

## Enhancing Effective Reading Comprehension through the Use of Reciprocal and Cooperative Instructional Strategies

<sup>1</sup>OKECHALU, Emmanuel, <sup>2</sup>ALIYU, Nanahauwa O., <sup>3</sup>GUMA, Hauwa

Corresponding author: [ema81\\_70@yahoo.com](mailto:ema81_70@yahoo.com)

<sup>1</sup>FCT Secondary Education Board, Area 3, Abuja

<sup>2</sup>FCT Local Education Authority, Gwagwalada, Abuja

<sup>3</sup>Federal College of Education (Special) Oyo

DOI: <https://doi.org/10.5281/zenodo.19381711>

---

### Abstract

*This study investigated enhancing effective reading comprehension through the use of reciprocal and cooperative instructional strategies. The research set out to determine whether a comparative difference exists in the mean scores in the reading comprehension performance of secondary school students, Abuja, taught using reciprocal, cooperative and the conventional instructional strategies particularly at the literal, inferential and critical levels. A pre-test, post-test, control group, non-randomized quasi-experimental design was adopted for the study. To guide the study, four research questions were raised. Through purposive sampling technique, a sample of 98 SSS 2 students were drawn from three senior secondary schools in Gwagwalada Area Council, Federal Capital Territory, Abuja. Data were collected through the use of the research instrument called the Reciprocal and Cooperative Strategies Based Test – adopted from the reading comprehension sections of the West African Examination Council examinations titled Senior School Certificate Examinations (SSCE). Mean statistics were used to answer the research questions. The results indicated significant difference exist in the reading comprehension performance of secondary school students exposed to reciprocal and cooperative instructional strategies. It was recommended that educators integrate the reciprocal and cooperative instructional strategies into their teaching methodologies. This will enhance students' literal, inferential and critical comprehension skills.*

**KEY WORDS:** Reciprocal Instructional Strategy, Cooperative Instructional Strategy, Conventional Instructional Strategy, Reading Comprehension, Secondary School Students.

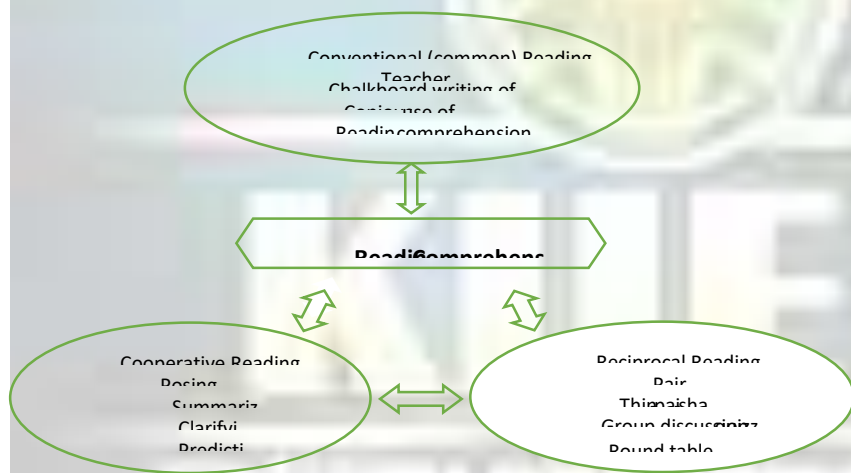
## Introduction

In today's co-educational settings especially when expressions like boys or girls' under-achievement in language skills in general, or reading comprehension in particular is discussed, it is imperative to note that studying the effect of gender on language learning is quite important. The current study therefore investigated the relationship between gender and reading comprehension performance at the literal, inferential and critical levels of reading comprehension using the reciprocal, cooperative and conventional instructional strategies. The comparison of the performance of male and female students on each of the three levels of reading comprehension will enable one to assess the effect and relationship between gender and reading comprehension performance.

