Impact of Student Engagement in Language Support Classes Through Cooperative Learning: A Study of Pakistani Educational Institutions

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Cooperative learning fosters collaborative endeavors among students, promoting shared goals and diverse learning activities to deepen subject understanding. This student-centered approach prioritizes learning objectives over performance targets and encourages alternative evaluation methods. The study employed a purposive sampling technique with 30 participants in each Control and Experimental Group. Cooperative learning activities were implemented, focusing on group discussions, knowledge exchange, and presentations. Each group comprised 30 participants, ensuring a comprehensive representation of learner diversity. The Experimental Group exhibited higher average pre-test scores than the Control Group, indicating superior starting proficiency. Following cooperative learning interventions, the Experimental Group consistently outperformed the Control Group in both pre- and post-test evaluations. This significant improvement in language proficiency underscores the efficacy of cooperative learning in enhancing learning outcomes, retention, intrinsic motivation, and attitudes toward academic and social abilities. Future research should explore the long-term effects of cooperative learning interventions across diverse educational contexts and subjects. Additionally, investigating optimal strategies for implementing cooperative learning to maximize its benefits remains an essential avenue for further inquiry.
1. Introduction

The conceptual framework of cooperative learning finds its roots in the educational philosophies advocated by early social theorists such as Vygotsky, Piaget, and Lewin, who underscored the centrality of community and social interaction in the learning process (Kagan, 1994; Richards & Rodgers, 2020). This pedagogical approach aims to foster an environment conducive to learning, facilitating enhanced academic achievements for all participants within the group (Ahmad et al., 2023). It endeavors to cultivate essential social skills, improve communication proficiency, and serve as a model for lifelong learning (Kagan, 1994; Wangda & Dorji, 2020). Furthermore, cooperative learning, as highlighted by Kagan, demonstrates adeptness in catering to diverse intelligences, while (Khos, Oad & Ahmad, 2023) asserts that collaborative learning, as a constructivist approach, supports the development of crucial cognitive and meta-cognitive skills essential for authentic knowledge acquisition (Dorji & Tenzin, 2021).

According to Imran and Akhtar (2023) cooperative learning is defined as a group learning activity wherein learning hinges upon information exchange among students collaborating within a framework of individual accountability and motivation aimed at enhancing mutual learning. This definition underscores principles of individual accountability, interaction, communication, and, significantly, collaboration. Additional explanations highlight the presence of common goals typically inherent in cooperative learning environments. Imran, et al., (2023) characterizes cooperative learning as an instructional approach wherein students collaborate with peers in small groups to achieve a shared objective and aid one another in the learning process. In this context, students not only collaborate but also reinforce and complement each other's learning, thereby enhancing competence in language acquisition, communication skills, and social awareness (Rubab et al., 2020).

In recent times, cooperative learning has garnered widespread adoption across educational levels, spanning from graduate school to preschool, and encompassing diverse subject areas and instructional settings, including both traditional and non-traditional learning environments, as well as after-school and extracurricular educational programs. Students engage in three fundamental modes of interaction during learning: competition, individualistic pursuit of goals without consideration for others, or cooperative engagement with a vested interest in their peers' learning (Ginting, 2021). Among these modes, competition currently exerts the most significant influence. While these interaction patterns vary in effectiveness for learning concepts and skills, students must develop proficient interaction skills in each pattern and select the appropriate one for a given situation.

Interpersonal, competitive situations entail negative goal interdependence, where one individual's success translates to others' failure (e.g., spelling bees or races to solve math problems). Individualistic learning situations are marked by independence, with success contingent solely upon individual performance. In cooperative learning scenarios, positive goal interdependence prevails alongside individual accountability, necessitating group members to collectively succeed or fail. Structuring groups for cooperation entails more than mere collaboration; it demands educators to manage and organize groups to ensure positive
interdependence, shared objectives, and individual accountability, thereby facilitating a truly cooperative learning experience (Hussain et al., 2021).

The present study is vital as it addresses the efficacy of cooperative learning strategies in enhancing student engagement, particularly in language support classes within Pakistani educational institutions. Understanding this impact can inform effective pedagogical approaches to improve language learning outcomes. Cooperative learning represents a pedagogical approach where students of varying abilities collaborate in small groups to achieve common goals (Haider, Ahmad, & Ali, 2024). It involves the implementation of diverse learning activities to deepen understanding of subject matter (Slavin, 1992; Hussain et al., 2021). Within these groups, learners engage in discussions, exchange ideas and knowledge, seek additional information, and present their findings to the class. Notably, cooperative learning prioritizes student-centeredness over teacher-centeredness, placing greater emphasis on learning objectives rather than performance targets (Hussain et al., 2021). This shift also diminishes the focus on competitive assessments, urging educators to embrace alternative evaluation methods (Imran & Akhtar, 2023). Asserts that cooperative learning enhances learning outcomes and retention, bolsters confidence and intrinsic motivation, and cultivates a more positive attitude towards academic and social abilities (Bukhari et al., 2024).

