FOSTERING CRITICAL THINKING SKILLS IN READING COMPREHENSION THROUGH CRITICAL THINKING STRATEGY AMONG SENIOR SECONDARY SCHOOL STUDENTS IN PANKSHIN LOCAL GOVERNMENT AREA

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Abstract

The study investigated "Fostering Critical Thinking Skills in Reading Comprehension through critical reading thinking strategy among Senior Secondary School students in Pankshin Local Government Area of Plateau State." Three objectives, three research questions and three hypotheses guided the study. The study was anchored on the Cognitive Load Theory, developed by John Sweller in the late 1980s. The researcher adopted a quasi-experimental research design. Specifically, the pre-test and post-test non-equivalent control group design was used. The population was 4,532 SS II students in Pankshin Local Government Area. The sample was 90 students who were randomly selected from two government secondary schools in the area. The sample consisted of 50 students in the experimental group and 40 students in the control group. The instrument for data collection was the Reading Comprehension Achievement Test (RCAT), which tested students' abilities in four areas of reading comprehension: identifying the main idea, answering inferential questions and answering critical questions. The instrument was subjected to content validation by experts from both English Education and Measurement and Evaluation units. Data collected were analyzed using mean and standard deviation to answer the research questions, while Analysis of Covariance (ANCOVA) was used to test the null hypotheses at a 0.05 level of significance. The results of the study showed that the use of critical thinking strategies was effective in enhancing students' achievement in reading comprehension. The following recommendations were made by the researcher: a call for teachers of English to employ critical thinking strategies and encourage students to engage actively in critical thinking activities to enhance their reading comprehension skills.

Keywords: Critical thinking, reading comprehension, students, achievement.

Introduction

Reading involves the interpretation of written or printed material, where the reader can articulate the content in their own words either to themselves or to others. The process of reading encompasses several stages, including word encoding, lexical access, assigning semantic roles, and connecting the information within a sentence to preceding sentences and prior knowledge and experiences in order to derive meaning. Reading entails various activities such as eye movement, word recognition, speech, comprehension, and vocabulary (Hilary, 2015). Essentially, when reading, the written symbols are visually perceived by the eyes and subsequently processed by the brain to form words, sentences, and paragraphs that convey a message to the reader. Reading comprehension is the act of constructing meaning while interacting with texts. Reading comprehension is an exercise aimed at improving or testing the learner's understanding of a written language. It is the ability of the reader to notice pieces of information that relate to their past experiences. Stephen (2019) maintained that it is an active engagement which includes making use of

prior knowledge. It involves drawing inferences from the words and expressions that a writer uses to communicate information, ideas and viewpoints.

Critical thinking encompasses a cognitive process that empowers individuals to go beyond surface-level understanding and delve into the depths of information. It enables students to evaluate, analyze, synthesize, and interpret information in a systematic and logical manner, fostering a deeper comprehension of the subject matter. In the context of reading comprehension, integrating critical thinking strategy provides students with a transformative learning experience (Aminu & Abdullahi, 2020). Rather than passively reading texts, students become active participants in the reading process. They are encouraged to ask questions, challenge assumptions, consider alternative perspectives, and make connections between different ideas. This active engagement not only enhances their reading comprehension abilities but also cultivates a host of essential skills that are transferable across various disciplines and real-life situations. Through critical thinking, students develop problem-solving skills, enabling them to tackle complex challenges by breaking them down into manageable parts and formulating effective strategies. Additionally, critical thinking promotes reasoning skills, allowing students to analyze and evaluate information objectively, identifying logical fallacies and inconsistencies. It also nurtures inference-making skills, enabling students to extract implicit meaning from the text, make connections, and draw conclusions based on evidence. Moreover, critical thinking fosters decision-making skills, empowering students to make informed choices by weighing different perspectives, considering consequences, and evaluating the reliability of information. By incorporating critical thinking in reading comprehension, educators provide students with a solid foundation for academic success, while equipping them with invaluable skills that will serve them well beyond the classroom.