For students to achieve effective reading comprehension ability, especially at higher level of education, they need to have developed evaluative thinking, to be capable of using strategies to learn independently by themselves (Schleicher, 2019). This requires a combination of critical thinking and problem solving abilities. The reciprocal and cooperative instructional strategies, if correctly employed, are strategies that can effectively enhance students' reading comprehension performance and equally provide additional value for potential attributes such as critical thinking, problem-solving abilities, creativity and innovation (Nurie 2017). The use of reading instructional strategies effectively improves the reading abilities of most students, expands their interaction with the text, and most importantly, students not only comprehend the text but also remembered every part of the story they have read (Banditvilai, 2020). For successful use of instructional strategies, teachers need to develop a structure for their students according to their needs, abilities and the type of print they work with (McNamara & Kendeou, 2022). The Reciprocal teaching is a method of instruction that teaches learners mental techniques which helps the students to improvise upon their skills regarding comprehension while reading (Oczkus, 2018). The Reciprocal instructional strategy focuses on explicit instruction in four comprehension-fostering activities: predicting the content of a text, formulating questions, clarifying unfamiliar words and summarizing the main idea of a text (Aktas, 2025). These activities are embedded in dialogic teaching and small group discussions, in which the responsibility for using reading strategies are gradually handed over from the teacher to the student (Lee & Tsai, 2017). The word cooperative is derived from cooperation: working together to accomplish shared goals (Altun, 2015). When cooperating, individuals work to achieve outcomes that benefit themselves and all other group

members. Cooperative learning is as an active process where students take an active part in their learning development cooperating to accomplish their learning goals and acquire new knowledge according to their interests, needs and skills (Gillies, 2016). By implementing cooperative learning, small teams with different levels of ability can use variety of learning activities to improve their understanding of a text (Iliyas, 2022). In other words, cooperative learning is a learning strategy, which covers both individual and small group learning in a mixed team. The learning activities are designed to improve students' cooperation and independence in comprehending materials. However, this learning strategy emphasizes the role of individual participation to determine the group achievement in the learning process (Klinger, Vaughn, & Boardman, 2015) in order to forestall the growing decline in external examination performance (Okika, 2021).

### Diagrammatic representation of the framework of the study



The diagram above shows reading comprehension at the heart of the study. Reading comprehension in this process is confronted in three possible ways that was ultimately evaluated. The dots after every instructional highlights depict the relative impacts of each of the techniques of the different strategies to the general reading comprehension at the secondary school level. One of the fundamental aspects is the influence of each of the learning process. In the conventional instructional strategy, the strategies employed to overcome reading comprehension difficulties, are mostly the identification of strange or difficult words, copious use of dictionary and reading comprehension exercises. However, it is

imperative to point out that the whole meaning of a reading comprehension text is not based on the sum of the meanings of the words that composed a text. It is therefore, necessary to apply different strategies to develop a significant learning process. For example, the development of meaningful tasks that allow the progress of communicative, linguistic functions and the structure of sentences in an oral or written way as obtained in the reciprocal and cooperative instructional strategies. In addition, the use of visual materials and the elaboration of text in which they can include central themes could be appropriate.

### **Research Objectives**

- i. to determine if a comparative difference exists in students' mean scores in reading comprehension based on exposure to the reciprocal, cooperative and the conventional instructional strategies;
- ii. examine whether or not, a comparative difference exists in the students' mean scores at the literal level, on the basis of being male and female, in reading comprehension based on exposure to the reciprocal, cooperative and conventional instructional strategies;
- iii. find out if a comparative difference exists in the students' mean scores at the inferential level, on the basis of being male and female, in reading comprehension based on exposure to the reciprocal, cooperative and conventional instructional strategies; and
- iv. determine if a comparative difference exists in the students' mean scores at the critical level, on the basis of being male and female, in reading comprehension based on exposure to the reciprocal, cooperative and conventional instructional strategies.

### **Research Questions**

- i. What is the comparative mean scores difference in the reading comprehension of students taught using the reciprocal, cooperative and conventional instructional strategies?
- ii. What is the comparative difference that exists in the students' mean scores, at the literal level, on the basis of being male and female, in reading comprehension based on exposure to reciprocal, cooperative and conventional instructional strategies?
- iii. What is the comparative difference that exists in the students' mean scores, at the inferential level, on the basis of being male and female, in reading comprehension based on exposure to reciprocal, cooperative and conventional instructional strategies? and

- iv. What is the comparative difference that exists in the students' mean scores, at the critical level, on the basis of being male and female, in reading comprehension based on exposure to reciprocal, cooperative and conventional instructional strategies?

