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Effects of Collaborative Learning on Grade 7 Social Studies Performance: A Basis for a Proposed Faculty Training Plan

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ABSTRACT

This study examined the effect of collaborative learning on the academic performance of Grade 7 learners in Social Studies and used the findings as the basis for a proposed faculty training plan. A quasi-experimental pretest-posttest control group design was used with two matched groups from a secondary school in North II District, Division of Caloocan City, during school years 2022 to 2023. The study involved 66 Grade 7 learners, with 33 in the experimental group and 33 in the control group, and 17 social studies teachers who assessed the classroom use of collaborative learning. Researcher-developed tests, a survey questionnaire, and documentary analysis were used to gather data. Results showed that the two groups had the same initial academic performance, with a mean of 81.42, and similar pretest scores, with means of 18.97 for the experimental group and 18.87 for the control group. After the intervention, the experimental group obtained a higher posttest mean of 33.39 compared with 23.30 for the control group. The difference in posttest scores was significant at ($p = 0.00000825$). Teachers rated collaborative learning as highly effective in terms of positive interdependence, face-to-face interaction, individual accountability, collaborative skills, and group processing. The main challenges were unequal participation within groups, difficulty assigning individual grades, weak cooperation among some learners, and learner overdependence on peers. Based on these findings, a faculty training plan was developed to strengthen the use of collaborative learning in social studies classrooms. The study supports collaborative learning as an effective classroom approach for improving learner performance and informing teacher development.

INTRODUCTION

Teaching strategies shape the quality of classroom learning, especially in Social Studies where learners are expected to interpret events, compare perspectives, and connect ideas to social life. In this kind of subject, learning is strengthened when students do more than receive information. They need chances to discuss, explain, question, and build meaning with others. Collaborative learning offers that kind of classroom structure because it places learners in shared tasks that require discussion, mutual support, and accountability. The broader literature gives strong support for this approach. Major syntheses have shown that cooperative learning methods generally improve achievement more than competitive or individualistic formats, especially when group goals and individual accountability are clearly built into the lesson (Le *et al.*, 2018; Khasawneh *et al.*, 2023). In Social Studies, this matters because the subject demands understanding, reasoning, and interpretation rather than simple recall. A classroom strategy that promotes interaction and shared problem solving is therefore well matched to the goals of the subject (Hwang & Chen, 2023). The logic of collaborative learning also rests on a clear theoretical base. From a sociocultural view of learning, cognitive growth develops through social interaction, guided participation, and shared activity. In classroom terms, learners often understand more fully when they work with peers, explain ideas, and receive support while

completing meaningful tasks (Langco *et al.*, 2022; Fadare *et al.*, 2021). This helps explain why collaborative learning is often linked not only to higher achievement but also to stronger participation, confidence, and engagement. At the same time, the literature does not treat collaborative learning as effective by default. Its success depends on how well it is structured and how consistently key elements are enacted in the classroom. Research points to five recurring dimensions of effective collaborative learning: positive interdependence, face-to-face interaction, individual accountability, collaborative skills, and group processing (Adl-Amini *et al.*, 2024; Prieto-Saborit *et al.*, 2022). When these dimensions are weak, group work can turn into unequal participation, free riding, and unclear responsibility. For Social Studies teachers, this creates a practical question. If collaborative learning is used with Grade 7 learners, can it improve academic performance more effectively than traditional instruction, and how do teachers judge its classroom value in actual use? This study addressed that question by examining the effect of collaborative learning on learner performance in Social Studies, assessing its effectiveness across key dimensions of implementation, identifying classroom challenges, and using the findings as a basis for a proposed training plan.

LITERATURE REVIEW

Collaborative learning is widely understood as an instructional approach in which students work together

