



Students' Perceptions of Collaborative Learning and its Impact on Academic Achievement

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Abstract

This descriptive survey research explores students' perceptions of collaborative learning and its impact on academic achievement. The objective of the study is to examine students' views on collaborative learning practices, identify commonly used collaborative techniques in the classroom, and assess the perceived impact of these methods on their academic performance. The study was conducted among 70 Grade 12 students from three institutional schools in Rupandehi district, Nepal. Data were collected using a structured and adapted questionnaire, administered to participants selected through random sampling. The findings reveal that students hold a generally positive perception of collaborative learning, recognizing it as a method that fosters a supportive, interactive, and engaging educational environment. Students highlighted increased motivation, better peer communication, enhanced critical thinking, and improved academic performance as key outcomes of collaborative learning. Moreover, the results suggest that when teachers effectively implement collaborative strategies—such as group discussions, peer feedback, and cooperative projects—students tend to participate more actively and achieve deeper understanding of the subject matter. These findings underscore the pedagogical value of collaborative learning and imply that its systematic integration into classroom instruction can play a significant role in enhancing students' academic achievement. The study recommends that educators and institutions consider adopting collaborative approaches more intentionally to improve learning outcomes and foster academic growth.

Keywords: Collaborative Learning, Academic Achievement, Peer Learning, Student Engagement, Knowledge Sharing

Introduction

Collaborative learning has gained significant attention in educational research due to its potential to enhance students' academic achievement and cognitive development. Rooted in Vygotsky's (1978) Social Constructivist Theory, collaborative learning emphasizes the role of social interaction in the learning process. According to Vygotsky, learning is most effective when it occurs within the Zone of Proximal Development (ZPD), where students can achieve higher understanding with the guidance of peers and educators. This theory underscores the importance of cooperative efforts in constructing knowledge rather than passively receiving information.

Johnson and Johnson (1999) further elaborated on the significance of collaborative learning through their Cooperative Learning Model, which highlights key principles such as

positive interdependence, individual accountability, and promotive interaction. Their research indicates that students engaged in collaborative learning environments demonstrate higher levels of academic achievement, improved problem-solving skills, and enhanced motivation compared to those in traditional, individualistic settings.

From students' perspectives, collaborative learning fosters deeper engagement, critical thinking, and interpersonal skills. Studies by Slavin (1995) and Dillenbourg (1999) suggest that students benefit from peer discussions, diverse viewpoints, and shared responsibilities, leading to an enriched learning experience. Furthermore, collaborative learning environments encourage active participation, enabling students to take ownership of their education and develop essential 21st-century skills such as communication and teamwork. Students often perceive collaborative learning as a means to enhance their self-confidence, social connections, and academic performance, as it allows them to seek peer support and clarify concepts through discussion and debate.

Various collaborative strategies have been employed in educational settings to enhance learning outcomes, including group problem-solving, peer tutoring, think-pair-share, and project-based learning. These strategies help students actively engage with the material, construct meaning through dialogue, and develop meta-cognitive skills. Research suggests that structured collaboration leads to deeper comprehension, knowledge retention, and improved academic performance, as it promotes active rather than passive learning.

Despite its advantages, the effectiveness of collaborative learning depends on factors such as group dynamics, task complexity, and the role of instructors in facilitating discussions. Understanding students' perceptions of collaborative learning is crucial in optimizing its implementation and maximizing its impact on academic achievement. This study aims to explore students' perspectives on collaborative learning, the effectiveness of various collaborative strategies, and their influence on academic performance, contributing to the existing body of knowledge on effective pedagogical strategies.

Collaborative learning is widely recognized for enhancing student engagement, critical thinking, and academic performance (Johnson & Johnson, 2014; Laal & Ghodsi, 2012). However, there is limited empirical evidence on how students perceive its impact on their academic achievement. While studies suggest that group-based learning fosters deeper understanding (Slavin, 2015), variations in learning styles, group dynamics, and institutional support may affect its effectiveness (Gillies, 2016). Despite its growing adoption, traditional teacher-centred methods still dominate classrooms, raising questions about whether collaborative learning significantly improves academic outcomes.

Research Questions

This study aims to explore students' perceptions on collaborative learning, identify collaborative strategies and analyze the impact of collaborative Learning in their Academic

Achievement based on the following research questions.

What is the perception of the students on collaborative learning?

How do the students perceive the collaborative learning in ELT classroom?

What is the impact of collaborative Learning in their Academic Achievement?