### **Hypotheses**

The following null hypotheses are formulated and tested at 0.05 level of significance:

H0<sub>1</sub>: There will be no significant difference in students' gain scores of reading comprehension based on exposure to reciprocal, cooperative and conventional instructional strategies.

H0<sub>2</sub>: There will be no significant difference in students' gain scores, at literal level, of reading comprehension, on the basis of being male and female, based on exposure to the reciprocal, cooperative and the conventional instructional strategies.

H0<sub>3</sub>: There will be no significant difference in students' gain score, at inferential level, of reading comprehension, on the basis of being male and female, based on exposure to the reciprocal, cooperative and the conventional instructional strategies.

H0<sub>4</sub>: There will be no significant difference in students' gain scores, at critical level, of reading comprehension, on the basis of being male and female, based on exposure to the reciprocal, cooperative and the conventional instructional strategies.

### **Methodology**

This research work adopted a pre-test, post-test, control group, non-randomized quasi-experimental design. The pre-test was used to establish the equivalence of the experimental and control groups, while the post-test was used to determine the effect of reciprocal and cooperative instructional strategies on the reading comprehension performance of the students, compared to the conventional instructional strategy. The design consisted of three instructional groups (Reciprocal Instructional Strategy, Cooperative Instructional Strategy and Conventional Instructional Strategy) which are the independent variables. The dependent variables are the students' reading comprehension performance at the literal, inferential and critical levels. The participants consisted of 98 SSS2 students from three (3) secondary schools in Gwagwalada Area Council, Federal Capital Territory, Abuja. The sample size of the experimental and control groups are the number of students in the intact classes chosen randomly in the three schools. The study employed purposive and random sampling techniques for all stages of

selection. In this selection method, all the individuals have an equal opportunity to participate in the study. At the first stage, purposive sampling was used in selecting one area council out of the six area councils in the Federal Capital Territory, Abuja. At the second stage, three senior secondary schools were randomly selected from the area council selected for the study through the “hat and draw” method. The selected schools have shared characteristics. In the third stage, the SS II arms were selected using the simple random sampling technique. The names of all the arms of SS II were written on a piece of paper, folded and shuffled vigorously. Thereafter, the research assistants randomly picked one paper, and the arm picked was used for the study in that school. Two of the three participating schools were randomly assigned to the experimental groups, while the third was assigned to the control group. The instrument for this study are reading comprehension tests tailored to the contents of the English language course taken by all students in the senior secondary school class in order to evaluate the effectiveness of the reciprocal and cooperative instructional strategies in the teaching of reading comprehension. The reading comprehension sections of the West African Examination Council (WAEC) examinations titled Senior School Certificate Examinations (SSCE) for the years 2024 and 2023 was adopted to measure participants’ reading comprehension test performance in the pre-test and post-test in this study. The analysis of data gathered for this study was Mean scores of students in the pre-test and post-test assessments administered in the study. The research questions were answered using mean statistics, while the hypotheses were tested using Analysis of Covariance (ANCOVA).

## Results

**Research Question 1:** What is the comparative difference generally in the mean scores in the reading comprehension performance of students taught using the reciprocal, cooperative and conventional instructional strategies?

Table 1: Means of Performance of students taught using reciprocal, cooperative and conventional instructional strategies

Group	Test	% Mean Score	Mean Gain	Minimum Score	Maximum Score	Remark
Reciprocal	Pre-test	31.06	14.53	1.00	68.00	Significant
	Post-test	45.59		3.00	84.00	
Cooperative	Pre-test	33.28	16.25	15.00	50.00	Significant

	Post-test	49.53		40.00	62.00	
Conventional	Pre-test	15.38	12.18	1.00	32.00	Significant
	Post-test	27.56		3.00	54.00	

The comparative difference in the mean and mean gain scores of students taught using reciprocal, cooperative and conventional instructional strategies is shown in Table 1. The pre-test mean score of students exposed to reciprocal instructional strategy is 31.06, while the post-test mean score is 45.59. The reciprocal instructional strategy mean gain score is 14.53. The pre-test mean score for the cooperative instructional strategy is 33.28, while the post-test is 49.53. The mean gain score is 16.25. With respect to the conventional instructional strategy, the pre-test mean score is 15.38, while the post-test is 27.56. The mean gain score is 12.18. Looking at the comparative differences of the mean gain score of the students exposed to reciprocal, cooperative and conventional instructional strategies, there is a significant difference in the mean gain test score of students exposed to cooperative instructional strategy compared to those exposed to reciprocal and conventional instructional strategies.