Studies have revealed a robust and positive correlation between critical thinking strategy and reading comprehension abilities. According to Ogundele and Babatunde (2019) students who possess well-developed critical thinking strategy demonstrate an enhanced aptitude for understanding and interpreting written texts. By employing critical thinking strategies, students actively participate in the reading process, enabling them to delve deeper into the content, unravel the author's purpose and perspective, evaluate the validity of arguments, and derive insightful conclusions. Moreover, the cultivation of critical thinking strategy nurtures a profound sense of curiosity, fostering an inquisitive mindset that fuels exploration and discovery. This heightened curiosity, coupled with the ability to think critically, empowers individuals to approach texts with an open mind, question assumptions, consider alternative viewpoints, and synthesize information, thus promoting creativity and intellectual autonomy. These attributes are crucial not only for academic success but also for lifelong learning and personal growth, equipping individuals with the skills needed to navigate a complex world and make well-informed decisions. It is in line with the above that this study seeks to foster critical thinking skills in reading comprehension through critical thinking strategy among Senior Secondary Schools in Pankshin Local Government Area.

Proficient reading comprehension skills are essential for students to fully engage with course materials, develop critical thinking abilities, and achieve academic success. In the ideal scenario, students would be able to actively read, understand, and analyze a variety of texts across different subject areas, enabling them to learn effectively and reach their full potential. However, many Senior Secondary (SS II) students struggle with reading comprehension. They often have difficulty identifying the main ideas, making logical inferences, and critically evaluating the content of the texts they encounter in their

studies. This persistent challenge appears to hinder their overall academic performance and their ability to actively participate in classroom discussions and activities. The inability of SS II students to effectively comprehend reading materials has far-reaching implications. It can lead to lower scores on assessments, as students struggle to demonstrate their understanding of course content. Furthermore, it can hinder their ability to complete assignments successfully and actively participate in classroom discussions. This, in turn, may contribute to feelings of frustration, disengagement, and diminished self-confidence among the affected students. The ripple effects of these challenges may extend beyond the individual students, potentially impacting the overall academic standards and performance of the local government area. While previous studies have explored the impact of critical thinking strategies on reading comprehension in various educational contexts, there is limited research specifically focused on the application of these strategies to improve the reading comprehension skills of students. Exploring this specific context could contribute to the broader understanding of how critical thinking instruction can be effectively implemented to address reading comprehension challenges in similar educational settings, thereby informing more targeted and evidence-based interventions.

The concept of reading comprehension is a never-ended concept to be discussed. Christopher (2017) stated that reading is the art of creating meaning with text. The two keywords here are creating and meaning. If there is no meaning being created, there is no reading taking place. To do this practice, the way readers can understand and create the meaning of what they read will depend on how they can perceive as well as to make sense of words, sentences, or even a connected text in their mind or thought. This process will require the readers to use background knowledge, vocabulary, grammatical knowledge, experience of the readers to help them in comprehending the written text. Reading is a complex activity that requires a deep understanding. For that reason, there are two levels of reader-upper and lower level. For those who are upper, they are decoding and establishing meaning at the same time as they are responding to what they read, selecting particular aspects for consideration and evaluating effects. At the lower level, emphasis is placed on accurate and fluent reading and on reading with understanding. Responses to texts are included at all levels but become more prominent later, as do strategies for information retrieval. It is the sense of a text as an artifact and critical evaluation of it which distinguishes someone's responses at the upper level (Muhammad & Alkali, 2022). From this explanation, the upper level is more critical than the lower. Reading comprehension can be defined as the process of reading, understanding, assimilating and interpreting what is contained in a reading material, be it a passage, a novel, an article or textbook.

There are different levels of reading comprehension. The first level of comprehension, known as **literal level**, is where a reader reads the printed page in order to have a factual understanding of the given passage. Wakkai and Mahfoodh (2023) regard the literal level as that which requires understanding of ideas and information explicitly stated in a passage. The reader at this level of comprehension does not need to go outside the text for its given or required information. For instance, the five w's: who, what, where, when, and which, are questions that can be asked in literal comprehension. The second level is the **inferential comprehension** which involves going beyond the explicit information presented in the text to make logical inferences and draw conclusions based on implicit or indirect cues. According to Adeoluwa, Ojo and Makinde (2021) inferential comprehension requires readers to read between the lines and use their background

knowledge and critical thinking strategy to make connections and draw conclusions. It involves understanding the author's intended message and the underlying meaning of the text. The highest level of reading comprehension is the critical/evaluative level. At this level, readers not only understand the text but also engage in critical thinking and evaluation. They are able to evaluate the author's arguments and evidence and form their own informed opinions. This level of comprehension is essential for developing independent thinkers and active citizens. It encourages students to question and challenge the text, fostering a deeper understanding of complex issues. By engaging in critical and evaluative reading, students are better equipped to analyze and interpret information in other areas of their lives, both academically and personally. They examine the text's reliability, credibility, and validity, questioning the author's assumptions, biases, and arguments. In addition, Aiyewumi (2019) postulated that critical reading allows students to develop their own opinions and perspectives on the text, rather than simply accepting what is presented at face value.