Review of Related Literature

Collaborative learning is a student-centred instructional approach where learners work together to achieve academic goals (Johnson & Johnson, 2014). It emphasizes cooperation, shared responsibility, and active engagement, contrasting traditional teacher-centred methods (Slavin, 2015). Research suggests that collaboration fosters deeper understanding and enhances problem-solving skills (Laal & Ghodsi, 2012). Collaborative learning is rooted in Vygotsky's (1978) **Social Constructivist Theory**, which argues that knowledge is constructed through social interactions. Piaget's (1965) **Theory of Cognitive Development** also supports collaboration, emphasizing peer interaction as a driver for intellectual growth. Additionally, Johnson and Johnson's (1989) **Cooperative Learning Theory** highlights five essential elements: positive interdependence, individual accountability, promotive interaction, social skills, and group processing.

Studies have shown that collaborative learning improves academic performance by increasing motivation, engagement, and retention of knowledge (Slavin, 2015; Gillies, 2016). A meta-analysis by Springer, Stanne, and Donovan (1999) found that students in cooperative learning settings performed better academically than those in traditional settings. Furthermore, collaborative learning has been linked to higher critical thinking skills and problem-solving abilities (Roseth, Johnson, & Johnson, 2008). Students' views on collaborative learning vary based on their experiences, group dynamics, and institutional support (Gillies, 2016). While some students appreciate the shared responsibility and peer support, others find group conflicts, unequal participation, and dependency on peers as challenges (Barkley, Major, & Cross, 2014). A study by Laal and Ghodsi (2012) emphasized that successful collaborative learning depends on clear communication, active participation, and structured guidance.

Despite its benefits, collaborative learning faces challenges, such as: Unequal participation among group members (Rochelle & Teasley, 1995). Difficulty in assessing individual contributions (Dillenbourg, 1999). Resistance from students accustomed to traditional learning methods (Gillies, 2016). Educators must address these challenges by structuring collaborative tasks effectively and fostering positive group interactions. Collaborative learning has the potential to enhance academic achievement, but its effectiveness depends on student perceptions, group dynamics, and institutional support. Further research is needed to explore students' perspectives on its impact and identify strategies to maximize its benefits.

Methodology

The study employs quantitative data collection. A sample of grade twelve students participates in Collaborative Learning, peer reviews, and reflective discussions. The authors utilize quantitative data from questionnaire. This approach provides comprehensive insights from the 70 students of three different institutional schools.

Results and Discussions

Table: 1

Students' perceptions on collaborative learning

SN	Statements	S. A	Agreed	Neutral	Disagreed	S.D	Total
	Collaborative learning helps us to share knowledge and build experience.	50	10	6	2	2	70
2	Collaborative learning enhances my social skills.	42	18	4	4	2	70
3	Students tutor in each other and active participation strengthens knowledge, and fosters a positive learning atmosphere.	36	14	10	4	6	70
4	It highlights the use of group projects or puzzles as instructional tools to enhance communication, language abilities, teamwork, and critical thinking.	10	14	20	20	6	70
5	Overall, I think collaborative learning has positive effects on my English language learning.	30	20	10	6	4	70
6	Our chatting, talking, sharing and discussing different ideas, make us easier to understand the topic better in a group.	4	8	16	22	20	70

Collaborative learning is grounded in the social constructivist theory, particularly Vygotsky's concept of the Zone of Proximal Development (ZPD), which emphasizes that students learn best when interacting with more knowledgeable peers. The data on students' perceptions of collaborative learning reveal both strong positive responses and notable challenges, shedding light on the effectiveness of group-based learning environments.

An overwhelming majority of the students surveyed (85.7%, with 50 expressing strong agreements and 10 expressing agreement) acknowledged that collaborative learning significantly contributes to the exchange of knowledge and the enhancement of experiential learning. This aligns with constructivist principles, which suggest that learning occurs through social interaction and shared experiences. The positive perception indicates that

students recognize the value of working with peers to enhance understanding, reinforcing the idea that cognitive development is enriched through collaboration. Similarly, 85.7% of students (42 strongly agree, 18 agree) believe that collaborative learning improves social skills, highlighting the role of peer interaction in enhancing communication abilities, teamwork, and mutual support. This supports the argument that learning is not just an intellectual process but also a social one, where engagement with peers plays a crucial role in personal and academic development.

Furthermore, 71.4% of students (30 strongly agree, 20 agree) acknowledged that collaborative learning positively impacts their English language learning. This response is significant, as language acquisition theories suggest that immersion in social and interactive environments accelerates language proficiency. The process of discussing, debating, and sharing ideas helps reinforce vocabulary, comprehension, and fluency, making collaborative learning particularly beneficial in language education.