**Research Question 2:** What is the comparative difference that exists in the students’ mean scores, at the literal level, on the basis of being male and female, in reading comprehension based on exposure to reciprocal, cooperative and conventional instructional strategies?

Table 2: Means of Performance of male and female public secondary school students in Federal Capital Territory, Abuja, at literal level introduced to reciprocal, cooperative and conventional Instructional strategies

Group	Test	%Mean Score	%Mean Gain	Pre-test	Post-test	Difference
Reciprocal	Male	36.67	26.66	13.00	24.00	11
	Female	63.33		27.00	37.00	10
Cooperative	Male	52.38	4.76	29.00	24.00	0.5
	Female	47.62		24.00	24.00	0.00
Conventional	Male	65.22	30.44	22.00	43.00	21
	Female	34.78		9.00	26.00	17

At literal level, the gender difference in mean score of the public secondary school students in Federal Capital Territory, Abuja, was recorded as shown in Table 2. The male students exposed to cooperative and conventional instructional strategies (52.38, 65.22) respectively performed better than the female students (47.62, 34.78). At the exposure to the cooperative instructional strategy the mean score performance is not significant. However, at the exposure to the reciprocal instructional strategy, the female students (63.33) performed better than the male students (36.67) judging by their mean score performance.

**Research Question 3:** What is the comparative difference that exists in the students’ mean scores, at the inferential level, on the basis of being male and female, in reading comprehension based on exposure to reciprocal, cooperative and conventional instructional strategies?

Table 3: Means of Performance of male and female public secondary school students in Federal Capital Territory, Abuja at inferential level

Group	Test	%Mean Score	%Mean Gain	Pre-test	Post-test	Difference
Reciprocal	Male	55.56	11.12	22.00	33.00	11
	Female	44.44		17.00	27.00	10
Cooperative	Male	57.14	14.28	9.00	48.00	39
	Female	42.86		14.00	29.00	15
Conventional	Male	66.67	33.34	11.00	56.00	45
	Female	33.33		11.00	22.00	11

At Inferential level, the gender difference in mean score of the public secondary school students in Federal Capital Territory, Abuja, was recorded as shown in Table 3 above. The male students (55.56, 57.14, 66.67) performed better than the female students (44.44, 42.86, 33.33) when exposed to the reciprocal, cooperative and conventional instructional strategies respectively at the inferential level.

**Research Question 4:** What is the comparative difference that exists in the students’ mean scores, at the critical level, on the basis of being male and female, in reading comprehension based on exposure to reciprocal, cooperative and conventional instructional strategies?

Table 4: Means of Performance of male and female public secondary school students in Federal Capital Territory, Abuja, at critical level introduced to reciprocal, cooperative and conventional Instructional strategies

Group	Test	%Mean Score	%Mean Gain	Pre-test	Post-test	Difference
Reciprocal	Male	33.33.	33.34	17.00	17.00	0.00
	Female	66.67		33.00	33.00	0.00
Cooperative	Male	47.37	5.00	16.00	32.00	16
	Female	52.63		11.00	42.00	31
Conventional	Male	60.00	20.00	20.00	40.00	20
	Female	40.00		0.00	40.00	40

At the Critical level, the gender difference in mean score of the public secondary school students in Federal Capital Territory, Abuja, was recorded, as shown in Table 4 above. It shows that the female students (66.67, 60.00) performed lower than the male students (33.33, 47.37) upon exposure to the reciprocal and cooperative instructional strategies. However, the males performed better (60.00) upon exposure to the conventional instructional strategy compared to the female students (40.00).

### Hypotheses

H<sub>01</sub>: There will be no significant difference in students' gain scores of reading comprehension based on exposure to the reciprocal, cooperative and conventional instructional strategies.