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to reach shared learning goals through discussion, mutual support, and accountable participation. Across the broader cooperative learning literature, the most consistent finding is that group work becomes academically productive when it is structured rather than incidental. Major syntheses report that cooperative methods generally outperform competitive or individualistic forms of instruction on achievement outcomes, especially when group goals and individual accountability are both present (Erbil, 2020). The literature also converges on a small set of core elements that distinguish true collaborative learning from ordinary seatwork done in groups. These elements include positive interdependence, promotive face-to-face interaction, individual accountability, social or interpersonal skills, and group processing (Shimizu *et al.*, 2022; Sjölie *et al.*, 2022). Positive interdependence means that learners understand their success to be tied to the success of their peers. Promotive interaction refers to active support, explanation, and encouragement within the group. Individual accountability ensures that each learner remains responsible for a visible contribution. Social skills help groups manage discussion, disagreement, and shared work. Group processing gives learners a chance to reflect on how well the group functioned and how it can improve (Krajcik & Czerniak, 2025). A useful line of evidence comes from studies that examined collaborative learning as a structured classroom intervention rather than as a general teaching preference. Researcher found positive effects across multiple cooperative learning models, indicating that achievement gains are not confined to one narrow technique (Yang, 2023). Slavin similarly argued that achievement effects are strongest when cooperative learning includes incentives for group success and mechanisms that keep each learner accountable (Slavin, 2022). This point is important for classroom practice because it shows that simply placing students in groups is not enough. The design of tasks, roles, and assessment procedures shapes whether collaboration becomes a learning advantage or a source of unequal participation. Social Studies specific evidence supports this pattern. A meta-analysis focused on Social Studies reported a strong overall positive effect of cooperative approaches on academic achievement (Gürdoğan-Bayır & Bozkurt, 2018). Experimental and quasi-experimental studies in lower secondary Social Studies and related history settings point in the same direction (Gopalan *et al.*, 2020). In a seventh grade study of the Jigsaw technique, students who learned a Social Studies unit through structured peer teaching achieved significantly higher posttest scores than those taught through a traditional teacher-centered approach (Er, 2017). That study also found that students often described the method as helping them express ideas, cooperate with classmates, and take responsibility for learning, although some also viewed it as time-consuming or demanding. More recent evidence from junior high Social Studies classrooms using Student Teams Achievement Divisions likewise showed significantly stronger posttest performance and higher student activeness in the experimental group than in the control group (Fikri *et al.*, 2025). Taken together, these

studies suggest that well-structured collaborative learning can improve both academic outcomes and the quality of student engagement in Social Studies. The literature further shows that collaborative learning is not only about higher test scores. It is also a way of organizing classroom interaction. Student discussion, peer explanation, and shared problem solving appear to support deeper processing of lesson content, especially in subjects that require interpretation and reasoning (Sali *et al.*, 2024). Instruments developed to assess cooperative learning in school settings are built around these process dimensions rather than only around achievement outcomes. The Cooperative Learning Questionnaire validated by Fernández-Río and colleagues measured promotive interaction, positive interdependence, individual accountability, group processing, and interpersonal skills across a large sample of students from primary to upper secondary levels (Fernández-Río *et al.*, 2017). From the teaching perspective, Prieto-Saborit and colleagues validated a parallel questionnaire that captures the same broad dimensions through teacher reports, showing that these elements can be measured in a reliable way across educational stages (Prieto-Saborit *et al.*, 2022). These studies provide a strong basis for evaluating collaborative learning in terms of positive interdependence, face-to-face interaction, individual accountability, collaborative skills, and group processing. Even so, implementation quality is uneven. A mixed methods study of cooperative learning in school practice found a substantial gap between what teachers believed they were doing and what was actually observed in classrooms (Adl-Amini *et al.*, 2024). Only a small minority of lessons implemented the full set of core elements, and some lessons labeled as cooperative learning showed none of them in observable form. Group goals and individual accountability were among the least consistently enacted features, even though prior theory identifies them as central to effectiveness. The same study also found that stronger implementation was linked to teacher beliefs about the value of social learning and to a stronger sense of responsibility for making collaboration work (Hendely *et al.*, 2022; Adlawan *et al.*, 2024). Assessment is one of the most persistent problem areas in the literature. Teachers often report difficulty identifying what each learner contributed during group work and how those contributions should be graded fairly. In a study of secondary school group work assessment, teachers pointed to limited training, uncertainty about what should be assessed, large classes, heavy workload, and lack of time as major barriers (Gedamu & Shewangezaw, 2020). Students in the same study raised related concerns, especially the problem of equal rewards for unequal contribution and weak monitoring of individual effort. Similar themes appear in work on teachers' perceptions of group work assessment, where the central challenge is how to distinguish individual performance within a collective product and how to maintain fairness and validity under real classroom conditions (Forsell *et al.*, 2021). Earlier work on teacher cognitions in cooperative learning assessment also found that even experienced teachers felt anxiety,

guilt, and uncertainty about evaluation, particularly when they had to reconcile collaborative processes with grading demands (Weddle *et al.*, 2019). These recurring findings help explain why collaborative learning is best viewed as both a pedagogical opportunity and an implementation problem. The approach offers clear academic and social benefits, but those benefits depend on careful design, monitoring, and assessment. Free riding, uneven participation, unclear roles, and vague criteria can weaken the very mechanisms that make collaboration effective. For this reason, the literature supports inquiry not only into student achievement but also into teacher judgments of effectiveness and the practical difficulties they encounter. In the present study, these strands converge in an examination of how collaborative learning affects Grade 7 Social Studies performance and how the results can inform teacher training and classroom improvement.

