

**Collaborative learning techniques and performance of Grade 10 students
in reading comprehension: Basis for a teaching plan**

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ABSTRACT

This study investigated the extent of collaborative learning techniques and their impact on the reading comprehension performance of Grade 10 students at Western Bicutan National High School, serving as the basis for a proposed teaching plan. Employing a descriptive-correlational design, data were gathered from 34 English teachers and 130 students during the first quarter of School Year 2025–2026. Findings revealed that teachers consistently utilized collaborative learning strategies such as jigsaw, round-robin, collaborative question generation, text debate, and reciprocal teaching to a great extent, although certain practices were observed only at a moderate level. Results demonstrated that students' mean comprehension scores improved from 81 (Low) before implementation to 84 (High) after, with specific strategies like jigsaw and round-robin producing very high and high outcomes, respectively. Statistical analysis confirmed a significant difference in comprehension before and after the use of collaborative strategies ($t = 4.12 > 1.645$, $p < 0.05$), thereby validating the effectiveness of these approaches. Furthermore, socio-economic status and exposure to reading materials were found to influence performance, while sex showed no significant effect, highlighting the importance of contextual and environmental factors in literacy development. A strong positive correlation (Pearson's $r = 0.82$) was established between teachers' use of collaborative techniques and students' comprehension outcomes, underscoring the pedagogical value of peer interaction and cooperative tasks. Based on these findings, a teaching plan was developed to integrate collaborative learning techniques, emphasizing active engagement, peer collaboration, and critical thinking as essential components for enhancing reading comprehension among secondary learners in classroom contexts.

Keywords: Collaborative learning, reading comprehension, jigsaw technique, round-robin, reciprocal teaching, teaching plan, grade 10 students.

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INTRODUCTION

In the global education landscape, collaborative learning has gained prominence as a transformative strategy that fosters deeper engagement and comprehension among students. Research highlights that collaborative learning not only enhances academic performance but

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also cultivates essential 21st-century skills such as critical thinking, communication, and teamwork (Gyasi et al., 2021). According to Gillies, Millis, and Davidson (2023), cooperative learning strategies like peer-assisted learning, the Jigsaw model, and dialogic talk have been successfully implemented across diverse educational contexts, demonstrating their effectiveness in improving students' cognitive and metacognitive abilities.

Moreover, students face persistent challenges across the globe in reading comprehension, a skill essential for academic success and lifelong learning. Despite advancements in pedagogy, many learners especially in secondary education struggle to decode, interpret, and critically engage with texts. Traditional, teacher-centered approaches often fail to address diverse learning needs and do not foster active engagement or strategic reading behaviors.

In response, collaborative learning strategies have gained traction internationally as a means to improve reading comprehension. However, the effectiveness of these strategies varies across contexts, and there is a need to explore their impact within specific educational settings such as Grade 10 students at Western Bicutan National High School to inform localized teaching plans that align with global best practices.

Reading comprehension is not merely the ability to understand text. It involves complex cognitive processes such as inference-making, summarizing, and vocabulary acquisition. Globally, educators have recognized that collaborative learning where students work together to construct meaning can significantly enhance these processes.

One widely studied method is Collaborative Strategic Reading (CSR), which integrates cooperative learning with explicit reading strategy instruction. CSR encourages students to preview texts, clarify vocabulary, generate questions, and summarize content in small groups, promoting both comprehension and metacognitive awareness. Muziatun & Katili (2020) conducted research in Indonesia showing that CSR significantly improved students' reading comprehension scores. Their study emphasized gains in identifying main ideas, making inferences, and understanding vocabulary. Moreover, Susanti (2020) found that CSR was effective across different learning styles, suggesting its adaptability in diverse classrooms. Students taught with CSR outperformed those taught with conventional methods in reading comprehension assessments. Also, Solanki & Acharya (2020) in India demonstrated that collaborative learning strategies led to statistically significant improvements in reading comprehension among ninth-grade students. The approach also boosted motivation and engagement. Suwantharathip (2020) in Thailand showed that collaborative reading strategies enhanced both comprehension and strategy use, with students reporting greater confidence and enjoyment in reading tasks.

In the Philippine context, the Department of Education has emphasized learner-centered approaches aligned with the K to 12 curriculum, encouraging the integration of collaborative learning in classrooms. Studies conducted in local settings affirm that collaborative strategies significantly improve students' academic performance and engagement, particularly in reading and writing tasks (Singh et al., 2020). Moreover, online collaborative learning has proven effective even during remote learning periods, as it fosters interaction and enhances comprehension in virtual environments (Mapile & Lapinid, 2023).

Reading comprehension remains a critical concern in secondary education in the Philippines. Despite national programs like ECARP (Every Child a Reader Program) and DEAR (Drop Everything and Read), many Grade 10 students still struggle to understand, interpret, and analyze texts effectively. At Western Bicutan National High School, this issue is particularly evident, where students' performance in reading comprehension assessments falls below expected standards.

