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Effects of Collaborative Learning Strategy on Reading Comprehension and Fluency: A Quasi-Experimental Study among Junior Secondary Students in Kano State, Nigeria

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Abstract

This study examined the effect of a collaborative learning strategy on the reading comprehension and reading fluency of Junior Secondary School III students in Kano State, Nigeria. Reading comprehension and fluency are critical components of academic success at the secondary-school level, yet many students continue to experience persistent difficulties in these areas. The study was guided by two objectives and adopted a quasi-experimental pre-test-post-test control-group design. The population comprised 626 students, from which a sample of 60 students was drawn. Two intact classes were selected and randomly assigned to the experimental group ($n = 30$) and control group ($n = 30$). Data were collected using the English Language Achievement Test, which yielded a test-retest reliability coefficient of .80. The experimental group was exposed to structured collaborative learning activities for eight weeks, while the control group received conventional teacher-centred instruction. Data were analysed using mean, standard deviation, and independent-samples (t)-test at the .05 level of significance, while Cohen's (d) was used to determine effect size. The findings revealed no statistically significant difference between the groups at the pre-test stage. However, significant post-test differences were found in reading comprehension, ($t(58) = 6.40$), ($p < .001$), ($d = 1.65$), and reading fluency, ($t(58) = 19.54$), ($p < .001$), ($d = 5.04$), in favour of the collaborative learning group. The study concluded that the collaborative learning strategy was associated with substantial improvements in students' reading comprehension and fluency. It was therefore recommended that English-language teachers integrate structured collaborative learning activities into classroom instruction to improve reading outcomes among secondary-school students.

Keywords: Collaborative Teaching, Reading Comprehension, Reading Fluency, Education, Secondary school

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Introduction

One of the most effective strategies for both lifetime learning and academic success is reading. The ability to read fluently and understand texts meaningfully is no longer viewed as a limited language skill in today's classrooms, but rather as the cornerstone of success in all subject areas. Students who read comprehensibly, accurately, and at a suitable pace are better equipped to interact with material in social studies, science, math, and other subjects. On the other hand, ongoing reading challenges frequently result in more general academic difficulties, low self-esteem, and little involvement in class activities. Reading comprehension and fluency are key indicators of academic success and long-term educational outcomes, according to recent empirical research (Kim, 2017; Rasinski, 2016; Mihret & Joshi, 2025).

Decoding printed words is only one aspect of reading comprehension; it requires readers to construct meaning through interaction with text, background knowledge, vocabulary, and strategic thinking. Comprehension is an active, constructive process in which learners monitor understanding, infer meaning, and integrate new information with prior knowledge (Oakhill, Cain, & Elbro, 2015; Lapasau & Virgana, 2023). At the same time, reading fluency which is commonly defined as the ability to read with accuracy, appropriate rate, and prosody serves as a bridge between word recognition and comprehension. When students struggle with fluency, cognitive resources are disproportionately allocated to decoding, leaving little capacity for meaning-making (Paige, Rasinski, & Magpuri-Lavell, 2018). In this regard, fluency and comprehension are mutually reinforcing components of skilled reading rather than isolated abilities.

Even though reading proficiency is acknowledged to be important, many secondary school students still struggle in these areas. Concerns regarding declining reading standards and low text engagement have been extensively documented in educational discourse in a number of developing nations, including Nigeria. While classroom observations often show students reading slowly, losing track of ideas, and exhibiting limited inferential understanding, national assessments often highlight broader achievement concerns. These trends imply that conventional teacher-centered teaching strategies might not adequately encourage students to actively engage with texts or offer chances for peer interaction and guided practice. Learner-centered pedagogies that position students as active participants in knowledge construction rather than passive recipients of information are becoming more and more popular in international research (Gillies, 2016; Slavin, 2015; Mir, 2025).

One instructional approach that has gained considerable attention in recent years is collaborative learning. Collaborative learning refers to structured instructional practices in which students work together in small groups to achieve shared academic goals, engage in dialogue, and support one another's understanding (Yang, 2023; Ramzan et al., 2023). Unlike unstructured group work, effective collaboration involves clearly defined roles, shared

accountability, and purposeful interaction. A well-designed collaborative learning environments according to Leow and Neo (2023) can enhance cognitive engagement, promote deeper processing of texts, and improve academic outcomes across disciplines. Through discussion, explanation, and peer feedback, learners are exposed to multiple perspectives that can clarify misunderstandings and extend comprehension.