MATERIALS AND METHODS

Research Design

The study used a quasi-experimental pretest-posttest control group design (Siedlecki, 2020; Rogers & Revesz, 2019). This design was appropriate for examining the effect of a classroom intervention in a real school setting where random assignment was not feasible. Two matched groups of Grade 7 learners were compared. Both groups took a pretest before the intervention. The experimental group received instruction through collaborative learning, while the control group received the usual teaching approach. After one grading period, both groups took a posttest to determine differences in learning outcomes.

Research Setting and Participants

The study was conducted in a secondary school in North II District, Division of Caloocan City during School Year 2022 to 2023. The student participants were 66 Grade 7 learners from two sections. Grade 7 Genesis, with 33 students, served as the experimental group, while Grade 7 Romans, also with 33 students, served as the control group. In addition, 17 Social Studies teachers participated as respondents in the assessment of the effectiveness of collaborative learning and the acceptability of the proposed training plan.

Sampling Procedure

Purposive sampling was used in selecting the student groups (Campbell *et al.*, 2020). The two sections were chosen because they showed comparable levels of academic performance based on first grading period results. This helped establish similarity between the groups before the intervention. The teacher respondents were likewise selected because they were Social Studies teachers who could assess the classroom use of collaborative learning.

Research Instruments

Three instruments were used to gather the data.

- A researcher-developed 40-item pretest and posttest, supported by a table of specifications, was used to measure

student learning before and after the intervention.

- A researcher-developed survey questionnaire was used to gather teacher assessments of the effectiveness of collaborative learning, identify challenges in classroom use, and evaluate the acceptability of the proposed training plan.

- Documentary analysis was used to review student grades and relevant lesson records.

The survey questionnaire was validated by the experts in the profession and further reviewed by 10 Social Studies teachers. Reliability testing included the use of Cronbach alpha. The achievement test was also tried out with students who were not included in the actual study.

Data Gathering Procedure

The researcher prepared the instruments, secured the needed approvals from the authority of the school, and seek the help of the students advisers in other to collaborate for proper administered the data, and after in which the researcher follow every adequate procedures. Before the intervention, both groups were given the pretest. The experimental group was then taught through collaborative learning activities, including Round Robin, Write Around, Peer Group, and Jigsaw. These activities required learners to work in groups, exchange ideas, prepare outputs, and present their work during classroom instruction. The control group received traditional instruction through teacher-led discussion, individual tasks, and individual reporting. After the intervention period, both groups took the posttest. Teacher respondents answered the survey questionnaire to assess collaborative learning in terms of positive interdependence, face-to-face interaction, individual accountability, collaborative skills, and group processing. They also identified the challenges they encountered in using the approach and assessed the acceptability of the proposed training plan derived from the findings.

Statistical Analysis

Descriptive and inferential statistics were used in the analysis of the data. Mean and standard deviation were used to describe academic performance and test results. Weighted mean and ranking were used to interpret teacher assessments of effectiveness, classroom challenges, and training plan acceptability. An independent samples t test was used to determine whether a significant difference existed between the posttest scores of the experimental and control groups.

RESULTS AND DISCUSSION

Baseline Academic Performance The first grading period results indicate that the two groups were comparable before the intervention.

Table 1: Pretest and Posttest Performance

Group	N	Mean	SD
Experimental	33	81.42	4.50
Control	33	81.42	4.50

Pretest results likewise show that the two groups began at nearly the same level, while posttest results reveal a clear

Table 2: Difference in Posttest Scores

Group	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	18.97	2.26	33.39	4.36
Control	18.87	2.57	23.30	3.94

The difference in posttest scores between the experimental and control groups was statistically significant.

Table 3: Teacher Assessment of Collaborative Learning Effectiveness

Comparison	P value	Alpha	Decision
Experimental and control posttest scores	0.00000825	0.05	Reject null hypothesis

Teachers rated collaborative learning as highly effective across all five dimensions measured in the study.

Table 4: Challenges in Using Collaborative Learning

Dimension	Weighted Mean	Interpretation
Positive interdependence	3.63	Highly Effective
Face-to-face interaction	3.83	Highly Effective
Individual accountability	3.71	Highly Effective
Collaborative skills	3.61	Highly Effective
Group processing	3.57	Highly Effective

Despite its positive effects, collaborative learning was not free of implementation problems.

Table 5: Proposed Training Plan and Acceptability

Challenge Areas	Weighted Mean	Rank
Unequal participation among members	3.00	1
Difficulty assigning individual grades	2.94	2
Non-cooperative learners	2.88	3.5
Learner overdependence on groupmates	2.88	3.5
Poor division of work	2.82	5.5
Time needed for instructional materials	2.82	5.5

Based on the findings, a three-day faculty training plan was developed. The training focused on understanding collaborative learning and its classroom activities,

preparing lesson plans with collaborative learning integration, and developing instructional materials for Social Studies.