Reading comprehension skills are essential for understanding and extracting meaning from written texts. They enable readers to engage with the material, comprehend the author's message, and make connections between ideas. Reading comprehension skills include identifying main ideas (involves recognizing the most important information or argument that the author is trying to convey), identifying supporting details (explanations that reinforce the main idea), Critical Thinking, summarization (condensing the main ideas and key details of a text into a concise and coherent form), retelling (the ability to recount or narrate the main events or ideas of a text in one's own words), and making notes (recording key points, main ideas, supporting details, and personal reflections while reading).

Critical thinking is a cognitive process that involves the ability to analyze, evaluate, and make reasoned judgments (Abrami, 2015). As a teaching strategy, the Critical Thinking Strategy (CTS) is designed to foster these essential intellectual skills in students. By incorporating CTS into lesson plans, educators can help students develop the skills needed to think critically about complex issues, solve problems creatively, and make informed decisions. This approach encourages students to question assumptions, consider alternative perspectives, and support their arguments with evidence. Ultimately, the goal of CTS is to empower students to become independent thinkers who can navigate the challenges of the modern world with confidence and clarity. One of the core principles of CTS is the emphasis on questioning assumptions and exploring alternative perspectives (Phan, 2019). By challenging students to think beyond the surface level of information, CTS encourages them to delve deeper, consider multiple viewpoints, and engage in reflective reasoning. The effectiveness of CTS as a teaching strategy has been well-documented in educational research. Studies have shown that students who participate in CTS-based instruction demonstrate improved academic performance, enhanced critical thinking skills, and a greater ability to apply knowledge to novel situations (Phan, 2019). Overall, the use of CTS in the classroom has proven to be a valuable tool for promoting active learning and student engagement. From an educational point of view, when students read text critically they are more motivated and more likely to use other processes that lead to effective comprehension. It is important for students to be capable of reading expository texts critically; reasoning through reading is an ability widely needed in the educational curriculum. Furthermore, according to Jones (2018), critical reading not only empowers students in second language learning skills such as vocabulary and reading, but also teaches them how to reach real understanding of texts and how to think about them

with a critical view. A critical reader performs a mental action on the word-form and makes associations between the context and his own personal knowledge to infer word meanings (Wallace, 2013).

Teaching in critical reading is based on Meta cognitive techniques in which the reader learns to exercise conscious control of of the reading process based on one's purpose as reader and the demands of the text (Kamil, 2016. P. 54). Along these lines, there has been a strong effort towards developing effective strategies, techniques, and model lessons to foster critical reading and higher level thinking skills in reading. However, to fully understand a text and critically analyze it, different steps in the form of strategies were adopted in this study from Sousa (2014, pp. 105-106) which include previewing, contextualizing, questioning, reflecting, outlining and summarizing, evaluating an argument, and comparing and contrasting related readings. The study is anchored on the Cognitive Load Theory, developed by John Sweller in the late 1980s, which explores how the brain processes and retains information based on the limitations of working memory. This theory emphasizes the role of intrinsic, extraneous, and germane cognitive load in learning, highlighting how critical thinking strategies like analysis, inference, and evaluation influence students' ability to comprehend texts effectively. It also considers individual differences in cognitive capacity, allowing researchers to examine how varying levels of critical thinking skills impact reading achievement among SS II students. Additionally, the theory provides insight into the mental effort required for processing information, helping to determine whether critical thinking strategies enhance or hinder comprehension due to cognitive overload. Through applying this framework, the study seeks to understand the relationship between critical thinking strategies and students' reading comprehension outcomes in Pankshin Local Government Area.

Purpose of the Study

The main purpose of this study is to determine how critical thinking strategy can foster critical thinking skills in reading comprehension among Senior Secondary School students in Pankshin Local Government Area. Specifically, the determined:

1. the pre-test and post-test achievement of students to identify main idea in reading comprehension in the experimental and control groups.
2. the pre-test and post-test achievement of students to answer inferential questions in reading comprehension in the experimental and control groups.
3. the pre-test and post-test achievement of students to answer critical questions in reading comprehension in the experimental and control groups.