The significance of this study lies in its recognition of the pivotal role played by cooperative learning in the broader context of language acquisition. Recent research supports the idea that cooperative learning enhances students' social connections and interpersonal interactions, thereby improving their ability to communicate effectively with one another (Khan et al., 2021). By incorporating innovative instructional methodologies such as cooperative learning, educators can derive valuable insights from this investigation. English language classes should transition towards a more student-centered approach, with instructors assuming the role of facilitators rather than controllers. This shift provides teaching and learning environments with greater flexibility and fosters an enjoyable atmosphere conducive to writing proficiency (Phulpoto et al., 2024).

1.1 Research Objectives
i. To examine the effectiveness of cooperative learning in enhancing student engagement in language support classes within Pakistani educational institutions.
ii. To assess the impact of cooperative learning on students' language proficiency and comprehension skills in the context of ESL classrooms.

1.2 Research Questions
i. How does cooperative learning contribute to increased student engagement in language support classes in Pakistani educational institutions?
ii. What is the effect of cooperative learning on students' language proficiency and comprehension skills in ESL classrooms?

2. Literature Review

Cooperative learning, rooted in the educational philosophies of scholars such as Vygotsky, Piaget, and Lewin, emphasizes social interaction and collaborative engagement (Kagan, 1994; Richards & Rodgers, 2001), serving as a pivotal pedagogical approach to enhance student engagement and facilitate effective language learning experiences in Pakistani educational institutions (Hussain et al., 2021). Through fostering collaborative
interactions, peer support, and shared responsibility (Slavin, 1992), cooperative learning encourages active participation and motivates students to engage in language learning activities, subsequently contributing to language proficiency and comprehension skills (McCombs, 2000). Moreover, by providing opportunities for authentic communicative practice and promoting social connections, empathy, and teamwork abilities (Kort, 1992), cooperative learning aligns with cultural values and enhances students' social integration and sense of belonging in language support classes (Akinbobola, 2006). However, challenges such as resistance from traditional teaching paradigms, logistical constraints, and managing group dynamics necessitate careful consideration for successful implementation and sustained effectiveness (Pressel, 1992). Thus, leveraging theoretical insights and empirical evidence (Ormord, 2011), educators can design cooperative learning activities tailored to the unique needs and cultural dynamics of Pakistani learners, optimizing language learning outcomes and fostering meaningful interactions among students (Imran et al., 2023).

Cooperative learning, rooted in the educational philosophies of scholars such as Vygotsky, Piaget, and Lewin (Kagan, 1994; Richards & Rodgers, 2001), emphasizes social interaction and collaborative engagement, serving as a pivotal pedagogical approach to enhance student engagement and facilitate effective language learning experiences in Pakistani educational institutions (Namaziandost et al., 2020). Drawing from the theoretical foundations laid by these scholars, cooperative learning prioritizes active participation, peer support, and shared responsibility among learners (Slavin, 1992), thereby motivating students to engage in language learning activities and contributing to their language proficiency and comprehension skills (Qurashi et al., 2023; McCombs, 2000). Additionally, cooperative learning provides opportunities for authentic communicative practice and fosters the development of social connections, empathy, and teamwork abilities (Kort, 1992), aligning with cultural values and enhancing students' social integration and sense of belonging in language support classes (Suhag et al., 2018; Akinbobola, 2006). Despite its potential benefits, the implementation of cooperative learning in Pakistani educational institutions faces challenges such as resistance from traditional teaching paradigms, logistical constraints, and the need to manage diverse group dynamics (Pressel, 1992). However, with careful consideration of these challenges and leveraging both theoretical insights and empirical evidence (Ormord, 2011), educators can design cooperative learning activities tailored to the unique needs and cultural dynamics of Pakistani learners, thereby optimizing language learning outcomes and fostering meaningful interactions among students (Imran et al., 2023).