Table 6: The proposed training plan was rated very highly by respondents.

Indicators	Weighted Mean	Interpretation
Built-in assessment for implementation and outcomes	4.80	Very Highly Acceptable
Changes in teacher knowledge, skills, behavior, and values	4.62	Very Highly Acceptable
Objectives are attainable	4.60	Very Highly Acceptable
Grows from how teachers see themselves	4.55	Very Highly Acceptable
Focused course of action for training needs	4.50	Very Highly Acceptable
Ongoing rather than episodic process	4.45	Highly Acceptable
Overall weighted mean	4.59	Very Highly Acceptable

DISCUSSION

The findings show a consistent pattern across student performance, teacher assessment, and training implications. The two groups began from a comparable academic position, but the group taught through collaborative learning achieved substantially

stronger posttest performance. This pattern suggests that collaborative learning supported stronger gains in Social Studies achievement than the traditional teaching approach used in the control class. The result is consistent with earlier studies in Social Studies and related subjects that found higher achievement under

structured cooperative methods such as Jigsaw and STAD (Er, 2017; Fikri *et al.*, 2025). It also aligns with broader evidence that cooperative learning has positive effects on achievement when group work is deliberately organized around shared goals and individual accountability (Gürdoğan-Bayır & Bozkurt, 2018). Teacher ratings strengthen this interpretation. Collaborative learning was assessed as highly effective in terms of positive interdependence, face-to-face interaction, individual accountability, collaborative skills, and group processing. These are the same core dimensions emphasized in the literature on effective implementation (Adl-Amini *et al.*, 2024; Prieto-Saborit *et al.*, 2022; Fernández-Rio *et al.*, 2017). The pattern of ratings suggests that teachers viewed collaborative learning not only as a means of improving test performance but also as a classroom process that promotes discussion, mutual support, responsible participation, and shared meaning making. The study also showed that implementation remains a practical concern. Unequal participation within groups, difficulty assigning individual grades, non-cooperation, and learner overdependence were the most visible challenges. These concerns mirror issues repeatedly raised in the literature, especially free riding, fairness in assessment, and weak accountability in group tasks (Gedamu & Shewangezew, 2020). The findings therefore suggest that the effectiveness of collaborative learning depends not only on using group activities, but on how clearly roles, responsibilities, and assessment procedures are structured. The high acceptability of the proposed training plan follows logically from these results. If collaborative learning improves learner performance but also presents implementation challenges, then teacher support becomes a necessary part of sustained classroom use. This is consistent with prior work showing that collaborative learning is more effective when teachers receive support in structuring interaction, accountability, and assessment over time (Adl-Amini *et al.*, 2024; Gedamu & Shewangezew, 2020). In this sense, the training plan is a practical extension of the study's findings rather than a separate add-on.

CONCLUSION

The findings show that collaborative learning was more effective than the usual teaching approach in improving the Social Studies performance of Grade 7 learners in this setting. The experimental and control groups began from comparable baseline levels, yet the collaborative learning group achieved a substantially higher posttest mean and a statistically significant advantage after the intervention. This result is consistent with the broader cooperative learning literature and with Social Studies specific studies that reported achievement gains under structured approaches such as Jigsaw and STAD. The teacher assessments strengthen this conclusion. Collaborative learning was rated highly in terms of positive interdependence, face-to-face interaction, individual accountability, collaborative skills, and group processing,

which are also the core dimensions emphasized in the literature on effective implementation. These findings suggest that the value of collaborative learning in Social Studies lies not only in higher test performance but also in the quality of classroom interaction it supports. At the same time, the study confirms that collaborative learning requires careful implementation. Unequal participation, grading difficulty, weak cooperation, and learner overdependence remained visible constraints, echoing concerns raised in prior work on implementation quality and group work assessment. For this reason, the proposed training plan is not a peripheral output of the study but a practical response to the conditions needed for collaborative learning to work well. Overall, the findings support collaborative learning as an effective strategy for Grade 7 Social Studies when it is paired with clear task structure, individual accountability, and sustained teacher support.

Recommendation

Based on the findings of the study, the following recommendations are proposed:

- Social Studies teachers may strengthen the use of collaborative learning in Grade 7 classes, particularly through activities that require clear group goals and individual accountability.
- Teachers may adopt assessment procedures that make individual contribution more visible in order to reduce unequal participation and grading difficulty.
- School administrators may support faculty development programs focused on collaborative learning strategies, classroom management of group work, and fair assessment practices.
- The proposed training plan may be implemented and evaluated as part of ongoing teacher development in Social Studies.
- Future studies may examine collaborative learning in other grade levels, subject areas, or school contexts to test the wider applicability of the findings.

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