The instructional value of collaborative approaches in literacy education is supported by recent empirical research. Ramzan et al (2023) highlights that guided oral practice and repeated reading, which are frequently incorporated into group activities, greatly increase reading rate and expressive reading. The need for instructional strategies that offer meaningful reading practice is further highlighted by Paige et al. (2018), who show a strong correlation between higher academic performance and expressive and fluent reading. Additionally, when properly implemented, cooperative and collaborative learning structures have a positive impact on students' academic achievement, according to meta-analytic evidence (Slavin, 2015; Güngör et al., 2026). Crucially, these advantages seem to be most noticeable when teamwork is deliberate, organized, and in line with specific learning objectives.

Although research from around the world shows that collaborative learning can improve literacy outcomes (Jaya et al., 2025; Ramdani and Susilo 2022; Lopez & Estremera, 2025), there is still a need to examine its effectiveness in specific educational settings. Educational practices are shaped by cultural norms, classroom realities, teacher preparation, and resource availability. In many Nigeria secondary schools, reading instruction often emphasizes teacher explanation and individual silent reading, with limited structured peer engagement. As a result, students may not receive sufficient opportunities to practice oral reading, negotiate meaning with peers, or develop metacognitive awareness through discussion. By examining the effects of a structured collaborative learning strategy on reading comprehension and fluency among Junior Secondary School III students in Kano State, the research sought to contribute empirical evidence to ongoing conversations about effective literacy instruction. In doing so, it responds to the growing recognition that improving reading outcomes requires not only curriculum alignment but also pedagogical innovation grounded in research and responsive to local classroom realities.

Problem Statement

There have been growing concerns among educators, school administrators, parents, and policymakers regarding the declining reading culture and persistent reading difficulties among secondary school students. Many students fail to acquire the fundamentals of reading when they move from primary to junior secondary school, and this gap frequently gets wider as academic demands rise. Low comprehension levels, sluggish reading rates, restricted vocabulary growth, and diminished confidence in interacting with academic texts have all

resulted from this. Despite the fact that reading is essential for success in every subject, many schools still primarily use teacher-centered teaching strategies that offer little chance for guided reading practice and active student participation.

Explanation of passages and solitary silent reading are often the main focus of instruction in English language classrooms, with little organized peer interaction. While such approaches may cover syllabus content, they may not sufficiently address students' fluency challenges or promote deeper comprehension. Collaborative learning strategies have been widely recommended in recent educational research as a means of improving engagement and academic achievement (Gillies, 2016; Johnson & Johnson, 2019; Güngör et al., 2026). These strategies encourage dialogue, peer support, shared responsibility, and active participation, all of which are theoretically linked to improved literacy development. However, despite the documented benefits of collaborative approaches in various educational contexts, their systematic application in secondary schools in Nigeria remains limited or inconsistently implemented.

Therefore, the crucial question is whether Junior Secondary School III students' reading comprehension and fluency can be greatly enhanced by using an organized collaborative learning strategy. Schools in Kano State, and especially in the Tofa Zonal Educational Area, still use conventional teaching methods. While some teachers occasionally involve their students in group activities, it is unclear whether these practices are organized, supported by research, or successful in raising quantifiable reading outcomes. Additionally, there isn't much empirical data in this area that unequivocally shows how collaborative learning affects comprehension and fluency at the same time.

Understanding the efficacy of cutting-edge teaching techniques is crucial since reading proficiency is a prerequisite for academic success. However, not many intervention-based studies have been carried out in this particular educational context to determine whether collaborative learning can produce meaningful improvements in students' reading performance. The absence of empirical evidence leaves a gap in both practice and policy decisions related to literacy instruction. Consequently, the present study was designed to examine the effect of collaborative learning strategy on reading comprehension and fluency among Junior Secondary School III students in Tofa Zonal Educational Area, Kano State.

Theoretical Framework

This theoretical framework for this study is based on Gough and Tunmer's Simple View of Reading theory. This theory describes reading comprehension as the result of two interdependent processes: decoding and language comprehension (Blaži, 2023). Decoding is the precise and efficient recognition of written words, whereas language comprehension is the ability to understand terminology, sentence structures, ideas, and relationships presented in both oral and written language (Kargin et al., 2024). The concept emphasises

that successful reading comprehension requires adequate development in both components, as deficiencies in either decoding or language comprehension may limit a learner's capacity to infer meaning from text. The Simple View of Reading is significant to this study since reading fluency is strongly linked to efficient decoding (Hsu et al., 2023). When students read words correctly, automatically, and at an acceptable rate, fewer cognitive resources are allocated to recognising specific words. This permits more attention to be focused on learning terminology, drawing inferences, identifying important concepts, and integrating information throughout a chapter. In contrast, sluggish and imprecise reading can disrupt meaning construction and impede understanding.