Table 5: Analysis of Covariance for post-test scores of students introduced to Reciprocal, Cooperative and Conventional Instructional strategy.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	18361.041 <sup>a</sup>	3	6120.347	29.540	.000
Intercept	9359.492	1	9359.492	45.173	.000
Pretest	9538.130	1	9538.130	46.035	.000
ISD	1031.301	2	515.651	2.489	.088

Error	19475.949	94	207.191
Total	202493.000	98	
Corrected Total	37836.990	97	

a. R Squared = .485 (Adjusted R Squared = .469)

Table 5 shows the analysis of covariance summary for the performance of students exposed to the different comprehension skills using reciprocal, cooperative and conventional instructional strategies. Generally, the overall performance of the students in the pre-test (26.57) is lower compared to the post-test (40.83) as shown in table 1, and the difference is statistically significant  $F(1, 94) = 46.04, p \leq 0.001$  (Table 5). However, this suggest that there is a significant difference generally in the pre-test and post-test mean scores of Public Secondary School Students, Abuja who were taught reading comprehension skills using the reciprocal, cooperative and the conventional instructional strategies.

H0<sub>2</sub>: There will be no significant difference in students' gain scores, at literal level, of reading comprehension, on the basis of being male and female, based on exposure to the reciprocal, cooperative and the conventional instructional strategies.

Table 6: Analysis of Covariance for the performance of students based on Gender at Literal level introduced to Reciprocal, Cooperative and Conventional Instructional strategies

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	25.038 <sup>a</sup>	2	12.519	1.167	.344
Intercept	111.588	1	111.588	10.405	.007
Pretest	7.608	1	7.608	.709	.416
Gender LITERAL	22.985	1	22.985	2.143	.169
Error	128.695	12	10.725		
Total	549.000	15			
Corrected Total	153.733	14			

a. R Squared = .163 (Adjusted R Squared = .023)

The analysis of covariance for the performance of public secondary school students in Federal Capital Territory, Abuja, based on Gender at literal level introduced to reciprocal, cooperative and conventional Instructional strategies is shown in Table 6. Adopting the literal skill in accessing student, the mean performance of the male students was not significantly different ( $F(1, 12) = 2.14, p = 0.169$ ) from that of the female students in both pre-test and post-test assessment evaluated at the Public Secondary School, Abuja, after been taught reading comprehension skills using the reciprocal, cooperative and the conventional instructional strategies. Here, the hypothesis was accepted because there is no significant difference in the gain scores, at literal level, of public Secondary School Students in Federal Capital Territory, Abuja, based on male and female, who were taught using the reciprocal, cooperative and the conventional instructional strategies.

H<sub>03</sub>: There will be no significant difference in students' gain score, at inferential level, of reading comprehension, on the basis of being male and female, based on exposure to the reciprocal, cooperative and the conventional instructional strategies.

Table 7: Analysis of Covariance for the post-test performance of students based on Gender at Inferential level introduced to Reciprocal, Cooperative and Conventional Instructional strategies

Source	Type III Squares	Sum of df	Mean Square	F	Sig.
Corrected Model	39.237 <sup>a</sup>	2	19.619	1.580	.264
Intercept	24.569	1	24.569	1.979	.197
Pretest	37.492	1	37.492	3.020	.120
Gender INFERENTIAL	.576	1	.576	.046	.835
Error	99.308	8	12.414		
Total	488.000	11			
Corrected Total	138.545	10			

a. R Squared = .283 (Adjusted R Squared = .104)

Table 7 shows the analysis of covariance for the performance of public secondary school students in Federal Capital Territory, Abuja, based on Gender at inferential level introduced to reciprocal, cooperative and conventional Instructional strategies. Similarly, at the inferential level, analyses reveals that the mean performance of the male students was not significantly different ( $F(1, 8) = 3.02, p = 0.120$ ) from that of the female students in both pre-test and post-test assessment evaluated at the Public Secondary School, Abuja, after been taught reading comprehension skills using the reciprocal, cooperative and the conventional instructional strategies. Likewise, the hypothesis was accepted because there is no significant difference in the gain score, at inferential level, of public Secondary School Students in Federal Capital Territory, Abuja, based on male and female, who were taught using the reciprocal, cooperative and the conventional instructional strategies.