Research Questions

The following research questions are raised to guide the study:

1. What are the pre-test and post-test achievement of students in identifying main idea in reading comprehension by the experimental and control groups?
2. What are the pre-test and post-test achievement of students in answering inferential questions in reading comprehension by the experimental and control groups?
3. What are the pre-test and post-test achievement of students in answering critical questions in reading comprehension by the experimental and control groups?

Hypotheses

The following hypotheses are formulated to guide the study and they will be tested at 0.05 level of significance in this study:

Ho₁: There is no significant difference in the mean achievement scores of students who were exposed to critical thinking strategy and those who were not exposed to it in ability to identify main ideas in reading comprehension.

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Methods

This study employed the quasi-experimental design, specifically the non-equivalent pre-test and post-test control group design. The population comprised 4,532 SS II students in Pankshin Local Government Area. The sample consisted of 90 SS II students selected from two government senior secondary schools in Pankshin Local Government Area. The experimental group consists 50 students while the control group consists of 40 students. The experimental group was taught for a period of one month. The instrument utilized for data collection was a test titled "Reading Comprehension Achievement Test (RCAT)" The RCAT measures a student's ability to understand and interpret written text, usually administered following a period of instruction to teach the motor or cognitive skill to be examined. This test was adapted from WAEC 2023 past examination questions to ensure alignment with the curriculum and standards. The data for the study were collected, organized, and interpreted using descriptive and inferential statistics. The mean score was used to answer the research questions while Analysis of covariance (ANCOVA) was used to test the hypotheses at 0.05 level.

Results

Research Question One: What are the pre-test and post-test achievement of students to identify main idea in reading comprehension in the experimental and control groups?

Table 1: Pre-test and post-test Achievement Scores of Students to Identify Main Idea in the Experimental and Control Groups

Group	N	Pre-test Mean	SD	Post-test Mean	SD	Mean Gain	$\overline{x}$ - difference
Experimental	50	22.80	9.91	61.38	12.70	38.58	
							16.58
Control	40	22.50	8.70	44.50	11.08	22	

Table 1 presents the pre-test and post-test achievement mean score of students to identify main idea in the experimental and control groups. In the experimental group the post-test achievement mean score was 61.38 and standard deviation of 12.70 higher than the pre-test mean score of 22.80 and standard deviation of 9.91 with a mean gain of 38.58, indicating that there was improvement in the achievement of students after treatment. Also, for the control group the mean score was 22.50 and a standard deviation of 8.70 at the pretest. The post-test mean score of students rouse to 44.50 and a standard deviation of 11.08. The findings show that students in the experimental group had a higher achievement mean score (61.38) after treatment using metacognitive strategies than those in the control group (44.50) who were not given treatment with a mean difference of 16.58. This means that at the pre-test the students in both groups had a poor achievement and were at the same level of achievement, but after the intervention the experimental group performed better than the control group. It can be deduced that critical thinking

strategydo improve students' achievement in identifying main idea in a reading comprehension.

Research Question Two: What are the pre-test and post-test achievement of students to answer critical questions in reading comprehension in the experimental and control groups?

Table 2: Pretest and Posttest Achievement Scores of the Students to Answer Critical Questions in the Experimental and Control Groups

Group	Test	N	$\overline{X}$	SD	Mean Gain	Mean Difference
Experimental	Pre-test	50	27.20	10.89	32.76	
	Post-test	50	59.96	14.57		9.01
Control	Pre-test	40	22.25	10.50	23.75	
	Post-test	40	46.00	10.81		

Table 2 shows that the students taught using critical thinking strategy and those taught without, had pre-test mean scores of 27.20 and 22.25 with standard deviation scores of 10.89 and 10.50 respectively. The post-test mean scores of the experimental and control groups are 59.96 and 46.00, with standard deviation scores of 14.57 and 10.81, respectively. The mean gains were 32.76 and 23.75 for the students' in answering critical questions taught reading comprehension using critical thinking strategy and those taught without respectively with a mean difference of 9.01. This implies that critical thinking strategy do help improve students' achievement in answering critical questions in a reading comprehension.

Research Question Three:" What are the pre-test and post-test achievement of students to answer inferential questions in reading comprehension in the experimental and control groups?