Traditional teaching methods often lecture-based and teacher-centered do not adequately address the diverse learning needs of students. This calls for innovative, student-centered approaches, such as collaborative learning strategies, to improve reading comprehension and overall academic performance.

At the local level, Western Bicutan National High School (WBNHS) continues to uphold its mission of delivering quality, inclusive education to its diverse student population. As a K to 12-ready institution offering programs in STEM, HUMSS, and other tracks, WBNHS recognizes the importance of equipping students with strong reading comprehension skills to succeed academically and beyond. However, challenges such as varied reading abilities and limited instructional time necessitate innovative strategies. This study will determine the collaborative learning strategies on the reading comprehension performance of Grade 10 students at WBNHS, aiming to provide a research-based foundation for an effective teaching plan tailored to their needs.

Despite the growing emphasis on student-centered learning, Grade 10 students at Western Bicutan National High School continue to face challenges in reading comprehension, which is a foundational skill across all academic subjects. Traditional teaching methods often fail to engage learners in meaningful text interaction, resulting in low performance in comprehension tasks. This persistent issue calls for innovative instructional strategies particularly collaborative learning approaches to enhance students' reading comprehension and overall academic success. Reading comprehension is a critical skill that influences students' ability to understand, analyze, and apply information across disciplines. However, many Filipino students struggle with this skill, as evidenced by the 2018 Programme for International Student Assessment (PISA) results, where the Philippines ranked among the lowest in reading literacy globally.

This study is essential because it addresses a critical gap in localized educational research. By focusing on Grade 10 students at Western Bicutan National High School, it provides context-specific insights into how collaborative learning strategies affect reading comprehension. The findings will serve as a basis for a teaching plan that is both evidence-based and tailored to the needs of Filipino learners—something that current literature lacks.

Statement of the problem

This study sought to determine the extent of collaborative learning techniques and the reading comprehension of Grade 10 students as a foundation for designing a more effective, inclusive, and research-based teaching plan.

Specifically, this study aimed to answer the following questions:

1. What is the demographic profile of the respondents in terms of teachers' age, sex, teaching experience, and educational attainment, and Grade 10 students' sex, socioeconomic status, and exposure to reading materials?
2. What is the extent of the collaborative learning techniques utilized by the teacher respondents in developing reading comprehension using the jigsaw technique, round robin technique, collaborative question generation, text debate, and reciprocal teaching?
3. What is the level of reading comprehension of students before and after the use of collaborative techniques?
4. Is there a significant difference in the level of reading comprehension of students before and after the use of collaborative techniques?

5. Is there a significant difference in the performance of students in reading comprehension using collaborative learning techniques when grouped according to their profile?
6. Is there a significant relationship between the extent of use of collaborative learning techniques and the students' performance in reading comprehension?
7. Based on the results of the study, what teaching plan can be proposed?

METHODOLOGY

This chapter presents the methodological framework of the study, including the research design, population and sampling technique, respondents of the study, research instrument, validation and reliability of the instrument, data gathering procedure, statistical treatment of data, and ethical considerations. These methodological components were carefully selected and implemented to ensure the validity, reliability, and integrity of the study while providing a comprehensive examination of the relationship between collaborative learning techniques and the reading comprehension performance of Grade 10 students.

The study employed a descriptive correlational research design to examine the relationship between collaborative learning techniques and the reading comprehension performance of Grade 10 students. The descriptive aspect of the design was appropriate because it enabled the researcher to systematically describe the extent to which teachers utilized collaborative learning techniques such as jigsaw, round robin, collaborative question generation, text debate, and reciprocal teaching in the classroom. This approach provided a clear picture of existing instructional practices without manipulating any variables. The correlational component was utilized to determine whether a significant relationship existed between the use of these collaborative learning techniques and students' reading comprehension performance. Since the study did not seek to establish causation but rather identify patterns of association between variables, the descriptive correlational design was considered appropriate. The findings generated through this design served as an empirical basis for the development of a teaching plan by identifying which collaborative learning techniques were most strongly associated with improved reading comprehension outcomes among students. The study likewise employed a quantitative descriptive approach to examine the extent of collaborative learning techniques used by teachers in teaching reading comprehension and the performance of Grade 10 students.

The population of the study consisted of all Grade 10 students enrolled at Western Bicutan National High School during the academic year 2025–2026, totaling 849 students distributed across 20 sections. For the purposes of the study, three Grade 10 sections were selected as respondents. These sections were chosen based on their availability and alignment with the objectives of the study, particularly regarding the implementation of collaborative learning techniques in reading comprehension instruction. The study employed a total enumeration sampling technique within the selected sections. Total enumeration, also referred to as complete enumeration or census sampling, is a non-probability sampling technique in which every member of a defined population is included in the study. In this investigation, the defined population referred to all students within the three selected Grade 10 sections. Data were collected from every student in the selected sections to ensure complete representation. This approach enabled the researcher to capture all perspectives within the selected groups, thereby providing a more comprehensive understanding of how collaborative learning techniques affect reading comprehension. Furthermore, bias was minimized because no student within the selected groups was excluded. Consequently, the results were more reliable and reflective of the actual dynamics within the collaborative learning environment, supporting the

study's goal of analyzing group based instructional strategies in which every participant's interaction and performance contributed to the overall findings.