H0<sub>4</sub>: There will be no significant difference in students' gain scores, at critical level, of reading comprehension, on the basis of being male and female, based on exposure to the reciprocal, cooperative and the conventional instructional strategies.

Table 8: Analysis of Covariance for the post-test performance of students based on Gender at Critical level introduced to Reciprocal, Cooperative and Conventional Instructional strategy

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	60.557 <sup>a</sup>	2	30.278	5.254	.040
Intercept	64.564	1	64.564	11.202	.012
Pretest	48.457	1	48.457	8.408	.023
Gender CRITICAL	2.311	1	2.311	.401	.547
Error	40.343	7	5.763		
Total	605.000	10			
Corrected Total	100.900	9			

a. R Squared = .600 (Adjusted R Squared = .486)

The analysis of covariance for the performance of public secondary school students in Federal Capital Territory, Abuja, based on Gender at critical level introduced to reciprocal, cooperative and conventional Instructional strategies is shown in Table 8. Likewise, evaluating at critical level, analysis reveals that the mean performance of the male students does not differ significantly ( $F(1, 7) = 8.41, p = 0.547$ ) from that of the female students in both pre-test and post-test assessment evaluated at the Public Secondary School, Abuja, after been taught reading comprehension skills using the reciprocal, cooperative and the conventional instructional strategies. Also, here, the hypothesis was accepted because there is no significant difference in the gain scores, at critical level, of public Secondary School Students in Federal Capital Territory, Abuja, based on male and female, who were taught using the reciprocal, cooperative and the conventional instructional strategies.

## **Discussion**

Finding of the study in research question one indicate that there was a significant difference in the reading comprehension performance of public secondary school students espoused to reciprocal, cooperative and conventional instructional strategies. The performance of the students in the post-test mean was 40.89%, higher than the pre-test mean, which is 26.57%. The research findings tend to be in agreement with that of Banditvilai (2020) who asserted that the use of reading instructional strategies effectively improves the reading abilities of most students. It is pertinent to note that the secondary school students taught using Reciprocal and Cooperative Instructional strategies (14.53% and 16.25% respectively) performed better than students espoused to the Conventional instructional strategy (12.18%). The reciprocal and cooperative classrooms involved a paradigm shift in the teacher's role from that of an imposing figure to that of a facilitator and guide. The study also revealed a significant insight into the effectiveness of the reciprocal and cooperative instructional strategies in the development of literal comprehension among the secondary school students in the Federal Capital Territory, Abuja irrespective of gender. The mean performance of the male students was not significantly different ( $F(1, 12) = 2.14, p = 0.169$ ) from that of the female students in both pre-test and post-test assessment evaluated. However, with a significant high mean performance at the literal level when compared with the students' performance at the Inferential and Critical level of reading comprehension, the research findings tend to be in agreement with the position of Iliyas (2022) when

he stated that implementing collaborative learning, small teams with different levels of ability can use variety of learning activities to improve their understanding of a text. Beyond the literal comprehension, the current study also examines the higher-order cognitive skill of making accurate inferences. The male students (55.56, 57.14, 66.67) performed better than the female students (44.44, 42.86, 33.33). However, the secondary school students' performance at the inferential level is not significant. This finding tends to agree with Nurie (2017) contention that the construction of inferential meaning takes place through three cognitive processes: infer, summarize and elaborate the meaning of the text and this requires a higher level of abstraction, which ultimately increase the difficulty level. However, at the inferential level, analyses reveals that the mean performance of the male students was not significantly different ( $F(1, 8) = 3.02, p = 0.120$ ) from that of the female students in both pre-test and post-test assessment evaluated. The non-significant performance at inferential level of reading comprehension was equally noticeable at the critical level of reading comprehension. The mean performance of the male students do not differ significantly ( $F(1, 7) = 8.41, p = 0.547$ ) from that of the female students in both pre-test and post-test assessment evaluated. The performance of the public secondary school students at the Critical level was very poor. The research findings may be a pointer to the reason behind students' persistent failure in external examinations, among secondary school students, particularly in English language, as alluded to by Okika (2021) when he asserted that there have been a downward trend in students' external examination performance; particularly, because those examinations demand a high level of cognition and value judgment.