However, perceptions of collaborative learning were not uniformly positive across all aspects. The effectiveness of peer tutoring and active participation was somewhat mixed, with 50% of students (36 strongly agree, 14 agree) affirming that these methods strengthen knowledge and foster a positive learning atmosphere. A 14.2% disagreement rate (4 disagree, 6 strongly disagree) suggests that while many students find peer interaction beneficial, others may struggle with engagement or the quality of peer explanations. This reflects the potential limitations of collaborative learning when students do not equally contribute or when there is a lack of structured guidance.

A more skeptical view emerged regarding the use of group projects and puzzles as instructional tools. Only 34.2% of students (10 strongly agree, 14 agree) found them effective, whereas a notable 37.1% (20 disagree, 6 strongly disagree) did not perceive these methods as beneficial. This suggests that while constructivist approaches advocate for interactive and student-centered learning, the execution of such activities may not always be effective. Some students might feel disengaged in group tasks due to uneven participation, lack of clarity, or ineffective collaboration strategies. The mixed response implies a need for well-structured group work, where clear objectives and equal involvement are ensured to maximize the benefits of collaborative learning.

The most striking data came from students' perceptions of discussion and peer interaction in understanding topics. A significant 60% of students (22 disagree, 20 strongly disagree) felt that chatting, talking, and discussing ideas in a group did not necessarily make it easier to understand a topic. This contradicts a fundamental principle of collaborative learning, which suggests that social interaction facilitates deeper comprehension. The negative response could be attributed to ineffective discussion strategies, where some students dominate conversations while others remain passive, or to a preference for more structured, instructor-led learning. This highlights the need to refine collaborative learning techniques by incorporating guided discussions, assigned roles, and teacher facilitation to make peer interaction more meaningful and productive.

Overall, the data reveal both strong support and critical gaps in students' perceptions of collaborative learning. While the majority acknowledge its benefits in knowledge-sharing, social skill development, and language learning, concerns regarding the structure and execution of group activities indicate that collaborative learning requires careful facilitation. According to Vygotsky's theory, the effectiveness of collaborative learning depends on well-managed peer interaction within the ZPD, where students are guided appropriately to reach their full potential. Without proper guidance, some students may feel lost in unstructured discussions or disengaged in group work. Therefore, while collaborative learning remains a powerful educational approach, its success relies on structured implementation, balanced participation, and strategic facilitation to ensure that all students benefit from the process.

Table no. 2

Students perceptions on collaborative learning strategies

S.N	Statements	SA	A	N	SD	D	Total
1	CL helps me understand through exchange of knowledge, information and experience	44	16	4	4	2	70
2	CL makes me active, responsible and problem solving.	38	16	10	2	4	70
3	CL stimulates critical thinking, and helps me improve in communication skills	34	16	8	8	4	70
4	CL is a group work so learning becomes participatory and fun.	36	10	12	6	6	70
5	CL develops team spirit	33	18	16	4	4	70
6	CL provides better learning platform	46	12	8	2	2	70

Collaborative learning (CL), grounded in Vygotsky's social constructivist theory, emphasizes that learning is a social process where students co-construct knowledge through interaction. The data from students' perceptions of collaborative learning strategies reveal strong positive responses, with most students acknowledging the benefits of CL in fostering knowledge exchange, engagement, problem-solving, and communication skills. However, there are also areas where perceptions vary, suggesting that the effectiveness of CL depends on how well it is structured and implemented.

A substantial 85.7% (44 strongly agree, 16 agree) of students believe that collaborative learning helps them understand concepts better through knowledge exchange, information sharing, and experience. This aligns with Vygotsky's Zone of Proximal Development (ZPD), which suggests that students learn best when interacting with peers who help them bridge the gap between their current understanding and potential knowledge. The ability to discuss ideas with others allows students to refine their thoughts, correct misconceptions, and develop a deeper grasp of the subject matter.

Similarly, 77.1% (38 strongly agree, 16 agree) of students stated that collaborative

learning makes them active, responsible, and better at problem-solving. This supports Piaget's cognitive development theory, which highlights the importance of active engagement in learning. When students take responsibility for their learning and engage in problem-solving with peers, they develop higher-order thinking skills. However, 14.2% of students (10 neutrals, 2 strongly disagree, 4 disagree) remained skeptical, suggesting that some students may feel disengaged or struggle with taking responsibility in a group setting. This could indicate that while CL has potential, it needs well-structured activities to ensure active participation.