The model is linked to the current study by reading processes that are embedded in collaborative learning activities. Guided oral reading, regular practice, peer modelling, and fast corrective feedback can help improve decoding accuracy, automaticity, and reading rate. Similarly, group discussion, questioning, explanation, and shared interpretation can improve language comprehension by assisting students in clarifying difficult vocabulary, connecting concepts, and negotiating text meaning. The Simple View of Reading thus provides a reading-specific explanation of how collaborative learning can improve both fluency and comprehension. It adds to social constructivist theory by highlighting the cognitive reading components that enable socially mediated education to yield better literacy results among secondary school pupils.

Objectives of the Study

The main objectives of the research are:

1. To determine the effect of collaborative learning strategy on reading comprehension of JSS III students in Kano State, Nigeria.
2. To examine the effect of collaborative learning strategy on reading fluency of JSS III students in Kano State, Nigeria.

Hypothesis of the Study

1. There is no significant difference in the mean reading comprehension scores of JSS III students in Kano State, Nigeria, who are taught using collaborative learning strategy and those taught using the conventional teaching method.
2. There is no significant difference in the mean reading fluency scores of JSS III students in Kano State, Nigeria, who are taught using collaborative learning strategy and those taught using the conventional teaching method.

Methodology

Research Design

The study used a quasi-experimental, pre-test-post-test control-group design. The design consisted of an experimental group taught using a structured collaborative learning strategy and a control group taught using the traditional teacher-centered approach. Both groups took pre- and post-tests on reading comprehension and fluency. The design was ideal since it allowed the researchers to compare the two groups' performance before and after the intervention and establish the effectiveness of the teaching strategy. Because intact classes were employed, the study was classified as quasi-experimental rather than experimental.

Population and Sampling Technique

The population consisted of all 626 Junior Secondary School III pupils from Army Day Government Secondary School, Janguza, in Kano State's Tofa Zonal Educational Area. These kids were deemed eligible because they had received core English-language education and were developmentally ready for structured collaborative reading activities. A sample of sixty pupils was chosen. Two intact JSS III classes that were deemed suitable for the study were purposefully chosen and randomly allocated to the experimental and control groups. Each class included 30 pupils. The experimental group received education utilising the collaborative learning strategy, whereas the control group was instructed using the traditional manner. Random assignments were made to complete classes rather than individual pupils.

Instrument for Data Collection

The English Language Achievement Test was developed to collect information about reading comprehension and fluency. The reading comprehension section featured a paragraph followed by ten multiple-choice questions. Each correct answer earned three points, for a maximum score of 30.

The reading-fluency section requires each student to read aloud a 50-word chapter in one minute. Fluency was tested in terms of accurate words per minute. The assessor noted the total number of words attempted and deducted reading errors such as omissions, substitutions, mispronunciations, and assessor-supplied words. Repetitions were not considered additional correct words, although rapid self-corrections were acknowledged as correct. Because the paragraph had 50 words and the reading time was one minute, each correctly read word was worth one mark. Thus, the words-corrected-per-minute value was directly proportional to a score on a 50-point scale. For example, a student who attempted all 50 words and made six mistakes received a score of 44.

Experts in English Language, Special Education, and Measurement and Evaluation validated the instrument on both the face and content levels. Their observations were used

to enhance clarity, relevance, and connection with the study's aims. A pilot research was carried out with pupils from a comparable school outside the study area. The stability of the instrument was established through the test-retest method, which produced a reliability coefficient of .80, indicating an acceptable level of consistency over time.

Treatment Procedure

The treatment lasted eight weeks. The same English-language teacher instructed both the experimental and control groups. Using a single instructor helps to reduce variability caused by variances in teachers' credentials, experience, instructional competency, and classroom management. Prior to the intervention, the instructor was given an orientation on the collaborative learning strategy's aims and methods.