Table 3: **Pre-test and post-test Achievement Scores of Students to Answer Inferential Questions in the Experimental and Control Groups**

Group	N	Pre-test		Post-test		Mean Gain	$\overline{x}$ - difference
		Mean	SD	Mean	SD		
Experimental	50	29.20	9.66	64.56	15.16	35.36	
							18.61
Control	40	25.25	9.06	42.00	7.91	16.75	

Table 3 reveals the pre-test and post-test achievement mean score of students to answer inferential questions in the experimental and control groups. In the experimental group the post-test achievement mean score was 64.56 and standard deviation of 15.16, higher than the pre-test mean score of 29.20 and standard deviation of 9.66 with a mean gain of 35.36, indicating that there was improvement in the achievement of students after treatment. Also, for the control group the mean score was 25.25 and a standard deviation of 9.06 at the pretest. The post-test mean score of students rouse to 42.00 and a standard deviation of 7.91. The findings show that students in the experimental group had a higher achievement mean score after treatment using critical thinking strategy than those in the control group who were not given treatment with a mean difference of 18.61. This means that at the pre-test the students in both groups had a poor achievement, but after the intervention the experimental group performed better than the control group. This implies that critical thinking strategy do improve students' achievement in answering inferential questions in a reading comprehension.

Hypotheses

Hypothesis One: There is no significant difference in the achievement of students who were exposed to critical thinking strategy and those who were not exposed to it in ability to identify main ideas.

Table 4: **ANCOVA Result on Post-Test Mean Achievement Scores of Students to Identify Main Ideas**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	6776.282[a]	2	3388.141	24.060	.000	.356
Intercept	29182.001	1	29182.001	207.229	.000	.704
Covariate	444.407	1	444.407	3.156	.079	.035
Group	6276.505	1	6276.505	44.571	.000	.339
Error	12251.373	87	140.820			
Total	280281.000	90				
Corrected Total	19027.656	89				

a. R Squared = .356 (Adjusted R Squared = .341)

Analysis of Covariance (ANCOVA) was conducted to determine if a significant difference exists in the posttest achievement mean score of students to identify main ideas when exposed to critical thinking strategy and those not exposed. Table 4 shows that $F(1,87) = 44.57$, $p < 0.05$, since the p-value of 0.000 is less than 0.05 level of significance, the null hypothesis was rejected, indicating that there was a significant effect of critical thinking strategy on achievement of students to identify main ideas. The result further reveals an adjusted R squared value of .341 which means that 34.1 percent of the variation in the dependent variable which is achievement in identifying main ideas is explained by variation in the treatment of critical thinking strategy, while the remaining is due to other factors not included in this study. This implies that critical thinking strategy can help improve students' achievement to identify main ideas in a reading comprehension.

Hypothesis Two: There is no significant difference in the achievement of students who were exposed to critical thinking strategy and those who were not exposed to it in ability to answer critical questions.

Table 5: ANCOVA Result on Post-Test Mean Achievement Scores of Students to Answer Critical Questions

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4440.717[a]	2	2220.359	13.006	.000	.230
Intercept	35406.015	1	35406.015	207.403	.000	.704
Covariate	110.015	1	110.015	.644	.424	.007
Group	3810.849	1	3810.849	22.323	.000	.204
Error	14851.905	87	170.712			
Total	279362.000	90				
Corrected Total	19292.622	89				

a. R Squared = .230 (Adjusted R Squared = .212)

Table 5 shows the Analysis of Covariance (ANCOVA) result on the post-test achievement mean score of students when exposed to critical thinking strategy and those not exposed to the critical thinking strategy in ability to answer critical questions. The result yielded $F(1,87) = 22.32$, $p < 0.05$, since the p-value of 0.000 is less than 0.05 level of significance, the null hypothesis was rejected, indicating that there was a significant effect of critical thinking strategy on achievement of students ability to answer critical questions. The result further reveals an adjusted R squared value of .212 which means that 21.2 percent of the variation in the dependent variable which is achievement in students' ability to answer critical questions and is explained by variation in the treatment of critical thinking strategy, while the remaining is due to other factors not included in this study. This implies that critical thinking strategy can help improve students' achievement in answering critical questions in a reading comprehension.

Hypothesis three: There is no significant difference in the mean achievement scores of students who were exposed to critical thinking strategy and those who were not exposed to it in the ability to make inferences.

