efforts to grasp the study material (Johnson & Johnson, 1999). Nonetheless, it is essential to acknowledge that while the CIRC model is potent in enhancing the learning journey, it also presents certain limitations. Its implementation may require a substantial time commitment, and creating an unobtrusive classroom environment during group discussions can be challenging (Slavin, 2015). A comprehensive evaluation requires understanding the CIRC strategy's strengths and constraints to appreciate its transformative impact on the learning landscape fully.

6. Conclusion

Integrating the CIRC learning strategy has showcased the potential to enhance the learning landscape by fostering meaningful engagement and collaboration among educators and students. Through two meticulously executed cycles, this study has illuminated the transformative power of active participation and cooperative learning in nurturing cognitive and affective growth. The findings underscore the pivotal role educators play in catalyzing student engagement, which, in turn, propels improved learning outcomes. This symbiotic relationship aligns with the

constructivist philosophy, advocating for collaborative discourse and active knowledge construction.

The study's results reaffirm the importance of meaningful learning experiences, where students take an active role in constructing their understanding and applying it to real-world contexts. By adhering to the CIRC strategy, students enhance their comprehension and critical thinking abilities and develop vital communication and problem-solving skills. The strategy effectively bridges the gap between theoretical knowledge and practical application, offering a holistic educational experience that resonates well beyond the classroom.

However, it is essential to recognize that while the CIRC strategy brings significant advantages, it is not without its challenges. The implementation may demand considerable time investment, and ensuring an optimal classroom atmosphere during group discussions requires careful attention. Nevertheless, these limitations do not overshadow the strategy's potential to revolutionize the learning journey.

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