The respondents of the study consisted of all English teachers and selected Grade 10 students enrolled at Western Bicutan National High School during the academic year 2025–2026. These respondents were selected because the researcher was currently teaching English 10 at the school, making data gathering more accessible and manageable. Specifically, 34 English teachers and 130 Grade 10 students participated in the study through total enumeration. This sampling approach ensured proportional representation while maintaining objectivity and reducing sampling bias. To guarantee the relevance and reliability of the data, specific inclusion criteria were established. Only Grade 10 students currently enrolled at Western Bicutan National High School during the academic year 2025–2026 and taking English classes where collaborative learning techniques such as jigsaw technique, think pair share, group problem solving, and round robin technique were applied were included. In addition, only teachers handling English classes during the School Year 2025–2026 were considered respondents. Participation was entirely voluntary, and informed consent was secured from all participants in accordance with ethical research standards. These criteria strengthened the validity and reliability of the data collected and provided a sound basis for identifying which collaborative learning techniques were most effective in improving the reading comprehension of Grade 10 students.

The study utilized a researcher made questionnaire designed to gather data regarding the extent of collaborative learning techniques used by teachers in teaching reading comprehension and the reading comprehension performance of Grade 10 students. The questionnaire consisted of three major parts aligned with the specific statements of the problem. The first part focused on the demographic profile of the respondents and collected background information from both teachers and students. For teachers, data were gathered regarding age, sex, years of teaching experience, and highest educational attainment. These variables helped identify patterns in instructional practices based on professional characteristics. For students, information on sex, socio economic status, and exposure to reading materials at home or in school was collected. These factors were considered relevant to understanding reading development and responsiveness to collaborative learning techniques.

The second part of the questionnaire assessed the extent of collaborative learning techniques used by teachers. This section measured how frequently teachers utilized specific collaborative learning techniques in teaching reading comprehension, including jigsaw technique, round robin technique, collaborative question generation, text debate, and reciprocal teaching. Teachers rated the extent of their use of each strategy using a four-point Likert scale consisting of 1 – No extent, 2 – Slight extent, 3 – Moderate extent, and 4 – To a great extent. This section provided information regarding the instructional approaches employed by teachers and the extent to which collaborative methods were integrated into reading instruction.

The third part focused on students' reading comprehension results based on the collaborative learning techniques in which they participated. This section evaluated students' reading comprehension outcomes based on differentiated tasks influenced by the collaborative learning techniques identified in the study. Students rated their perceived level of improvement in reading comprehension using a rubric with the following score ranges, ratings, and descriptions: 100-94 – 4-Full Participation-Very Good, 93-87 – 3-Moderate Participation-Good, 86-80 – 2-Limited Participation-Fair, and Below 80 – 1-Minimal Participation-Needs Improvement. This section determined the effectiveness of each collaborative learning technique in enhancing reading comprehension and established the connection between instructional practices and learner outcomes. Collectively, the three sections of the

questionnaire provided comprehensive data that facilitated a deeper understanding of the reading comprehension performance of Grade 10 students and served as the basis for developing a targeted teaching plan to improve comprehension outcomes.

To ensure validity, the researcher developed a self-made questionnaire that underwent validation by three experts knowledgeable in the field of research. Their recommendations were carefully incorporated to improve the instrument's overall validity. The questionnaire was further reviewed and validated by a school head, a master teacher, and a professor from the University of Perpetual Help. Their comments and suggestions resulted in additional revisions that enhanced the clarity, relevance, and appropriateness of the instrument. To establish reliability, a pilot test was conducted among 30 non-respondent teachers and 40 students who possessed characteristics similar to those of the target population. The pilot test was conducted to determine whether the questionnaire items were clear, consistent, and reliable prior to actual data collection. All 70 responses were included in the analysis, with no cases excluded, indicating satisfactory participation and data quality. The pilot test data were analyzed using Cronbach's alpha to determine the internal consistency and reliability of the instrument.

Data collection was conducted systematically to ensure accuracy and compliance with ethical standards. Prior to the conduct of the study, permission was secured from the school head of Western Bicutan National High School as well as from the respective department heads. These approvals were necessary to ensure compliance with institutional regulations and maintain transparency throughout the research process. Following approval, individualized letters of request were distributed to respondents to obtain their informed consent and willingness to participate. The survey questionnaires were administered physically during English classes and during teachers' vacant periods, allowing respondents adequate time and convenience to complete the instrument. Completed questionnaires were collected, checked for completeness and accuracy, and securely stored for subsequent analysis.