Cooperative learning, deeply rooted in the foundational theories of educational luminaries like (Kagan, 1994; Richards & Rodgers, 2001), embodies a pedagogical philosophy centered on social interaction and collaborative engagement, making it a cornerstone approach to enhancing student engagement and facilitating enriched language learning experiences within Pakistani educational institutions (Jabeen et al., 2023). This approach, underscored by scholars such as Slavin (1992), prioritizes active participation, peer support, and shared responsibility among learners, thus fostering intrinsic motivation and encouraging students to immerse themselves in language learning activities, ultimately augmenting their language proficiency and comprehension skills (Nawaz et al., 2022; McCombs, 2000).
Moreover, the dynamic nature of cooperative learning not only provides ample opportunities for authentic communicative practice but also nurtures social connections, empathy, and teamwork abilities among students, aligning seamlessly with the cultural values and social fabric of Pakistani society (Kort, 1992; Akinbobola, 2006). However, the successful implementation of cooperative learning strategies in Pakistani educational settings is not devoid of challenges, as educators grapple with resistance from conventional teaching paradigms, logistical constraints, and the intricacies of managing diverse group dynamics (Pressel, 1992). Nevertheless, armed with insights gleaned from theoretical frameworks and empirical studies (Ormord, 2011), educators can craft tailored cooperative learning activities that cater to the unique needs and cultural nuances of Pakistani learners, thereby unlocking their full potential, optimizing language learning outcomes, and fostering a vibrant and inclusive learning environment characterized by meaningful interactions and collaborative activities (Jabeen et al., 2023).

2.1 Theoretical Framework

The study draws on Vygotsky's Social Constructivism Theory, which emphasizes the role of social interaction in cognitive development (Vygotsky, 1978). Collaborative learning, aligned with Vygotsky's theory, fosters joint problem-solving and knowledge construction through social interaction (Vygotsky, 1978). By integrating Vygotsky's theory into the Collaborative Learning Classroom Model, this study explores how collaborative learning activities enhance writing skills. The theoretical framework underpins various activities, such as character development workshops and collaborative story writing sessions, which promote social interaction and cognitive growth among students.

3. Methodology

3.1 Research Design

The study utilized action research methodology alongside a quantitative approach for data collection, aiming to provide a comprehensive understanding of the investigated topic (Anderson, 1998). Initially, a pre-test, involving the composition of a descriptive essay, was administered to assess learners' writing proficiency. Subsequently, students engaged in a four-week action research period focused on improving descriptive writing skills through cooperative learning. A post-test, similar to the pre-test, was conducted following the action research period. Quantifiable results were obtained from both the pre-test and post-test. The study followed the spiral steps in action research as outlined by Kemmis and McTaggart (1988), encompassing identification of writing difficulties, planning and execution of cooperative learning activities, observation of impacts, and reflective analysis of the action research activities (Bukhari et al., 2024).

The study was conducted at Beacon House School, in which an experimental research design was employed. A sample of 60 ESL students was randomly selected from the population of 130 secondary class students. The selected students were divided into two groups, with each group comprising 30 students. One group served as the control group while the other group served as the experimental group.

3.2 Research Paradigm and Approach

Action research typically involves the use of qualitative data gathered through tests (Cohen et al., 2007). While some researchers combine qualitative and quantitative data (Dick, 1993), others opt for solely qualitative data (Efron & Ravid, 2013; Creswell, 2012). Efron
and Ravid (2013) emphasize the importance of selecting data types based on research questions, purpose, and context. This study leans towards post-positivism, which acknowledges both objective and subjective viewpoints in investigating phenomena (Wildemuth, 1993; Petter & Gallivan, 2004). Post-positivism aims to understand objective reality while recognizing the influence of the investigator's subjectivity. In this study, post-positivism allows for the integration of quantitative data analysis while considering contextual nuances and participants' subjective experiences, thus offering a comprehensive perspective.

3.3 Data Collection

Quantitative data were collected through pre-tests and post-tests to assess language proficiency, while qualitative data were gathered through questionnaires and interviews. Questionnaires provided adaptable data points, allowing for a comprehensive understanding of participants' experiences (Strange et al., 2003; Cohen et al., 2007). The research design facilitated purposeful sampling to ensure data extensiveness and applicability.

3.4 Validity and Reliability

The validity and reliability of the research tool, including tests (pre&Post), were ensured through content, face, and construct validity assessments, as well as pilot testing. Reliability was evaluated through test-retest reliability, split-half reliability, and factor analysis to ensure consistency and stability in data collection.