Table 6: **ANCOVA Result on Post-Test Achievement Mean Scores of Students in Ability to Make Inferences**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	9886.704ᵃ	2	4943.352	27.103	.000	.384
Intercept	29559.165	1	29559.165	162.063	.000	.651
Covariate	142.624	1	142.624	.782	.379	.009
Group	9810.612	1	9810.612	53.788	.000	.382
Error	15868.196	87	182.393			
Total	284643.000	90				
Corrected Total	25754.900	89				

a. R Squared = .384 (Adjusted R Squared = .370)

Analysis of Covariance (ANCOVA) was conducted to determine if a significant difference exists in the post-test mean achievement score of students to make inferences when exposed to critical thinking strategy and those not exposed. Table 6 shows that $F(1,87) = 53.79$, $p < 0.05$, since the p-value of 0.000 is less than 0.05 level of significance, the null hypothesis was rejected, indicating that there was a significant effect of critical thinking strategy on achievement of students ability to make inferences. The result further reveals an adjusted R squared value of .370 which means that 37 percent of the variation in the dependent variable which is achievement in ability of students to make inferences is explained by variation in the treatment of critical thinking strategy, while the remaining is due to other factors not included in this study. This implies that critical thinking strategy can help improve students' achievement in making inferences in a reading comprehension.

Discussion

The study examined how critical thinking strategy can foster critical thinking skills in reading comprehension in reading comprehension among Senior Secondary School students in Pankshin Local Government Area. The findings on the pre-test and post-test achievement of students to identify main idea in the experimental and control groups revealed that at the Pre-test, students in both groups had a poor achievement and were

almost at the same level, but after the intervention, the experimental group performed better than the control group. It means that critical thinking strategy improves students' achievement in identifying main idea in a reading comprehension. This finding agrees with that of Johnson (2018) who found out that critical thinking strategy has positive impact on the achievement of students in identification of main idea as students who were exposed to critical thinking strategy outperformed students who were not exposed to the strategy. The findings on the pre-test and post-test achievement of students to answer critical questions in the experimental and control groups indicated that at the Pre-test, students in both groups had a poor achievement and were almost at the same level, but after treatment using critical thinking strategy, the experimental group performed better than the control group. It means that critical thinking strategy do improve students' achievement in answering critical questions in a reading comprehension. This finding aligns with that of Abdulbaki, Suhaimi, Alsaqqaf and Jawad (2018) who found out those students who were exposed to critical thinking strategy enhanced students' performance in answering critical questions.

The findings on the pre-test and post-test achievement of students to answer inferential questions in the experimental and control groups to answer inferential questions revealed that at the Pre-test, students in both groups had a poor achievement and were almost at the same level, but after the intervention, the experimental group performed better than the control group. It means that critical thinking strategy do improve students' achievement in answering inferential questions in a reading comprehension. This finding is in line with that of Bagga (2018), which indicated that students who were exposed to critical thinking strategy in reading comprehension where able to outperform those who were not exposed to the strategy in answering inferential questions in reading comprehension.

Conclusion

Based on the findings, the study concludes that the use of critical thinking strategies fostered critical thinking skills. The experimental group that received instruction using critical thinking strategies demonstrated markedly higher post-test scores compared to the control group across all the measured dimensions - identifying main ideas, answering critical questions, decoding unfamiliar words, and answering inferential questions. The mean gains for the experimental group were consistently much larger than the control group, indicating the critical thinking approach was highly effective at improving students' overall reading comprehension abilities. The study provides strong evidence that incorporating explicit critical thinking instruction into the teaching of reading comprehension can lead to substantial improvements in students' mastery of key comprehension skills. The findings suggest education policymakers and teachers should consider adopting critical thinking-based instructional methods to enhance the reading achievement of secondary school students.

Recommendations

Based on the findings of this study, the following recommendations are made:
1. Policy makers should implement policies that mandate the integration of critical thinking strategies into the curriculum and instructional approaches for teaching reading comprehension at the secondary school level.
2. Policy makers should provide comprehensive teacher training programs to equip educators with the knowledge and skills to effectively utilize critical thinking-based methods for enhancing students' reading comprehension abilities.

3. School administrators should ensure that schools under their supervision allocate sufficient resources, including instructional materials and professional development opportunities, to support the implementation of critical thinking strategies for reading comprehension instruction.
4. School administrators should monitor and evaluate the effectiveness of critical thinking-based approaches in improving students' reading comprehension outcomes within their schools.
5. Teachers should adopt and consistently apply critical thinking strategies, such as those demonstrated in the study, when teaching reading comprehension to secondary school students.

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