At the beginning of the data collection process, respondents were provided with informed consent forms and relevant documentation explaining the purpose of the study, research procedures, and data collection tools. These details were communicated through the introductory section of the questionnaire to ensure that participants fully understood the nature of the study and voluntarily agreed to participate. Respondents were assured that their responses would remain confidential and that they retained the right to withdraw from the study at any point without experiencing any negative consequences.

For the analysis and interpretation of quantitative data, several statistical tools were employed. Frequency and Percentage were used to describe the demographic profile of the respondents, including teachers' age, sex, teaching experience, and educational attainment, as well as students' sex, socio economic status, and exposure to reading materials. These measures summarized the characteristics of the participants and identified the composition of the respondent groups. Mean was utilized to determine the level of assessment of the extent of collaborative learning strategies used by teachers in teaching reading comprehension. Mean scores were computed for reading comprehension, collaborative learning, jigsaw technique, think pair share, group problem solving, round robin technique, and collaborative strategic reading. The same statistical measure was used to determine the extent of teachers' utilization of collaborative learning techniques based on the four-point Likert scale. ANOVA was employed to examine significant differences in the level of assessment and extent of collaborative learning strategies used by teachers when grouped according to their profile variables. The test determined whether significant differences existed among respondents based on their demographic characteristics. The findings informed instructional practices and provided a foundation for the development of a teaching plan aimed at improving reading comprehension outcomes. A t test was used to determine the significant difference in students'

reading comprehension levels before and after the use of collaborative learning techniques. Pearson's r was utilized to determine the significant relationship between the extent of use of collaborative learning techniques and students' reading comprehension performance.

The study strictly adhered to ethical standards throughout the planning, data collection, analysis, and reporting stages. Before participation, all respondents were provided with a clear explanation of the study's objectives, procedures, and their rights as participants. Written informed consent was secured to ensure that participation was voluntary and based on a complete understanding of the research. Confidentiality and anonymity were maintained throughout the study. No personal identifiers were collected, and all responses were coded to protect participants' privacy. Data were reported in aggregate form to prevent the identification of individual respondents. Participants were informed of their right to withdraw from the study at any time without penalty, thereby reinforcing the voluntary nature of their involvement.

The study also observed the principle of non-maleficence by ensuring that no procedures or questions posed any physical, psychological, or professional harm to respondents. All collected data were securely stored and accessible only to the researcher. The information gathered was used exclusively for academic purposes and was scheduled for disposal upon completion of the study. Furthermore, the researcher secured all necessary permissions from school heads, administrators, and relevant school authorities before conducting the research. The study complied with institutional requirements and Department of Education guidelines. It likewise adhered to the provisions of Republic Act No. 10173, otherwise known as the Data Privacy Act of 2012, to ensure the ethical collection, handling, storage, and protection of personal and sensitive information.

RESULTS AND DISCUSSION

This chapter presents the analysis and interpretation of data gathered to answer the research problems stated in Chapter 1. The study involved 34 teacher respondents and 130 student respondents, whose responses and performance results served as the basis for examining demographic profiles, the extent of collaborative learning techniques used in developing reading comprehension, the level of students' reading comprehension before and after the use of collaborative techniques, significant differences in performance, the relationship between collaborative learning techniques and reading comprehension performance, and the proposed teaching plan. Using the sampling approach, data gathering instruments, and statistical procedures employed in the study, including frequency, percentage, mean, verbal interpretation, t -test, analysis of variance, Pearson's r , computed t -value, tabular t -value, and hypothesis testing at the 0.05 level of significance, the discussion is grounded directly in the gathered data and interpreted in relation to the objectives of the study.

In terms of the age profile of the teacher respondents, the data showed that 12 or 34 % were 40 to 49 years old, 8 or 24 % were 50 to 59 years old, 7 or 21 % were 30 to 39 years old, 6 or 18 % were 29 years old and below, and 1 or 3 % was 60 years old and above, for a total of 34 or 100 %. This age distribution indicates that the majority of the teachers belonged to the middle and late career stages, suggesting a workforce with substantial professional experience. In the context of English instruction, such experience is important because teaching reading comprehension requires competence in grammar, communication, vocabulary development, classroom interaction, and strategic reading instruction. The presence of teachers from younger age groups, particularly the 7 or 21 % aged 30 to 39 years old and the 6 or 18 % aged 29 years old and below, also suggests that the teaching force includes educators who may contribute contemporary methods, technology assisted instruction, and innovative classroom practices.

The small number of teachers aged 60 years old and above, represented by 1 or 3 %, further implies the need for continuing recruitment and professional development to sustain effective English language instruction.