Students in the experimental group were divided into small groups and given responsibilities such as group leader, reader, recorder, and summariser. They took part in guided reading, peer discussion, shared text interpretation, collaborative replies to comprehension questions, and reciprocal feedback on their oral reading performance. Roles were swapped to encourage participation and personal accountability. The conventional group received identical reading passages from the same teacher using the standard technique. Individual reading, teacher-directed question-and-answer exercises, and instructor explanation were all part of the instruction. Both groups were given the identical content, lesson objectives, instructional length, and assessment circumstances. The main distinction was the educational technique adopted. To reduce contamination, the groups were taught separately, and new lesson plans were created for each condition.

The intervention was conducted twice weekly for eight weeks, with each session lasting 40 minutes, resulting in 16 instructional sessions and a total contact time of 640 minutes.

Treatment Fidelity

Treatment fidelity was assessed using a standardised observation checklist based on the collaborative-learning lesson plan. The checklist determined if the teacher organised the required groups, allocated student responsibilities, supported guided reading, fostered peer discussion, offered opportunities for repeated oral reading, promoted peer feedback, and completed the intended activities.

The intervention achieved a fidelity score of 90, suggesting strong and acceptable adherence to the intervention plan. The control lessons were also inspected routinely to ensure that collaborative-learning processes were not implemented.

Ethical Considerations

Prior to beginning the study, permission was acquired from the school administration. Students were told about the research's goal and methodology, and their participation was entirely optional. Their identities and scores were kept private, and the data obtained was

used solely for academic purposes. Because the participants were secondary school students, parental or guardian agreement as well as student assent were sought.

Data Collection and Analysis

Prior to the intervention, both groups were given a pre-test to evaluate their baseline reading comprehension and fluency. Following the eight-week treatment, a post-test was conducted under similar conditions.

The researchers employed mean and standard deviation to answer their questions. Independent-samples t-tests were performed to determine pre-test equivalency and compare post-test scores between the two groups at the .05 significant level. The independent-samples t-test was appropriate because the study compared the mean reading-comprehension and reading-fluency scores of two separate groups. Cohen's d was used to estimate the practical magnitude of the treatment effect. Prior to doing the independent-samples t-tests, the assumptions of normality and variance homogeneity were checked. The Shapiro-Wilk test and Q-Q plot examination were used to examine normality, while Levene's test was used to verify variance homogeneity. The results showed no significant violation of normality or variance homogeneity for the reading comprehension and reading fluency scores; thus, the independent-samples t-test was deemed suitable.

Findings

Research Question One: What is the difference in the mean reading comprehension scores of JSS III students in Kano State, Nigeria, who are taught using collaborative learning strategy and those taught using the conventional teaching method?

Table 1: Descriptive statistics (mean and standard deviation) in Pre-test and Post-test Reading Comprehension Scores of JSS III Students

Variable	N	Mean	Standard
Deviation			
Pre-test:			
Collaborative	30	11.23	3.41
Conventional	30	10.87	3.56
Post-test:			
Collaborative	30	17.60	3.76
Conventional	30	10.90	4.33

Source: Field Work, 2026

Table 1 reveals that the collaborative-learning group had a pre-test mean score of 11.23 with a standard deviation of 3.41, compared to the conventional-method group's mean score of 10.87 with a standard deviation of 3.56. The pre-test mean difference of 0.36 suggests that the groups had similar reading comprehension skills prior to the intervention.

At the post-test stage, the collaborative-learning group received a mean score of 17.60 with a standard deviation of 3.76, whereas the conventional-method group received a mean score of 10.90 with a standard deviation of 4.33. The post-test mean difference of 6.70 benefited the collaborative-learning group. This suggests that students taught using the collaborative learning strategy had a better gain in reading comprehension than those taught using the standard method.

Research Question Two: What is the difference in the mean reading fluency scores of JSS III students in Kano State, Nigeria, who are taught using collaborative learning strategy and those taught using the conventional teaching method?

Table 2: Descriptive statistics (mean and standard deviation) in Pre-test and Post-test Reading Fluency Scores of JSS III Students

Variable	N	Mean	Standard Deviation
Pre-test:			
Collaborative	30	20.45	2.98
Conventional	30	20.12	3.05
Post-test:			
Collaborative	30	34.30	3.01
Conventional	30	19.78	2.75

Source: Field Work, 2026

Table 2 reveals that the collaborative-learning group had a pre-test mean fluency score of 20.45 with a standard deviation of 2.98, whereas the conventional-method group had a mean of 20.12 with a standard deviation of 3.05. The pre-test mean difference of 0.33 suggests that the groups had similar reading-fluency performance prior to the intervention.