A strong link between critical thinking and communication skills was also noted, as 71.4% (34 strongly agree, 16 agree) of students reported that CL stimulates their ability to analyze information critically while enhancing communication. This aligns with Slavin's Cooperative Learning Theory, which argues that learning in a social environment fosters deeper comprehension and cognitive flexibility. However, 17.1% of students (8 neutrals, 8 strongly disagree, 4 disagree) expressed reservations, possibly because not all students feel equally comfortable communicating in group settings. Some may prefer individual learning over verbal interaction, highlighting the need for inclusive strategies that encourage both verbal and written collaboration.

In addition to academic benefits, collaborative learning is often perceived as engaging and enjoyable, with 65.7% (36 strongly agree, 10 agree) stating that CL makes learning participatory and fun. This supports constructivist learning theories, which argue that when students are actively engaged, they are more motivated to learn. However, 34.2% (12 neutrals, 6 strongly disagree, 6 disagree) suggest that not all students find group work enjoyable, possibly due to unequal participation, dominance by certain members, or a lack of interest in group activities.

Teamwork is another core element of collaborative learning, and 72.8% (33 strongly agree, 18 agree) of students agreed that CL develops team spirit. This aligns with the social interdependence theory, which emphasizes the importance of collaboration in fostering cooperation, trust, and shared goals. However, 17.1% of students (16 neutrals, 4 strongly disagree, 4 disagree) remained neutral or disagreed, possibly due to past experiences of conflict, unequal participation, or difficulty in working with diverse perspectives.

Finally, 82.8% (46 strongly agree, 12 agree) of students perceive collaborative learning as a better learning platform compared to traditional methods. This suggests that students value peer interaction, discussion-based learning, and diverse perspectives, all of which align with experiential learning theories. The minimal 5.7% (2 strongly disagree, 2 disagree) suggests that while a small fraction of students may prefer teacher-centred instruction, the overwhelming majority see collaborative learning as an effective strategy.

The data strongly support the effectiveness of collaborative learning in enhancing knowledge acquisition, responsibility, problem-solving, communication, participation, teamwork, and engagement. However, not all students equally benefit from or enjoy collaborative learning, indicating the need for structured guidance, clear role assignments,

and balanced participation to ensure inclusivity. The findings align well with Vygotsky's and Piaget's constructivist theories, reinforcing the idea that learning is most effective when it is social, interactive, and student-driven. However, educators must address challenges such as group dynamics, communication barriers, and differing learning preferences to maximize the benefits of collaborative learning strategies

Table 3

The impact of collaborative learning on student's academic achievement

I	Statements	S.A	Agreed	Neutral	Disagreed	S.D	Total
1	<i>Collaborative learning has constructive role for developing students' language skills, social skills and personal skills.</i>	36	18	6	6	4	70
2	The collaborative approach asks students, working in small groups, to practice decision-making in sequenced tasks, with detailed feed-back at every step.	32	26	16	4	4	70
3	In collaborative learning situations, our students are not simply taking in new information or ideas rather they are creating , processing and constructing something new	24	18	16	8	4	70
4	Collaborative learning promotes Cooperative learning as "the instructional use of small groups so that students work together to maximize their own and each other's learning"	30	26	10	2	2	70
5	Collaborative learning is dependent on the positive interdependence of group members, which provides the achievement of a common goal.	14	10	28	12	6	70
6	When students use collaboration, take control of their own schooling, learning is a pleasure, too.	20	18	12	10	10	70

Collaborative learning (CL) is deeply embedded in constructivist learning theories, particularly Vygotsky's social constructivism, which emphasizes the co-construction of knowledge through interaction. The data on students' perceptions of the impact of CL on academic achievement highlight significant positive effects on language skills, decision-

making, active learning, cooperative learning, and student engagement. However, there are also mixed responses regarding the dependence on group interdependence and students' control over their own learning, suggesting that the success of CL strategies depends on their implementation and structure.

A significant 77.1% (36 strongly agree, 18 agree) of students perceive CL as beneficial for developing language skills, social skills, and personal skills. This aligns with Krashen's Input Hypothesis, which posits that language acquisition improves when students are immersed in meaningful interactions. CL allows students to practice communication, critical thinking, and teamwork, which are essential in both academic and real-life contexts. However, 14.2% (6 disagree, 4 strongly disagree) expressed doubts, possibly due to challenges such as unequal participation, passive group members, or difficulty in adapting to group-based communication.