With respect to sex, the teacher respondents were composed of 23 females or 68 % and 11 males or 32 %, for a total of 34 or 100 %. This result shows that the teaching profession among the respondents was female dominated. Such distribution reflects common patterns in Philippine education, where women often constitute a larger portion of the teaching workforce. The strong representation of female teachers may contribute positively to classroom interaction, particularly in areas associated with patience, care, and interpersonal support. However, the presence of 11 male teachers or 32 % remains important because gender diversity among teachers may provide varied perspectives, approaches, and role models in the educational environment.

In terms of teaching experience, 10 or 29 % of the teacher respondents had 16 years and above of teaching experience, 9 or 26 % had 11 to 15 years, 8 or 24 % had 6 to 10 years, and 7 or 21 % had 5 years and below, for a total of 34 or 100 %. The data indicate that the largest group of teachers had 16 years and above of experience, suggesting that many respondents were already seasoned educators. Teachers with longer experience are often more capable of managing classrooms, selecting appropriate instructional strategies, and responding to diverse student needs. The 9 or 26 % with 11 to 15 years of experience and the 8 or 24 % with 6 to 10 years of experience further show that most respondents had considerable exposure to teaching. Meanwhile, the 7 or 21 % with 5 years and below of experience represent newer educators who may still be developing their professional competence but may also bring energy and openness to innovative collaborative methods.

Regarding educational attainment, 12 or 36 % of the teachers had a Bachelor's Degree with Master's Units, 8 or 24 % had a Master's Degree, 7 or 19 % had a Master's Degree with Doctoral Units, 4 or 12 % had a Bachelor's Degree, and 3 or 9 % had a Doctorate Degree (EdD/PhD), for a total of 34 or 100 %. These findings show that most teacher respondents had pursued graduate level education beyond the bachelor's degree. The 12 or 36 % with master's units, 8 or 24 % with master's degrees, 7 or 19 % with doctoral units, and 3 or 9 % with doctorate degrees reflect a strong commitment to professional advancement. This level of academic preparation may enhance teachers' pedagogical knowledge, research awareness, and ability to implement evidence-based strategies in reading instruction.

The demographic profile of the student respondents in terms of sex showed that 93 or 76 % were female and 37 or 24 % were male, for a total of 130 or 100 %. This indicates that female students constituted the majority of the respondents. The strong female representation may influence classroom dynamics, particularly in participation, collaboration, and engagement in reading activities. However, the presence of 37 male students or 24 % also suggests that collaborative learning techniques must remain inclusive and responsive to the learning styles and participation patterns of both male and female learners.

In terms of socio-economic status, 84 or 54 % of the students belonged to the middle-income group, 33 or 25 % belonged to the high-income group, and 13 or 21 % belonged to the low-income group, for a total of 130 or 100 %. The data show that most students came from middle income families, which may provide moderate access to learning materials, technology, and academic support. The 33 or 25 % from high income families may have greater access to books, digital resources, and academic enrichment opportunities, while the 13 or 21 % from low-income families may face limitations in educational resources. This profile is important because socio-economic background can influence reading exposure, vocabulary development, and academic readiness.

As to exposure to reading materials, 52 or 40 % of the students had regular exposure, 40 or 31 % had extensive exposure, 30 or 22 % had occasional exposure, and 8 or 6 % had no exposure to reading materials, for a total of 130 or 100 %. These findings indicate that a substantial number of students had regular or extensive access to reading materials, which may support vocabulary growth, comprehension development, and independent learning. However, the presence of 30 or 22 % with only occasional exposure and 8 or 6 % with no exposure suggests that some students may have limited opportunities to develop reading habits outside formal instruction. This reinforces the need for classroom-based reading strategies, such as collaborative learning techniques, to help bridge differences in reading exposure.

The extent of collaborative learning techniques utilized in developing reading comprehension was first examined in terms of the Jigsaw Technique. The teacher ensured that students understood their roles as “experts” before sharing with their group to a great extent, with a mean of 3.55. The teacher monitored and supported students during the expert group phase to a moderate extent, with a mean of 3.47. The teacher facilitated group discussions where each student contributed their learned segment to a moderate extent, with a mean of 3.36. The teacher provided guiding questions to help students extract key ideas from their assigned texts to a moderate extent, with a mean of 3.19. The teacher divided the reading materials into segments by assigning each student a portion to master and teach to peers to a moderate extent, with a mean of 3.12. The over-all mean of 3.31 was interpreted as Moderate Extent based on the legend where 3.5 to 4.0 means Great Extent, 2.5 to 3.49 means Moderate Extent, 1.5 to 2.40 means Slightly Extent, and 1.0 to 1.49 means No Extent. These results indicate that the Jigsaw Technique was practiced, but not consistently at the highest level. Its strongest component was role clarification, while the segmentation of reading materials received the lowest mean. This suggests that teachers recognize the value of assigning expert roles but may need to strengthen the structure and preparation of Jigsaw reading tasks.

