

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2024, Vol. 5, No. 6, 2080 – 2087

<http://dx.doi.org/10.11594/ijmaber.05.06.10>

Research Article

Collaborative Learning Approach (CLA) in Improving Reading Proficiency

Ronnel Rey R. Delima*, Cupid Jones O. Risonar, Jayson S. Digamon

Department of Education, Gingoog City, Philippines

Article history:

Submission April 2024

Revised June 2024

Accepted June 2024

*Corresponding author:

E-mail:

ronnelrey.delima1994@deped.gov.ph

ABSTRACT

Studies show that Filipino learners are not demonstrating proficiency in reading. In the recent Program for International Student Assessment (PISA) 2023 results, Filipino students were found to be poor at reading proficiency. One potential strategy is collaborative learning. Thus, this study aimed to determine the effect of the Collaborative Learning Approach (CLA) on the reading proficiency of seventh-grade students. This study used a quasi-experimental design with two experimental and control groups. Using purposive sampling, two grade 7 sections of the research site were included in the study. There were 26 students in one section who were chosen to be part of the experimental group and 24 in the other section, constituting the control group, for 50 students. Each group was given a pretest and a post-test. Students in the experimental group employed the collaborative reading method, while the control group used the traditional method. The questionnaire was validated by experts and deemed reliable, scoring .70 on the Kuder-Richardson test. Mean scores and independent t-tests were used to analyze the data. Results revealed a significant difference between the experimental and control groups regarding reading proficiency after the intervention of CLA with a p-value of 0.000. It was concluded that CLA significantly influences reading proficiency and can be recommended for use in the classroom. However, based on the PHIL-IRI criteria for reading proficiency, the students in the experimental group did not meet the minimum instructional or proficiency level requirements. It is therefore suggested that further research must be done to make conclusive evidence that CLA significantly influences reading proficiency and evaluate PHIL-IRI criteria for reading proficiency, considering that it is inconsistent with the independent t-test results showing a significant difference in the reading proficiency of the experimental group.

Keywords: *Collaborative learning, Frustration readers, Instructional readers, Proficient readers, Reading proficiency*

How to cite:

Delima, R. R. R., Risonar, C. J. O., & Digamon, J. S. (2024). Collaborative Learning Approach (CLA) in Improving Reading Proficiency. *International Journal of Multidisciplinary: Applied Business and Education Research*. 5(6), 2080 – 2087. doi: 10.11594/ijmaber.05.06.10

Introduction

Reading is one of the essential skills in a language that students must learn and develop as a requisite skill in learning other areas like science, math, arts and history (Buehl, 2023). However, many Filipino students in junior high school struggle to read, indicating low reading proficiency. This was manifested in the Programme for International Student Assessment (PISA) 2023, in which a study on students around fifteen years old revealed that the Philippines ranked 5th lowest among 81 countries in areas like math, science, and reading comprehension (Haw and King, 2023). This is consistent with the study of Risonar et al. (2021) which found that learners in a grade 6 class lacked solid general knowledge and vast vocabulary, which are essential in reading. Additionally, in the school where the study was conducted, the Philippine Informal Reading Inventory (PHIL-IRI) results revealed that 80% of the students from Grade 7 to Grade 10 were frustrated readers, meaning they recognize words and sentences but cannot understand their meaning.

Many factors affect the learning of the students. According to Churchward and Willis (2023), the quality of the education system, teaching standards, curriculum relevance, and language proficiency play essential roles in the education of students. However, among all these factors, teaching impacts students' learning more than other factors (Risonar et al., 2023). This means that teachers must employ strategies that can help students learn. One potential learning strategy is collaborative learning, which is suggested to be implemented in the 21st-century classroom (Ghavifekr, 2020).

Similarly, collaborative learning involves groups of learners working together to solve a problem, complete a task, or create a product (Yilmaz & Karaoglan, 2020). It has social, psychological, academic, and assessment benefits (Smith et al., 2020). In fact, in the study of Loes (2019), the use of collaborative learning is beneficial because students have chances to explore the competencies in reading proficiency on any text to enhance their competency in communication and easily interact with other students, especially when it comes to exchanging opinions and ideas on the text being read.