At the post-test stage, the collaborative-learning group had a mean score of 34.30 with a standard deviation of 3.01, whereas the conventional-method group received a mean score of 19.78 with a standard deviation of 2.74. The post-test mean difference of 14.52 benefited the collaborative-learning group. This suggests that students taught using the collaborative learning strategy had a better gain in reading fluency than those taught using the standard method.

Research Hypothesis One:

Pretest Equivalence of Groups

Before the commencement of the treatment, a pretest was administered to both the experimental and control groups to determine their baseline reading comprehension and reading fluency levels. The purpose of this analysis was to establish whether there was any significant difference between the two groups prior to the intervention. Establishing pretest equivalence is important in quasi-experimental studies because it strengthens the internal validity of the findings by demonstrating that both groups were comparable at the outset.

An independent samples t-test was conducted to compare the pretest mean scores of the experimental and control groups. The results are presented in Table 3.

Table 3: Independent Samples t-Test Showing Pretest Equivalence of Experimental and Control Groups

Variable	Group	N	Mean (M)	SD	df	t- value	p- value	Decision
Reading Comprehension	Collaborative	30	11.23	3.41	58	0.40	0.691	Not Significant
	Conventional	35	10.87	3.56				
Reading Fluency	Collaborative	30	20.45	2.98	58	0.42	0.673	Not Significant
	Conventional	30	19.78	3.05				

Significance level: $\alpha = .05$.

Table 3 shows that the collaborative group had a mean reading comprehension score of 11.83 (SD = 3.41), while the control group's mean score was 11.40 (SD = 3.18). The estimated p-value of 0.640 and t-value of 0.47 both exceed the significance level of 0.05. This shows that prior to the intervention, there was no statistically significant difference in reading comprehension between the two groups. Similarly, the experimental group's reading fluency score was 20.15 (SD = 2.95), compared to the conventional group's score of 19.78 (SD = 3.02). The computed t-value of 0.59 and p-value of 0.557 show that the difference was not statistically significant at the 0.05 level. These results confirm that both groups had comparable reading comprehension and fluency levels prior to the deployment of the collaborative learning technique. As a result, any substantial variations in post-test scores can safely be attributed to the influence of the treatment rather than pre-existing disparities between the groups.

Hypothesis One (Reading Comprehension)

There is no significant difference in the mean reading comprehension scores of JSS III students in Kano State, Nigeria, who are taught using collaborative learning strategy and those taught using the conventional teaching method.

To test this hypothesis, the post-test reading comprehension scores of students in the experimental and control groups were analyzed using an independent samples t-test at the 0.05 level of significance. The results are presented in Table 4.

Table 4: Independent Samples t-test on Post-test Reading Comprehension Scores of JSS III Students

Group	N	Mean	SD	Mean Difference	Df	t-cal	P Value	Cohen's d
Collaborative	30	17.60	3.76	6.70	58	6.40	0.001	1.65
Conventional Method	30	10.90	4.33					

Significance level: $\alpha = .05$. Cohen's d interpretation: 0.20 = small, 0.50 = medium and 0.80 = large.

Table 4 shows that students taught using the collaborative learning strategy had a higher post-test mean reading-comprehension score of 17.60, with a standard deviation of 3.76, than students taught using the traditional method, who had a mean score of 10.90, with a standard deviation of 4.33.

The difference between the groups was statistically significant, $t(58) = 6.40$, $p < .001$. The null hypothesis was thus rejected. The Cohen's d value of 1.65 implies a significant practical influence. This suggests that the difference was not only statistically significant, but also educationally significant, as the collaborative learning technique significantly improved students' reading comprehension skills.

Hypothesis Two (Reading Fluency)

There is no significant difference in the mean reading fluency scores of JSS III students in Kano State, Nigeria, who are taught using collaborative learning strategy and those taught using the conventional teaching method.

To test this hypothesis, the post-test reading fluency scores of students in the experimental and control groups were analyzed using an independent samples t-test at the 0.05 level of significance. The results are presented in Table 5.