For the Round-Robin Technique, the teacher structured reading tasks so that each student built upon the previous response to a great extent, with a mean of 3.87. The teacher facilitated turn taking to promote equal participation to a great extent, with a mean of 3.77. The teacher used round-robin sharing to ensure all students contributed ideas during reading discussions to a moderate extent, with a mean of 3.37. The teacher used this strategy to review key concepts from the reading material to a moderate extent, with a mean of 3.24. The teacher encouraged students to listen actively and respond constructively to a moderate extent, with a mean of 3.19. The over-all mean of 3.43 was interpreted as Moderate Extent. These findings show that Round-Robin was used to encourage sequential participation and equal turn taking, but there remained a need to strengthen active listening, constructive response, and concept review. The technique appears useful for participation, but its full effect on reading comprehension depends on the quality of discussion and feedback provided during the activity.

In terms of Collaborative Question Generation, the teacher instructed students to work in pairs or groups to generate questions before, during, or after reading to a great extent, with a mean of 3.65. The teacher guided students in refining their questions to promote deeper understanding to a great extent, with a mean of 3.54. The teacher integrated collaborative questioning into lesson plans regularly to a moderate extent, with a mean of 3.43. The teacher encouraged students to formulate their own questions about the text to a moderate extent, with a mean of 3.36. The teacher used student generated questions to initiate class discussions or assessments to a moderate extent, with a mean of 3.15. The over-all mean of 3.36 was interpreted as Moderate Extent. These findings suggest that teachers supported group-based questioning and question refinement, but student generated questions were not yet maximized as regular tools for discussion and assessment. Since questioning encourages students to

analyze, evaluate, and reflect on texts, increasing opportunities for learners to formulate and use their own questions may further develop higher order thinking and reading comprehension.

For Text Debate, the teacher assigned roles or positions to students to promote perspective taking and critical thinking to a great extent, with a mean of 3.79. The teacher encouraged students to use textual evidence to support their arguments during debates to a great extent, with a mean of 3.55. The teacher facilitated structured debates that allowed students to respond to opposing viewpoints to a moderate extent, with a mean of 3.47. Text debate was used to assess students' comprehension and analytical skills to a moderate extent, with a mean of 3.36. The teacher organized debates based on themes or issues found in reading materials to a moderate extent, with a mean of 3.12. The over-all mean of 3.31 was interpreted as Moderate Extent. The data indicate that teachers used Text Debate mainly to assign roles and encourage evidence-based argumentation, but there was less emphasis on organizing debates around themes and issues in the reading materials. This suggests that while the technique promotes critical thinking and perspective taking, it may become more effective if teachers consistently connect debates to textual content and use them as structured assessments of comprehension and analysis.

In terms of Reciprocal Teaching, the teacher implemented the four key strategies of reciprocal teaching, namely predicting, questioning, clarifying, and summarizing, to a great extent, with a mean of 3.87. The teacher modeled the use of reciprocal teaching strategies before students applied them independently to a great extent, with a mean of 3.51. The teacher regularly assessed students' use of reciprocal teaching strategies during reading activities to a moderate extent, with a mean of 3.45. The teacher allowed students to take turns leading discussions using reciprocal teaching strategies to a moderate extent, with a mean of 3.14. Reciprocal teaching was used to improve students' comprehension of complex texts to a moderate extent, with a mean of 3.12. The over-all mean of 3.37 was interpreted as Moderate Extent. These findings show that teachers were familiar with and implemented the core strategies of reciprocal teaching, but students were given fewer opportunities to lead discussions and apply the strategies independently to complex texts. Since reciprocal teaching depends on active student leadership and metacognitive monitoring, greater emphasis on guided practice and student led discussion may enhance its effectiveness in improving comprehension.

The level of students' reading comprehension before and after the use of collaborative techniques showed improvement across most techniques. In the Jigsaw Technique, the score increased from 93, interpreted as Very High, before the intervention to 96, also interpreted as Very High, after the intervention. In the Round-Robin Technique, the score increased from 85, interpreted as High, to 92, interpreted as High. In Collaborative Question Generation, the score increased from 78, interpreted as Low, to 81, interpreted as Low. In Text Debate, the score likewise increased from 78, interpreted as Low, to 81, interpreted as Low. In Reciprocal Teaching, the score remained 70 before and 70 after, both interpreted as Very Low. The mean score increased from 81, interpreted as Low, before the use of collaborative techniques to 84, interpreted as High, after their use. Based on the legend, 93 to 100 is Very High, 82 to 92 is High, 71 to 81 is Low, and below 70 is Very Low. These results show that collaborative learning techniques generally improved students' reading comprehension, although the extent of improvement varied by technique. Jigsaw produced the highest scores, increasing from 93 to 96, while Round-Robin also showed notable improvement from 85 to 92. Collaborative Question Generation and Text Debate showed modest gains from 78 to 81, while Reciprocal Teaching showed no change at 70 before and 70 after. The overall increase from 81 to 84 suggests that collaborative learning contributed positively to students' comprehension performance.