Gillies (2023) further supports this assertion, highlighting collaborative learning's role in fostering social and cognitive development and enhancing socialization skills. Marollano (2018) emphasizes the significance of collaborative learning in honing reading proficiency and communication skills, allowing students to engage with diverse content while fostering effective communication. Additionally, Qureshi et al. (2023) suggest that collaborative learning inspires students to read more, contributing to improved reading skills.

Collaboration fosters deep thinking and imaginative exploration of subjects while promoting empathy for diverse perspectives, as Sparks (2017) noted. Santiago (2023) emphasizes that collaboration provides children and teenagers invaluable insights into various situations and challenges, enriching their understanding. Ismail et al. (2023) assert that collaborative learning encourages active participation and shared responsibility among students, nurturing critical thinking skills. Additionally, Mayer & Alexander (2016) suggest that cooperative learning environments outperform individualized settings, emphasizing the importance of peer interaction. Burn & Creaney (2023) underscore the supportive role of collaboration in enhancing children's achievements through peer and adult guidance. De Felice (2023) further supports this notion, emphasizing that collaborative endeavors with skilled companions facilitate the acquisition of new concepts and talents. Nabijonova (2023) emphasizes that a cooperative classroom is where students communicate and seek information to achieve a common goal.

Interaction with adults and peers is essential for students' language and literacy learning across diverse contexts, as Richardson et al. (2023) highlighted. This notion is further supported by Nardo (2021), who suggests that cognitive performance improves when students engage in interaction rather than solitary study. The growing influence of collaboration in education is evident, with its integration into frameworks such as the Danielson Framework for teacher evaluation, as noted by Shak (2023). Emphasizing the significance of productive group tasks, Henderson and Cunningham (2023) stress the importance of students

actively participating in such activities to facilitate genuine learning experiences.

Akilan (2024) highlights the importance of teachers possessing the essential skill of structuring students' learning goals collaboratively, competitively, or individually. However, the clarity of the benefits of peer interaction in learning remains uncertain, as revealed by the findings of Mesghina et al. (2024). Their study suggests ambiguity regarding whether students benefit more from peers with similar or higher levels of prior knowledge. On the other hand, Ma et al. (2023) found no significant difference in self-efficacy between collaborative learning and individual learning approaches, adding complexity to the understanding of effective learning strategies. In collaborative settings, students expand their understanding through peer interaction and provide mutual assistance during activities like guided reading exercises (Ramzan et al., 2023). As supported by research (Catarino et al., 2019), collaborative learning stands out for its ability to enhance students' reasoning processes and critical thinking skills.

While there are so many research studies inside and outside of the Philippines regarding the significant impact of collaborative learning methods on students' learning (Aporbo, 2023), there is a drought of research about collaborative learning in Misamis Oriental, where this research was conducted. It was the primary reason why this research was developed. Aside from that, the researchers also have found potential benefits with collaborative learning as an effective strategy to improve reading comprehension (Chen et al., 2020), which is a problem in the Philippines (Oclarit & Casinillo, 2021).

Research Methodology

Research Design

This research employed a quasi-experimental design. A quasi-experimental strategy aims to establish a cause-and-effect relationship between an independent and dependent variable. The impact of the intervention technique on the respondents' reading competency was tested using a quasi-experiment by the researchers. The study used two intact classes as control and experimental groups. The experimental group's Collaborative Learning Approach (CLA) was employed as an intervention technique. On the other hand, the control group was subjected to the traditional method, which consisted of traditional reading without peer collaboration.

Research Setting

This study was conducted in a Grade 7 class in an integrated school in Gingoog City. The study used intentional selection, or purposive sampling, since the results of the school's PHIL-IRI revealed that most of the students were frustrated readers, which the intervention technique used in this study was designed to address. The number of study participants is shown in the table below.

Research Respondents

The following table shows the study respondents. Using the purposive sampling method, two grade 7 sections from the research site were included in the study. 50 Grade 7 students were selected as participants in this study. There were 26 students chosen for the experimental group, while 24 respondents were in the control group.