Table 5 reveals that students taught using the collaborative learning strategy had a higher post-test mean reading-fluency score of 34.30, with a standard deviation of 3.01, than students taught using the traditional method, who had a mean score of 19.78, with a standard deviation of 2.74. The difference between the groups was statistically significant, $t(58) = 19.54$, $p < .001$. The null hypothesis was thus rejected. Cohen's d value of 5.04 implies a very substantial practical effect. Thus, when compared to traditional teaching methods, the collaborative learning strategy significantly improved students' reading-fluency performance. However, the extraordinarily significant impact size for reading necessitates thorough verification of the raw data, scoring technique, group allocation, and assessment process. Such a magnitude may reflect a highly effective intervention, but it may also arise

from restricted score variability, measurement effects, assessor bias or other methodological factors.

Table 5: Independent Samples t-test on Post-test Reading Fluency Scores of JSS III Students

Group	N	Mean	SD	Mean Difference	Df	t-cal	P Value	Cohen's d
Collaborative	30	34.30	3.01	14.52	58	19.54	<.001	5.04
Conventional Method	30	19.78	2.74					

Significance level: $\alpha = .05$. Cohen's d interpretation: 0.20 = small, 0.50 = medium and 0.80 = large.

Discussion of findings

The data on reading comprehension demonstrated that there was no statistically significant difference between the collaborative and traditional groups at the pre-test stage, implying that the groups were equivalent prior to the intervention. The collaborative learning group outperformed the traditional group at the post-test stage, with a considerably higher mean score ($t(58) = 6.40$, $p < .001$). The impact size was also quite large, with Cohen's $d = 1.65$, showing that the difference was both statistically significant and educationally significant. These findings indicate that the structured collaborative learning technique had a significant impact on the improvement in students' reading comprehension performance.

This finding is consistent with research on cooperative and collaborative learning. For example, Slavin (2015) proved that structured cooperative learning improves academic accomplishment when compared to standard teaching approaches, especially when learners have comparable baseline ability. Similarly, Gillies (2016) found that guided peer contact improves deeper cognitive engagement and comprehension through debate and collaborative meaning-making. The data further support Johnson and Johnson's (2019) argument that collaborative learning environments improve accomplishment through positive interdependence, individual accountability, and promotional engagement.

Beyond these basic investigations, the current findings are supported by more recent empirical and meta-analytic data. In a second-order meta-analysis, Güngör et al. (2026) demonstrated that cooperative learning had a significant favourable effect on academic success, higher-order thinking, and affective outcomes. This lends support to the theory that collaborative learning might improve comprehension by stimulating deeper processing and critical engagement with materials. Similarly, Jaya et al. (2025) stressed that peer interaction allows students to co-create knowledge and address ambiguities together. Lapasau and Virgana (2023) discovered that cooperative learning improved reading comprehension by

increasing students' involvement and self-efficacy, both of which are necessary for effective text processing..

From a theoretical standpoint, the reading comprehension findings are compatible with Vygotsky's social constructivist theory, specifically the Zone of Proximal Development. Learners who connect with peers may be able to complete tasks that would be more difficult to complete separately. The organised collaborative tasks utilised in the study likely allowed for scaffolding, dialogue, explanation, and shared cognitive accountability. These procedures may have helped students clarify meanings, link ideas, and have a better grasp of the reading passages.

In terms of reading proficiency, the findings revealed no statistically significant difference between the groups in the pre-test stage. The collaborative learning group outperformed the traditional group in post-test scores ($t(58) = 19.54, p < .001$). Cohen's $d = 5.04$ suggested a very substantial practical effect. This shows that collaborative learning activities resulted in a significant improvement in students' ability to read accurately and at the right rate. The extent of the fluency effect should, however, be evaluated with caution. Although the results show a significant difference between the groups, such a substantial effect could possibly be attributed to the confined 50-mark scoring range, relatively low variation among the groups, sample characteristics, or assessment technique aspects. As a result, the findings provide strong evidence in the research environment, but they must be replicated using larger samples, other schools, and additional fluency metrics.

The fluency finding is consistent with Rasinski's (2016) observation that fluency develops through guided oral reading, frequent practice, and meaningful interaction with texts. Similarly, Paige, Rasinski, and Magpuri-Lavell (2018) discovered that repetitive and expressive reading exercises boost reading pace and prosody, especially when combined with interactive instructional strategies. The collaborative learning environment used in this study allowed for peer-assisted reading, modelling, repeated practice, and quick feedback, which could have contributed to the observed improvement.