## **Conclusion**

This study evaluated the effects of reciprocal and cooperative instructional strategies on students' reading comprehension performance. The research findings showed results in support of the efficacy of the reciprocal and cooperative teaching strategies. The outcomes from the study have pedagogical implications as the findings revealed that these strategies (reciprocal and cooperative) had a positive impact on reading comprehension. The reciprocal and cooperative instructional strategies equally help students to develop self-regulation and monitor themselves in order to become independent readers. The implication of the gender performances, have no significant impact on the instructional strategies and the comprehension levels. However, the result from the finding shows that both male and female

students benefitted from the treatment. The educational implication of the study is that the three instructional strategies are gender friendly and have the attribute to effectively enhance students' reading comprehension performance regardless of gender.

### **Recommendations**

From the findings of the study, the following are therefore, suggested as recommendations.

- (i) Teachers are encouraged to organize meaningful tasks that allow the progress of communicative, linguistic functions and the structure of sentences in an oral or written way as obtained in the reciprocal and cooperative instructional strategies be adopted in our schools.
- (ii) With significant improvement in students' ability to comprehend or process literal information, it is recommended that educators integrate the reciprocal and cooperative instructional strategies into their teaching methodologies.
- (iii) Educators should design and incorporate activities specifically focused on fostering inferential thinking. This may involve incorporating more complex texts or introducing structured discussions during reading comprehension classes, thereby encouraging students to analyze and make accurate inferences and interpret the contents of the reading texts.
- (iv) To enhance the development of critical or evaluative thinking amongst students, it is recommended that educators design activities that explicitly target critical thinking and evaluative skills.

### **References**

- Aktas, N. (2025). The effect of online reciprocal teaching on fourth grade primary school students' reading comprehension skills and reading motivation. *Reading & Writing Quarterly*, 41(1), 1-27. <https://doi.org/10.1080/10573569.2023.2192720>
- Altun, S. (2015). The effect of cooperative learning on students; achievement and views on the science and technology course. *International Electronic Journal of Elementary Education*, 7(3), 451–467.
- Banditvilai, C. (2020). “The Effectiveness of Reading Strategies on Reading Comprehension.” *International Journal of Social Science and Humanity*: 46-50.
- Gillies, R. M. (2016). Cooperative learning: Review of research and practice. *Australian Journal of teacher education*, 41(3), 3.

- Iliyas, R. A. (2022). Sources of anxiety to listening comprehension in English language of secondary school students in Dutsinma, Katsina State, Nigeria. *Ethiopian Journal of Social Language Studies, Jimma university, Ethiopia*,9(2), 117–130.  
<https://journals.ju.edu.et/index.php/ejssls>
- Klinger, J. K., Vaughn, S., and Boardman, A. (2015). *Teaching reading comprehension to students with learning disabilities* (2nd ed.). Guilford Press.
- Lee, S. H., & Tsai, S.-F. (2017). Experimental intervention research on students with specific poor comprehension: A systematic review of treatment outcomes. *Reading and Writing*, 30(4), 917–943.
- McNamara, D. S. & Kendeou, P. (2022). The early automated writing evaluation (eAWE) framework. *Assessment in Education: Principles, Policy & Practice*, 29(2), 150-182.  
<https://doi.org/10.1080/0969594x.2022.2037509>
- Nurie, Y. (2017). *Pedagogical Practices in Teaching Reading Comprehension: A case study of three secondary schools in Ethiopia*. Bahir Dar University, Ethiopia.
- Oczkus, L. D. (2018). *Reciprocal teaching at work: Powerful strategies and lessons for improving reading comprehension*. ASCD.
- Okika, L. C. (2021). *Effect of literature circle and peer tutoring on the reading comprehension achievement of primary school pupils*. Unpublished Ph.D Dissertation, Department of Early Childhood and Primary Education, Nnamdi Azikiwe University, Awka,
- Vega, M. De., Glenberg, A. & Graesser, A. (2012). *The representation of changing emotions in reading comprehension*. Oxford University Press.
- Schleicher, A. (2019). PISA 2018: Insights and Interpretations. *Oecd Publishing*.