Table 1. Respondents of the Study

Group	Sample
Experimental	26
Control	24
<i>Total</i>	<i>50</i>

Validity and Reliability

Three reading experts validated the study's instrument: an Education Program Specialist from the Division of Gingoog City and two

master teachers from Gingoog City Comprehensive National High School. It was done to ensure the passages and questions were appropriate for a seventh-grade audience. Pilot

testing was done on another sample of seventh graders with the same characteristics as the responders to ensure reliability. The reliability evaluation was then performed using Kuder-Richardson 20, which yielded a value of 0.70, indicating that the data was reliable.

Data Gathering Procedure

Before conducting the study, the researchers secured research ethics compliance from the Research Ethics Review Committee of Capitol University, Cagayan de Oro City. Then, researchers sought authorization to conduct the study: the university's dean, the division superintendent of the research setting, and the school head. Consent Forms were then acquired. The respondents were assured that all their responses were treated with the utmost confidentiality. Following the approval of the request, the researchers began validating the research instrument, and pilot testing was conducted to ensure its reliability. After that, a pre-test was conducted in experimental and control groups. It measured their level of reading

proficiency. The measure indicated whether the students were frustrated, instructional, or independent. The passages used in both tests were adapted from the PHIL-IRI. The researchers used the Collaborative Learning Approach (CLA) after the pretest in the experimental group. The implementation lasted at least one to two hours per workday for eight (8) weeks.

Meanwhile, the control group did not adopt the CLA. After implementing the intervention, both groups answered a post-test, the same as the pretest. The data from the post-test were gathered, tabulated, and statistically treated and interpreted.

Research Instrument and Scoring Procedure

A 50-item Reading Proficiency Test with literal, inferential, and evaluative questions was used to assess reading ability. The researchers employed the Philippine Informal Reading Inventory (Phil-IRI) Scale 2018 to measure the learners' reading competency level. The following is the scale used to determine reading proficiency:

Table 2. Scoring Procedure

Range of Score	Reading Proficiency Level	
	Performance Criteria	Qualitative Description
40-50	At least 80-100% of the questions were correctly answered	Independent
30-39	Students answered 59-79% of the questions correctly	Instructional
0-29	At least 58% of the questions were correctly answered	Frustration

Statistical Techniques

The mean was used to determine the learners' reading proficiency level, and an independent t-test was used to determine the difference in the reading proficiency levels between the experimental and control groups.

Results and Discussion

Reading Proficiency Level in the Pretest and Post-test

Table 3 presents the reading proficiency level of the learners in the control and experimental groups in the pretest and post-test.

Table 3. Mean Level of Respondents' Reading Proficiency in Pretest and Post-test

Group	Pretest		Post-test	
	Mean	Level	Mean	Level
Control Group	20.58	Frustration	23.04	Frustration
Experimental Group	19.73	Frustration	28.04	Frustration

Legend: Independent – 40-50 Instructional – 30-39 Frustration – 0-29

The results revealed that in the pretest, the mean values of both groups were slightly closer. The experimental group had a mean score of 19.73, while the control group had a mean score of 20.58.

Meanwhile, in the post-test, the experimental group's mean score was 28.04, greater than the control group's mean score of 19.73. The results indicate a difference in the reading proficiency level between the groups. However, this result is inconclusive in saying that CLA significantly impacts reading proficiency, considering both groups are still categorized as frustrated readers.

When comparing the results of the two groups in the pretest and post-test results, the experimental group improved more than the control group. The experimental group has improved from a mean score of 19.73 to 28.04. Meanwhile, there is a minimal improvement in the control group, which recorded a mean score of 23.04 in the post-test, compared to 20.58 in the pretest.

The overall results imply a problem with the students' reading proficiency because even

after the implementation of CLA, the students are still frustrated readers. The students could read the text but struggled to comprehend its meaning. The findings align with the Program for International Student Assessment, or PISA (2023), which found that the Philippines is 5th lowest in the ranking among the 81 nations assessed on reading comprehension.

Moreover, the findings of the study of Mesghina et al. (2024) revealed that it remains unclear whether students gain more from peers at relatively higher or similar levels of prior knowledge. In a similar study, Ma et al. (2023) found no significant difference in self-efficacy between collaborative learning and individual learning.

Significant Difference in the Experimental Group's Pretest and Post-test

Table 4 shows the distribution of statistics of the respondents' reading proficiency levels. In addition, it indicates their pretest and post-test scores.