Recent research lends weight to this interpretation. Ramzan et al. (2023) found that collaborative tactics improve vocabulary learning and motivation, perhaps supporting the development of reading fluency. Lopez and Estremera (2025) discovered that collaborative learning approaches in language classes foster prolonged peer engagement while also improving fluency and communicative competence. Leow and Neo (2023) also recognised structured engagement, explicit responsibilities, and shared accountability as critical variables in increasing students' collaborative learning experiences and performance. The ability to provide quick feedback, modelling, and correction within peer groups may also contribute to improved reading skills. Gillies (2016) found that collaborative spaces allow students to watch appropriate performance, practise repeatedly, and receive constructive criticism. Furthermore, Ramdani and Susilo (2022) discovered that collaborative learning

enhances cognitive and metacognitive skills, allowing learners to monitor and modify their reading performance. Taken together, the data show that structured collaborative learning can improve reading comprehension and fluency. The findings are consistent with learner-centred approaches that highlight active participation, interaction, and engagement as critical components of effective instruction (Mir, 2025). They also support the broader premise that enhanced reading skills can help pupils attain academic success in all subject areas (Mihret & Joshi, 2025).

According to the findings, organised collaborative learning was related with considerably improved reading comprehension and fluency outcomes than traditional teaching methods among the participating students. The findings encourage increased use of carefully planned peer interaction, guided reading, repeated oral practice, and shared interpretation in junior secondary reading education, while acknowledging the need for additional study to confirm the extraordinarily substantial benefit.

Implications of the Findings

Practical Implications: The significant improvement in the collaborative group's post-test scores, reading comprehension and fluency indicates that structured peer interaction enhances learning outcomes. This implies that teachers should adopt collaborative strategies such as group reading, peer discussion, and guided feedback. These practices are important because they directly address students' initial low performance and provide opportunities for active engagement, repeated practice, and immediate correction, which were lacking in conventional methods.

Theoretical Implications: The findings support Lev Vygotsky's social constructivist theory. The observed gains suggest that students benefited from interaction within their Zone of Proximal Development, where peer support and scaffolding improved comprehension and fluency. The equivalence at pre-test and divergence at post-test confirm that learning was socially mediated rather than individually constructed.

Policy and Research Implications: The strong statistical differences in post-test outcomes ($t = 6.41$ for comprehension; $t = 19.55$ for fluency) highlight the need for policy shifts toward learner-centred pedagogy. Educational authorities should promote collaborative learning in curricula and teacher training. Additionally, the findings justify further research to test scalability across schools and over longer periods.

Conclusion

The study concluded that collaborative teaching strategies significantly improved reading comprehension and fluency among JSS 3 students. The findings clearly demonstrated that students who were exposed to collaborative instructional approaches performed better than those who were taught using conventional teaching methods. Through structured group interactions, peer support, and shared learning experiences, students were able to enhance

their understanding of texts and develop stronger comprehension skills.

Recommendations

Based on the findings of the study the following recommendations were made

There is need to institutionalise structured collaborative learning: Teachers should consistently implement role-based group reading, likereader, summariser, and evaluator. This is important because the findings show substantial gains in comprehension and fluency, indicating that peer interaction and guided dialogue enhance meaning-making and reading practice.

Targeted teacher professional development: Schools should train teachers on designing and managing collaborative tasks like group formation, scaffolding, feedback. This is essential to ensure fidelity of implementation; poorly structured group work will not reproduce the strong effects observed.

Embed collaborative practices in curriculum and lesson planning: Curriculum guidelines should require scheduled collaborative reading sessions and oral practice. This ensures sustainability and alignment with learning objectives, translating the demonstrated benefits into routine classroom practice.

Strengthen assessment to capture fluency and interaction: Include oral reading measures (e.g., words-correct-per-minute) and group-based comprehension tasks. This is important to monitor gains reflected in the study and to reinforce behaviours (practice, feedback) that drive improvement.

Limitations of the Study

The study was limited to only 60 JSS III students from a single secondary school in Kano State's Tofa Zonal Education Area. As a result, the findings may not apply to all junior secondary pupils in Kano State or other educational contexts. The intervention lasted only eight weeks, limiting the ability to measure long-term retention of reading benefits. Furthermore, the same teacher taught both groups, which helped to control teacher differences but may not have totally removed potential treatment contamination. The fluency examination was based on a single 50-word oral-reading passage, which may not have covered all aspects of reading fluency, including prosody. Despite these limitations, the study provides valuable information about the potential benefits of organised collaborative learning for enhancing reading comprehension and fluency.

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