4. Results and Discussions

4.1 Data Analysis and Representation

| Table No 1: Comparison of Pretest (Control Group & Experimental Group) |
|-------------------|--------|----------|-----------------|-----------------|
|                   | Pre-Test | N   | Mean  | Std Deviation | Std Error Mean |
| Scores            | CG      | 30  | 22.00 | 7.9            | 1.8             |
|                   | Exp G   | 30  | 26.52 | 5.1            | 1.13            |

Table 1 presents the results of a pre-test conducted on two groups: a control group (CG) and an experimental group (Exp G). The number 'N' indicates 30 participants in each CG and Exp G. The 'Mean' represents the average score from each group, with CG scoring 22.00 and Exp G scoring higher at 26.52. The 'Standard Deviation' shows the variance from the mean score. The CG displayed a higher variance of 7.9, contrasting with Exp G, which showed a lower variance of 5.1. This suggests that the scores of Exp G were more closely clustered around the mean compared to CG. The 'Standard Error of Mean' further supports this, reflecting how spread out the scores are from the mean. With CG having a standard error mean of 1.8 and Exp G reporting 1.13, the scores within Exp G are closer to their mean than CG, meaning there is no significant difference between CG and Exp G.

In table No 2, the statistical analysis involves a Levene's test and a t-test. The Levene's test, used to assess the equality of variances, a key assumption in many statistical analyses, returned a p-value of .46, meaning that the assumption of equal variances holds. The t-test assesses the significance of the differences between the two groups. The calculated t-statistic is -2.07, associated with a p-value ranging from .45 to .46 indicates no significant difference between the groups as it is above the commonly used threshold of .05. Furthermore, the mean difference between the groups is -4.35 with a standard error of 2.09, indicating substantial uncertainty regarding the mean difference. A supporting 95% confidence interval for the
mean difference is calculated, ranging from -8.6 to -0.083. Overall, the test results suggest a lack of significant differences between the two groups.

Table No2: Independent t-test of Pretest (Control Group & Experimental Group)

<table>
<thead>
<tr>
<th>Scores</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>4.24</td>
<td>-2.07</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.46</td>
<td>0.46</td>
</tr>
<tr>
<td>t</td>
<td>-2.07</td>
<td>0.46</td>
</tr>
<tr>
<td>df</td>
<td>38</td>
<td>0.45</td>
</tr>
<tr>
<td>Mean Dif</td>
<td>-4.35</td>
<td>-4.35</td>
</tr>
<tr>
<td>Std. Error Dif</td>
<td>2.09</td>
<td>2.09</td>
</tr>
<tr>
<td>95% Confidence interval of the Difference</td>
<td>-8.6</td>
<td>-11</td>
</tr>
<tr>
<td>Lower</td>
<td>4.35</td>
<td>-4.35</td>
</tr>
<tr>
<td>Upper</td>
<td>0.083</td>
<td>0.083</td>
</tr>
</tbody>
</table>

The table 3 provides descriptive statistics for two groups, the Control Group (CG) and the Experimental Group (Exp G), with both groups having a size of 30. The CG has an average score of 25.75, with a standard deviation, a measure of variation, of 4.2. This higher standard deviation implies more variability in scores within the CG. The group's standard error of the mean, an estimate of uncertainty in the mean, stands at 0.9. In comparison, Exp G demonstrates higher performance with an average score of 44. The group displays less score variability, with a standard deviation of 1.8. The standard error of the mean for the Exp G is 0.4, which is lower than that of the CG. This data seems to suggest that Exp G not only has higher scores on average but also shows less variability concerning CG.

Table No 4: Independent t-test of post-test: (Control Group & Experimental Group)

<table>
<thead>
<tr>
<th>Scores</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>13.71</td>
<td>-17.92</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>t</td>
<td>-17.92</td>
<td>0.00</td>
</tr>
<tr>
<td>df</td>
<td>38</td>
<td>0.00</td>
</tr>
<tr>
<td>Mean Dif</td>
<td>-18.25</td>
<td>-18.25</td>
</tr>
<tr>
<td>Std. Error Dif</td>
<td>1.018</td>
<td>1.018</td>
</tr>
<tr>
<td>95% Confidence interval of the Difference</td>
<td>1.0179</td>
<td>-16.18</td>
</tr>
<tr>
<td>Lower</td>
<td>-16.18</td>
<td>-16.18</td>
</tr>
<tr>
<td>Upper</td>
<td>1.0179</td>
<td>1.0179</td>
</tr>
</tbody>
</table>
The statistical analysis applies a Levene's test and a t-test. Levene's test evaluates the equality of variances, generating a significant p-value of 0.00, compelling a rejection of the assumption of equal variances. This results in a substantial t-statistic of -17.928 with a significant p-value of 0.00, thus indicating a significant difference between the two groups when evaluated at a 95% confidence level. Further, the assessment highlights a substantial mean difference of -18.25 with a standard error of 1.01793, reflecting significant uncertainty around this substantial difference. In this case, the 95% confidence interval for the mean difference ranges from -16.156 to -16.189. This implies that, with 95% certainty, the true population difference falls within this interval. The findings provide compelling evidence of a significant difference between the groups under consideration.