Table 4. Significant Difference in the Experimental Group's Pretest and Post-test

Group	Pretest		Post-test		T	p	Decision	Interpretation
	Mean	SD	Mean	SD				
Experimental	19.73	7.42	28.04	4.52	-6.601	.000	Reject H ₀₁	Significant

The data reveal a significant difference in the mean level of the experimental group in the pretest and post-test. This is consistent with the p-value of 0.000, which implies that the Collaborative Learning Approach (CLA) positively affects students' reading proficiency. This is consistent with the study of Qureshi et al. (2023) which found that collaborative learning engages students and ultimately affects their learning performance.

According to Nabijonova (2023), a cooperative classroom is where students communicate and seek information to achieve a common goal. Similarly, collaborative learning benefits learners' social, psychological, academic, and assessment aspects (Smith et al., 2020). Gillies (2023) also claims that collaborative learning helps with various social and cognitive development and socialization.

Additionally, Marollano's (2018) study concluded that collaborative learning is beneficial since it allows students to practice reading proficiency in any content while also learning to communicate. In fact, in the study of Loes (2019), the use of collaborative learning is beneficial because students have chances to explore the competencies in reading proficiency on any text to enhance their competency in communication and easily interact with other students, especially when it comes to exchanging opinions and ideas on the text being read.

Lastly, interaction with others, including adults and peers, is required for students' language and literacy learning in various circumstances (Richardson et al., 2023). They do better cognitively when interacting than when they study alone, according to (Nardo, 2021).

Significant Difference in the Control and Experimental Group's Post-test Results

Table 3 indicates the post-test scores of the Non-SR and SR groups. In addition, it shows the

distribution of statistical mean and test statistics of the respondents' reading proficiency levels.

Table 3. The contrast of the Final Exam of the Controlled and Experimental Group of Students

Remark	Control		Experimental		T	P	Decision	Interpretation
	Mean	SD	Mean	SD				
Post-test	23.04	6.42	28.04	4.52	-3.201	.002	Reject H ₀₂	Significant

The data shows a mean of 23.04 in the post-test of the control group and 28.04 in the experimental group's post-test, in favor of the latter. The p-value is 0.002, suggesting that the difference in the post-test between the two groups is significant. This indicates that the Collaborative Learning Approach (CLA) to which the experimental group was exposed made a significant difference in the students' reading proficiency.

This supports the findings of studies indicating that collaborative learning improves students' reading proficiency (Koşar, 2023). Similarly, Millis (2023) argues that when students interact, discuss, and exchange ideas, it boosts learning participation and significantly benefits standardized tests. According to Sparks (2017), collaboration in the classroom can help students think more deeply and imaginatively about a subject and develop empathy for others' perspectives.

Additionally, collaborative learning emphasizes active participation and shared responsibility among students, fostering the development of critical thinking skills (Ismail et al., 2023). Research by Mayer & Alexander (2016) suggests that cooperative learning environments yield superior learning outcomes compared to individualized settings, highlighting the importance of peer interaction in education. Burns & Creaney (2023) underscore the potential of collaboration in facilitating children's achievements, which are enhanced through the support and guidance of peers and adults. Furthermore, De Felice (2023) asserts that collaborative endeavors with more skilled companions enable individuals to acquire new concepts, psychological tools, and talents. In collaborative settings, students expand their understanding through peer interaction and

provide mutual assistance during activities like guided reading exercises (Ramzan et al., 2023).

Lastly, as supported by research (Catarino et al., 2019), collaborative learning stands out for its ability to enhance students' reasoning processes and critical thinking skills. This method has become so influential in education that it is now integrated into frameworks like the Danielson Framework for teacher evaluation (Shak, 2023). Through collaboration, children and teenagers gain insights into diverse perspectives, thus deepening their understanding of various situations and challenges (Santiago, 2023). Henderson and Cunningham (2023) emphasize the importance of students engaging in productive group tasks to facilitate actual learning. Additionally, Akilan (2024) underscores the significance of teachers possessing the essential skill of structuring students' learning goals collaboratively, competitively, or individually.