The significant difference in students' reading comprehension before and after the use of collaborative techniques was tested using a t-test. Before the use of collaborative techniques, the mean was 81, interpreted as Low, while after their use, the mean was 84, interpreted as High. The computed t-value was 4.12, which exceeded the critical value of 1.645 at the 0.05 level of significance. Therefore, the null hypothesis was rejected, and the result was interpreted as Significant. This means that there was a significant difference in the level of students' reading comprehension before and after the use of collaborative techniques. The improvement from 81 to 84 indicates that students performed better after being exposed to collaborative learning activities. This supports the view that collaborative learning improves comprehension by allowing students to discuss texts, share ideas, clarify difficult concepts, and construct meaning through peer interaction.

The significant difference in students' reading comprehension performance using collaborative learning techniques when grouped according to profile was examined in terms of sex, socio-economic status, and exposure to reading materials. When grouped according to sex, the between groups sum of squares was 16.92, df was 2., mean square was 8.46, F was 4.21, and p-value was 0.311. The within groups sum of squares was 295.47, df was 127, and mean square was 2.01, while the total sum of squares was 312.39 with df of 129. Since the computed p-value of 0.311 was greater than 0.05, the null hypothesis was accepted, and the result was interpreted as Not Significant. This means that there was no significant difference in students' reading comprehension performance using collaborative learning techniques when grouped according to sex. The finding implies that sex was not a determining factor in students' reading comprehension performance in the context of collaborative learning, suggesting that the techniques provided learning opportunities that benefited both male and female students.

When grouped according to socio-economic status, the between groups sum of squares was 12.99, df was 2, mean square was 6.47, F was 2.98, and p-value was 0.001. The within groups sum of squares was 320.46, df was 127, and mean square was 2.18, while the total sum of squares was 333.45 with df of 129. Since the computed p-value of 0.001 was less than 0.05, the null hypothesis was rejected, and the result was interpreted as Significant. This indicates that there was a significant difference in students' reading comprehension performance using collaborative learning techniques when grouped according to socio-economic status. The finding suggests that socio-economic status affected students' reading comprehension performance, possibly because learners from different economic backgrounds may have unequal access to books, technology, academic support, and literacy rich environments. Thus, while collaborative learning can improve comprehension, students' socio-economic conditions may still influence how effectively they participate in and benefit from these techniques.

When grouped according to exposure to reading materials, the between groups sum of squares was 14.21, df was 2, mean square was 7.11, F was 3.76, and p-value was 0.002. The within groups sum of squares was 277.83, df was 127, and mean square was 1.89, while the total sum of squares was 292.04 with df of 129. Since the computed p-value of 0.002 was less than 0.05, the null hypothesis was rejected, and the result was interpreted as Significant. This means that there was a significant difference in students' reading comprehension performance using collaborative learning techniques when grouped according to exposure to reading materials. The result implies that exposure to reading materials affected students' reading comprehension performance. Students who had regular or extensive access to reading materials may have had stronger vocabulary, background knowledge, and comprehension skills, while those with occasional or no exposure may have experienced greater difficulty in interpreting and analyzing texts during collaborative activities.

The relationship between the extent of use of collaborative learning techniques and students' performance in reading comprehension was determined using Pearson's r . The Pearson's r value was 0.82, interpreted as High Correlation. The computed t -value was 3.89, while the tabular t -value was 1.645 at the 0.05 level of significance. Since the computed t -value of 3.89 was greater than the tabular t -value of 1.645, the null hypothesis was rejected, and the result was interpreted as Significant. This indicates that there was a significant relationship between the extent of use of collaborative learning techniques and students' performance in reading comprehension. The high correlation of 0.82 suggests that greater use of collaborative learning techniques was associated with better reading comprehension performance. This finding highlights the value of collaborative learning as an instructional approach that promotes active engagement, peer discussion, shared responsibility, and deeper processing of texts.

Based on the findings of the study, a proposed teaching plan was developed to strengthen the use of collaborative learning techniques in reading comprehension. The plan focused on Reciprocal Teaching, Text Debate, and Collaborative Question Generation because these three techniques had the lowest mean scores and required further enhancement. The teaching plan was designed for Grade 10 students and aimed to integrate structured collaborative learning activities that promote active participation, critical thinking, peer interaction, and metacognitive awareness. Its introduction emphasized the use of specific techniques such as Reciprocal Teaching, Text Debate, and Collaborative Question Generation to support student centered learning. Its rationale was based on the idea that collaborative learning improves comprehension by encouraging dialogue, shared responsibility, and meaningful interaction with texts. Its general objectives were to strengthen students' reading comprehension through cooperative strategies, promote critical thinking and communication skills, foster metacognitive awareness, and provide teachers with a framework for integrating collaborative methods into classroom practice.