A strong 82.8% (32 strongly agree, 26 agree) of students believe that CL encourages decision-making through sequenced tasks and feedback. This resonates with Piaget's cognitive development theory, which suggests that students refine their understanding through active participation and feedback-driven learning. The emphasis on small-group tasks and step-by-step guidance allows students to develop problem-solving and leadership skills. However, the 11.4% (4 disagree, 4 strongly disagree) who remained skeptical might feel that not all group activities provide effective feedback mechanisms, or they might prefer individual decision-making rather than collective discussions.

According to constructivist learning principles, students should actively engage in constructing new knowledge rather than passively receiving information. A total of 60% (24 strongly agree, 18 agree) of students believe that CL fosters active knowledge creation rather than passive intake. However, 28.5% (16 neutrals, 8 disagree, 4 strongly disagree) indicate a level of uncertainty or disagreement, possibly due to challenges in maintaining group focus, ineffective structuring of collaborative activities, or a preference for direct instruction from teachers. This suggests that while CL has great potential for deep learning, its effectiveness depends on how well it is facilitated.

A remarkable 80% (30 strongly agree, 26 agree) of students recognize that CL promotes cooperative learning, where students work together to maximize both individual and collective achievement. This supports Slavin's Cooperative Learning Theory, which emphasizes the importance of structured group work, shared responsibilities, and positive interdependence. However, 5.7% (2 disagree, 2 strongly disagree) do not share the same view, possibly due to past negative experiences in group work where contributions were not equally valued or distributed.

When it comes to the idea that CL relies on positive interdependence among group members, responses were more mixed. While 34.2% (14 strongly agree, 10 agree) supported the idea, a substantial 40% (28 neutral) remained indifferent, and 25.7% (12 disagree, 6 strongly disagree) disagreed with the statement. This suggests that not all students perceive interdependence as beneficial, possibly due to negative experiences where group dynamics

led to imbalanced workloads, conflicts, or lack of accountability. Johnson and Johnson's Social Interdependence Theory argues that positive interdependence is crucial for CL success, but this finding suggests that educators need to design strategies that ensure equal participation and accountability in group settings.

A total of 54.2% (20 strongly agree, 18 agree) believe that collaboration enhances the pleasure of learning by allowing students to take control of their education. This aligns with self-determination theory, which states that autonomy in learning enhances motivation and engagement. However, a considerable 31.4% (12 neutral) were indifferent, while 28.5% (10 disagree, 10 strongly disagree) disagreed, possibly indicating that not all students enjoy group-based learning or feel in control when collaborating. Some may prefer teacher-guided instruction, structured learning environments, or individual study methods.

The data strongly support the positive academic and personal impact of collaborative learning, with students acknowledging its role in skill development, decision-making, cooperative learning, and engagement. However, challenges related to group interdependence, workload distribution, and student control over learning highlight the need for structured implementation.

According to Vygotsky's and Piaget's theories, CL is most effective when it is well-facilitated, inclusive, and balanced. If CL implemented correctly, it enhances language acquisition, communication, decision-making, and active engagement. However, educators must ensure clear role distribution, accountability measures, and structured feedback to overcome challenges related to unequal participation, disengagement, and ineffective group dynamics. By addressing these concerns, CL can maximize its impact on students' academic achievement and learning. Collaborative learning has the potential to significantly enhance students' academic achievement and overall learning outcomes by fostering an environment of active engagement and mutual support. When students work together, they are encouraged to articulate their understanding, clarify misconceptions, and integrate diverse viewpoints, which deepens their conceptual knowledge. For example, group discussions and peer teaching allow learners to co-construct knowledge, thereby promoting critical thinking and problem-solving skills. Additionally, collaborative learning cultivates social and communication skills, which are essential for academic success and lifelong learning. As students share their experiences and strategies, they not only reinforce their own learning but also contribute to the collective growth of the group, resulting in improved motivation and higher academic achievement

Conclusions

The research on *Students' Perceptions on Collaborative Learning and its Impact on Academic Achievement* highlights that student generally perceive collaborative learning positively. They find it engaging, interactive, and beneficial for knowledge retention. In the context of the ELT (English Language Teaching) classroom, students view collaborative

learning as an effective strategy that enhances communication skills, critical thinking, and peer support. Moreover, the study indicates that collaborative learning has a significant positive impact on academic achievement. It fosters deeper understanding, encourages active participation, and improves overall performance.

For educators and institutions, it is recommended to integrate structured collaborative learning activities into the curriculum, ensuring active student participation and a supportive learning environment. Policy-level stakeholders should consider promoting collaborative learning by incorporating it into educational frameworks, training teachers in collaborative methods, and providing necessary resources. Further research could explore long-term effects of collaborative learning across different disciplines, assess its impact on diverse student groups, and examine the role of technology in enhancing collaborative learning experiences.

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