Conclusion and Recommendations

The study results show that the students who participated in the study in both the experimental and control groups were frustrated readers. This means that it is evident that Filipino learners struggle with reading proficiency, which is consistent with international and local surveys such as PISA and PHIL-IRI. However, it does not mean that CLA did not affect the students' reading proficiency. In fact, with a p-value of .000 using the independent t-test, CLA influences the students' reading proficiency significantly. There is a significant difference in the proficiency level between the experimental group who were exposed to the CLA and the control group who were not. The experimental group showed a significant improvement in reading proficiency. Nonetheless, it did

not transform them into instructional or proficient readers based on PHIL-IRI criteria for reading proficiency. This means that while CLA appears to influence students' reading proficiency and can be recommended for use in the classroom, further research must be conducted to make conclusive evidence that CLA significantly influences reading proficiency. There must also be a study evaluating PHIL-IRI standards, considering that there is an inconsistency between the independent t-test results (showing a significant difference in the reading proficiency of the experimental group) and the PHIL-IRI criteria for reading proficiency (implying that the experimental group are still frustration readers after the experiment).

References

- Akilan, M. A. M. (2024). The Role of Using Cooperative Strategy in Developing Students' English Language Skills from Teachers' Perspective. *Journal of Applied Linguistics and Language Research*, 11(1), 81-109.
- Aporbo, R. J. (2023). Impact of Cooperative Learning Strategy on Students' Academic Productivity. *Journal of Student and Education*, 1(1), 16-26.
- Buehl, D. (2023). *Developing readers in the academic disciplines*. Routledge.
- Burns, S., & Creaney, S. (2023). Embracing children's voices: Transforming youth justice practice through co-production and child first participation. In *Child First: Developing a New Youth Justice System* (pp. 333-365). Cham: Springer International Publishing.
- Catarino, P., Vasco, P., Lopes, J., Silva, H., & Morais, E. (2019). Aprendizaje Cooperativo para Promover el Pensamiento Creativo y la Creatividad Matemática en la Educación Superior. *REICE. Revista Iberoamericana Sobre Calidad, Eficacia Y Cambio En Educación*, 17(3). <https://doi.org/10.15366/reice2019.17.3.001>
- Chen, C. M., Li, M. C., & Chen, T. C. (2020). A web-based collaborative reading annotation system with gamification mechanisms to improve reading performance. *Computers & education*, 144, 103697.
- Churchward, P., & Willis, J. (2023). Early career teachers and the always becoming horizon of quality teaching. *Teachers and Teaching*, 29(1), 1-19.
- De Felice, S., Hamilton, A. F. D. C., Ponari, M., & Vigliocco, G. (2023). Learning from others is good, with others is better: the role of social interaction in human acquisition of new knowledge. *Philosophical Transactions of the Royal Society B*, 378(1870), 20210357.
- Ghavifekr, S. (2020). COLLABORATIVE LEARNING: A KEY TO ENHANCE STUDENTS' SOCIAL INTERACTION SKILLS. *MOJES: Malaysian Online Journal of Educational Sciences*, 8(4), 9-21.
- Gillies, R. M. (2023). Promoting cognitive and affective dispositions through collaborative learning. In *The Routledge International Handbook of Gender Beliefs, Stereotype Threat, and Teacher Expectations* (pp. 307-317). Routledge.
- Haw, J. Y., & King, R. B. (2023). Understanding Filipino students' achievement in PISA: The roles of personal characteristics, proximal processes, and social contexts. *Social Psychology of Education*, 26(4), 1089-1126.
- Henderson, R. W., & Cunningham, L. (2023). Creating interactive sociocultural environments for self-regulated learning. In *Self-regulation of learning and performance* (pp. 255-281). Routledge.
- Ismail, F. A., Bungsu, J., & Shahrill, M. (2023). Improving students' participation and performance in building quantities through think-pair-share cooperative learning. *Indonesian Journal of Educational Research and Technology*, 3(3), 203-216.
- Koşar, G. (2023). Online collaborative learning: does it improve college students' critical reading skills?. *Interactive Learning Environments*, 31(8), 5114-5126.
- Loes, C. N. (2019). Applied Learning through Collaborative Educational Experiences. *New Directions for Higher Education*, 2019(188), 13-21. <https://doi.org/10.1002/he.20341>
- Ma, N., Du, L., Zhang, Y. L., Cui, Z. J., & Ma, R. (2023). The effect of interaction between