Overall, the findings show that the teacher respondents were mostly experienced and professionally prepared, while the student respondents varied in sex, socio-economic status, and exposure to reading materials. The collaborative learning techniques used in developing reading comprehension were generally implemented to a Moderate Extent, with over-all means of 3.31 for Jigsaw Technique, 3.43 for Round-Robin Technique, 3.36 for Collaborative Question Generation, 3.31 for Text Debate, and 3.37 for Reciprocal Teaching. Students' reading comprehension improved from a mean score of 81, interpreted as Low, before the use of collaborative techniques to 84, interpreted as High, after their use. The t -test result showed a significant difference, with a computed t -value of 4.12 exceeding the critical value of 1.645 at the 0.05 level of significance, leading to rejection of the null hypothesis. When grouped according to profile, sex showed no significant difference with a p -value of 0.311, while socio-economic status and exposure to reading materials showed significant differences with p -values of 0.001 and 0.002, respectively. Pearson's r revealed a High Correlation of 0.82 between the extent of use of collaborative learning techniques and students' reading comprehension performance, with a computed t -value of 3.89 exceeding the tabular t -value of 1.645 at the 0.05 level of significance, resulting in rejection of the null hypothesis and confirmation of a significant relationship. These findings affirm that collaborative learning techniques contribute meaningfully to the improvement of reading comprehension, while also showing that learner background factors and the quality of implementation influence outcomes. The proposed teaching plan therefore provides a practical response to the findings and serves as a basis for strengthening reading instruction in the succeeding chapter.

CONCLUSION

The findings of the study demonstrate that the respondents were predominantly female teachers with varied years of teaching experience and advanced academic qualifications, as well as predominantly female students who largely came from middle-income families and had regular exposure to reading materials. These demographic characteristics provided important contextual insights into the educational environment in which collaborative learning techniques were implemented and examined. The findings further revealed that teachers utilized collaborative learning techniques to a great extent in developing students' reading comprehension. Strategies such as Jigsaw, Round-Robin, collaborative question generation, text debates, and reciprocal teaching were generally implemented effectively, particularly in structuring participation, guiding collaborative activities, and fostering student engagement. Nevertheless, some aspects involving deeper facilitation and application of these strategies were practiced only to a moderate extent, indicating opportunities for further enhancement in instructional delivery.

The results also established that collaborative learning techniques contributed substantially to the improvement of students' reading comprehension performance. Prior to the implementation of these approaches, most students demonstrated low levels of reading comprehension achievement. However, following the use of collaborative learning techniques, students exhibited significantly higher levels of performance, with many advancing to the high and very high achievement categories. This improvement underscores the effectiveness of collaborative learning in promoting active engagement, meaningful discussion, peer support, and deeper understanding of reading texts. Statistical analysis further confirmed the effectiveness of these strategies, as a significant difference was found between students' reading comprehension performance before and after the implementation of collaborative learning techniques. The rejection of the null hypothesis indicated that the observed improvement was not due to chance but was associated with the instructional intervention employed in the study.

Furthermore, the findings revealed that students' reading comprehension performance varied according to certain profile characteristics. No significant differences were found when students were grouped according to sex, suggesting that collaborative learning techniques benefited both male and female students similarly. In contrast, significant differences emerged when students were grouped according to socio-economic status and exposure to reading materials, indicating that these factors exert a meaningful influence on reading comprehension outcomes. These results highlight the importance of considering students' backgrounds and literacy experiences when designing and implementing instructional strategies. The study likewise established a strong and statistically significant positive relationship between the extent of collaborative learning techniques employed by teachers and students' reading comprehension performance. The high correlation coefficient demonstrated that greater implementation of collaborative learning strategies was closely associated with improved comprehension outcomes, further validating the instructional value of these approaches in reading education.

The study also confirmed the relevance and applicability of the proposed teaching plan, which integrates collaborative learning techniques to enhance Grade 10 students' reading comprehension through active participation, peer interaction, critical thinking, and meaningful construction of knowledge. The teaching plan provides a structured and student-centered framework that supports the development of reading skills while fostering cooperation and engagement among learners.

Based on these findings, it is recommended that school heads develop educational programs and reading initiatives that capitalize on the strengths of teachers while sustaining students' access to reading materials and literacy opportunities. Teachers are encouraged to further strengthen their implementation of collaborative learning techniques by deepening facilitation practices and consistently integrating these approaches into reading instruction. Particular attention should be given to designing inclusive collaborative activities that consider differences in socio-economic status and exposure to reading materials to promote equitable learning outcomes. The proposed teaching plan may likewise be adopted and implemented by school administrators to further improve students' reading comprehension and address existing disparities among learners. Students are encouraged to actively participate in collaborative learning activities and broaden their exposure to diverse reading resources to strengthen their comprehension skills. Finally, future researchers may extend this line of inquiry by examining the long-term effects of collaborative learning techniques on reading comprehension across various age groups, educational contexts, and learning environments. Overall, the study affirms that collaborative learning techniques constitute an effective instructional approach for enhancing reading comprehension and fostering meaningful, inclusive, and student-centered learning experiences.

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