The study conducted a pre-test on a control group (CG) and an experimental group (Exp G), with Exp G exhibiting higher average scores compared to CG. Statistical analysis revealed no significant difference between the groups, indicating comparable performance levels at the outset. Following intervention through cooperative learning activities, Exp G consistently outperformed CG in both pre-test and post-test assessments. However, Levene's test for the post-test indicated unequal variances between the groups, leading to a significant difference in scores (Pudjiarti et al., 2023). The substantial mean difference and narrow confidence interval underscored the significance of the observed difference, highlighting the efficacy of cooperative learning in enhancing language proficiency.

5. Conclusion

In conclusion, the findings of the study suggest that cooperative learning interventions positively impact language proficiency among students in Pakistani educational institutions. Despite comparable initial performance levels, students exposed to cooperative learning activities demonstrated significantly higher proficiency levels compared to those following traditional instruction methods. These results underscore the effectiveness of cooperative learning in fostering collaborative engagement, knowledge construction, and language acquisition. Consequently, educational institutions in Pakistan are encouraged to adopt cooperative learning approaches to enhance student learning outcomes and promote a dynamic and inclusive learning environment. Further research is warranted to explore the long-term effects and scalability of cooperative learning interventions across diverse educational contexts in Pakistan.

5.1 Implications

The findings of this study carry several implications for educational practice, policy, and future research in Pakistani educational institutions:

5.1.1 Pedagogical Practices

The study highlights the effectiveness of cooperative learning in improving language proficiency among students. Educators and instructional designers can leverage cooperative learning strategies to create engaging and interactive learning environments that promote active participation, collaboration, and knowledge sharing among students. Implementing cooperative learning approaches can enhance teaching effectiveness and student learning outcomes across various subjects and grade levels.

5.1.2 Curriculum Design
The success of cooperative learning interventions underscores the importance of integrating collaborative activities into the curriculum. Curriculum designers and educational policymakers can consider incorporating cooperative learning principles and techniques into curriculum frameworks to foster holistic development, critical thinking, and communication skills among students. By prioritizing cooperative learning, curriculum designers can ensure that educational programs align with contemporary pedagogical trends and address the diverse learning needs of students.

5.1.3 Teacher Training and Professional Development

Given the central role of teachers in facilitating cooperative learning experiences, there is a need for comprehensive teacher training and professional development programs. Educational institutions can invest in workshops, seminars, and courses aimed at equipping teachers with the knowledge, skills, and resources necessary to implement cooperative learning effectively. By supporting ongoing professional development initiatives, educational institutions can empower teachers to adopt innovative instructional practices and create inclusive learning environments that promote student engagement and academic success.

5.1.4 Policy Implementation

Policymakers and educational stakeholders can use the findings of this study to inform policy decisions related to curriculum reform, instructional strategies, and teacher training initiatives. By incorporating cooperative learning principles into educational policies and guidelines, policymakers can promote pedagogical innovation, student-centered learning, and collaborative teaching practices across schools and educational institutions. Additionally, policymakers can allocate resources and funding to support the implementation of cooperative learning initiatives and ensure equitable access to quality education for all students.

5.2 Future Research Directions

The study highlights the need for further research to explore the long-term effects, scalability, and sustainability of cooperative learning interventions in Pakistani educational contexts. Future studies could investigate the impact of cooperative learning on various academic subjects, student demographics, and educational settings. Additionally, research could explore the role of technology-mediated cooperative learning approaches and cross-cultural adaptations of cooperative learning models in diverse educational contexts. By advancing research in this area, scholars can contribute valuable insights to the field of educational psychology, curriculum development, and instructional design, ultimately enhancing educational practices and outcomes in Pakistani educational institutions and beyond.

The study's findings indicate that cooperative learning interventions have a positive impact on language proficiency among students in Pakistani educational institutions. Despite similar initial performance levels, students exposed to cooperative learning activities showed significantly higher proficiency levels compared to those following traditional instruction methods. These results emphasize the effectiveness of cooperative learning in fostering collaborative engagement, knowledge construction, and language acquisition. Therefore, educational institutions in Pakistan are encouraged to adopt cooperative learning approaches to enhance student learning outcomes and promote a dynamic and inclusive learning environment.
environment. Further research is needed to explore the long-term effects and scalability of cooperative learning interventions across diverse educational contexts in Pakistan, as well as variations in intervention strategies, the role of teacher training, cultural considerations, and technology integration. Additionally, comparative studies across different educational levels and subject areas, along with mixed methods research approaches, could provide valuable insights into the mechanisms underlying the effectiveness of cooperative learning in language support classes.

6. References