- knowledge map and collaborative learning strategies on teachers' learning performance and self-efficacy of group learning. *Interactive learning environments*, 31(3), 1592-1606.
- Marollano, M. (2018). *Paggamit ng pagbasa sa pagkakaroon ng kasanayan*. <https://scrib.com/document/paggamit-ng-pagbasa-sa-pagkakaroon>.
- Mayer, R. E., & Alexander, P. A. (2016). Handbook of Research on Learning and Instruction. In *Google Books*. Taylor & Francis. <https://books.google.com.ph/books?hl=en&lr=&id=ii8lDwAAQBAJ&oi=fnd&pg=PA388&dq=When+the+environment+is+structured+in+a+cooperative+way+rather+than+individualized>
- Mesghina, A., Hong, G., & Durrell, A. (2024). Cooperative Learning in Introductory Statistics: Assessing Students' Perceptions, Performance, and Learning in Heterogeneous and Homogeneous Groups. *Journal of Statistics and Data Science Education*, 1-26.
- Millis, B. (Ed.). (2023). *Cooperative learning in higher education: Across the disciplines, across the academy*. Taylor & Francis.
- Nabijonova, N. (2023). ACTIVITIES TO ACTIVATE AND MAINTAIN A COMMUNICATIVE CLASSROOM. *Solution of social problems in management and economy*, 2(11), 70-74.
- Nardo, A. (2021). Exploring a Vygotskian Theory of Education and Its Evolutionary Foundations. *Educational Theory*, 71(3), 331-352. <https://doi.org/10.1111/edth.12485>
- Oclarit, R. P., & Casinillo, L. F. (2021). Strengthening the reading comprehension of students using a context clue. *Journal of Education Research and Evaluation*, 5(3), 373-379.
- Qureshi, M. A., Khaskheli, A., Qureshi, J. A., Raza, S. A., & Yousufi, S. Q. (2023). Factors affecting students' learning performance through collaborative learning and engagement. *Interactive Learning Environments*, 31(4), 2371-2391.
- Ramzan, M., Javaid, Z. K., & Ali, A. A. (2023). Perception of Students about Collaborative Strategies Employed by Teachers for Enhancing English Vocabulary and Learning Motivation. *Pakistan JL Analysis & Wisdom*, 2, 146.
- Richardson, T., Waite, S., Askerlund, P., Almers, E., & Hvit-Lindstrand, S. (2023). How does nature support early language learning? A systematic literature review. *Early Years*, 1-28.
- Risonar, C. J., Digamon, J., De La Pena, J., & Delima, R. R. (2021). Story Retelling (SR) Technique in Improving Reading Comprehension of Sixth-Graders. *JPAIR Multidisciplinary Research*, 46(1), 107-129.
- Risonar, C. J., Prado, N., & Digamon, J. (2023). Transactional Management, Transformational Leadership, Organizational Culture, and Teaching Competencies of Teachers in Basic Education. *JPAIR Institutional Research*, 21(1), 83-104.
- Santiago, L. (2023). *The Impact of Teacher Evaluations on Collective Teacher Efficacy*. Hofstra University.
- Shak, M. (2023). *The emergence of leadership in pre-service teacher education students' collaborative learning in the context of maker education project* (Master's thesis, M. Shak).
- Smith, T. E., Sheridan, S. M., Kim, E. M., Park, S., & Beretvas, S. N. (2020). The effects of family-school partnership interventions on academic and social-emotional functioning: A meta-analysis exploring what works for whom. *Educational Psychology Review*, 32, 511-544.
- Sparks, S. (2017, May 16). Children Must Be Taught to Collaborate, Studies Say. In Education Week. Retrieved September 22, 2018, from <https://www.edweek.org/ew/articles/2017/05/17/children-must-be-taught-to-collaborate-studies.html>
- Yilmaz, R., & Karaoglan, F. G. (2020). Examination of the effectiveness of the task and group awareness support system used for computer-supported collaborative learning. *Educational Technology Research and Development*, 68, 1355-1380.