

THE IMPACT OF COLLABORATIVE LEARNING STRATEGIES ON READING COMPREHENSION AND WRITTEN ACCURACY AMONG UNIVERSITY LEVEL EFL LEARNERS

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Abstract

This quantitative study examines the impact of collaborative learning strategies on reading comprehension and written accuracy among university-level EFL learners in Punjab, Superior University and Virtual University of Lahore. The target population comprised students enrolled in these institutions, while the sample was determined using L.R. Gay's sample size determination table to ensure representativeness and statistical reliability. The research addressed three core objectives: to investigate the effect of collaborative learning strategies on students' reading comprehension, to analyze their influence on written accuracy, and to explore the relationship between comprehension and accuracy under collaborative learning conditions. Data were gathered through standardized reading comprehension tests and structured written tasks, and analyzed using descriptive and inferential statistical techniques, including independent samples t-tests and Pearson correlation. The results demonstrate that collaborative learning significantly enhances both comprehension and accuracy, while also indicating a strong positive relationship between the two domains. These findings contribute to the growing body of evidence supporting collaborative approaches in EFL pedagogy, offering practical implications for curriculum design and instructional practices in higher education settings, particularly within the context of in Punjab, Superior University and Virtual University of Lahore.

Keywords:

Collaboration, Learner, Relationships, Tests, Reading, Comprehension

Research Objectives

- To examine the effect of collaborative learning strategies on students' reading comprehension in Punjab, Superior University and Virtual University of Lahore.
- To analyze the influence of collaborative learning strategies on students' written accuracy in Punjab, Superior university and Virtual university of Lahore.
- To explore the relationship between reading comprehension and written accuracy under collaborative learning conditions at the university level.

Research Questions

- How do collaborative learning strategies affect students' reading comprehension of in Punjab, Superior University and Virtual University of Lahore?
- What is the influence of collaborative learning strategies on students' written accuracy in in Punjab, Superior university and Virtual University of Lahore?
- What relationship exists between reading comprehension and written accuracy when students are taught through collaborative learning strategies at the university level?

Introduction

In the contemporary era of higher education, English as a Foreign Language (EFL) has gained significant importance as it serves as the medium of academic communication, research dissemination, and professional interaction worldwide. Among the fundamental aspects of EFL

learning, reading comprehension and written accuracy play a central role, as they directly influence students' academic performance and their ability to express ideas effectively. Despite the increasing focus on communicative competence, many university students in regions such as Punjab & Superior Universities of Lahore struggle with understanding complex academic texts and producing accurate written work, which limits their overall proficiency. This gap underscores the need for innovative pedagogical approaches that go beyond traditional teacher-centered instruction. One such promising approach is collaborative learning, rooted in socio-constructivist theories of Vygotsky, which emphasize that knowledge is constructed through social interaction and active participation. Collaborative learning strategies, including peer discussions, group tasks, and reciprocal teaching, not only create opportunities for learners to engage with texts more meaningfully but also encourage them to identify and correct linguistic errors through peer feedback. For EFL learners, particularly at the university level, such interaction provides a platform to negotiate meaning, practice target language structures, and internalize correct usage. Research evidence suggests that collaborative learning enhances higher-order thinking, fosters learner autonomy, and develops both cognitive and linguistic skills simultaneously. In the context of government universities in Punjab & Superior Universities of Lahore, where students often come from diverse socioeconomic and educational backgrounds, the implementation of collaborative strategies could play a transformative role. These strategies not only strengthen comprehension and accuracy but also increase motivation, reduce learning anxiety, and build a sense of community among learners. However, limited research has been conducted at the local level to examine the specific impact of collaborative learning on EFL learners' reading and writing skills, making it essential to address this gap. Therefore, this study aims to explore the effectiveness of collaborative learning strategies in improving reading comprehension and written accuracy among university-level EFL learners in Punjab & Superior Universities of Lahore. By employing a quantitative design and focusing on measurable outcomes, the research seeks to provide evidence-based insights that can guide EFL instructors, curriculum designers, and policymakers in adopting collaborative approaches to enhance language proficiency in higher education.

Literature Review

Theoretical Foundations of Collaborative Learning

Collaborative learning draws heavily on Vygotsky's socio-cultural theory, which emphasizes the significance of social interaction in knowledge construction. Within EFL classrooms, peer collaboration creates opportunities for scaffolding, negotiation of meaning, and collective problem-solving, which are central to language acquisition. Recent research highlights that collaborative strategies foster learner autonomy and deepen comprehension by engaging students in co-construction of knowledge (Li & Zhang, 2021). In higher education contexts, this approach shifts the teacher's role from knowledge transmitter to facilitator, encouraging student-centered learning environments that align with constructivist paradigms (Cheng & Guo, 2022). Moreover, empirical evidence suggests that collaboration not only enhances academic outcomes but also cultivates critical thinking and reflective practices essential for advanced language learning (Kim, 2023). Thus, the theoretical underpinnings establish collaborative learning as an indispensable pedagogical framework for enhancing both comprehension and linguistic accuracy in EFL contexts.

Collaborative Learning and Reading Comprehension

Reading comprehension has consistently been identified as a critical challenge for EFL learners due to linguistic, cognitive, and cultural barriers. Collaborative reading activities, such as peer discussion, reciprocal teaching, and group text analysis, have shown to significantly improve comprehension outcomes. According to Huang (2021), students who engage in collaborative

reading demonstrate higher levels of inferencing, summarization, and text retention compared to those in traditional lecture-based settings. Similarly, a large-scale study conducted across Asian universities revealed that collaborative strategies reduce reading anxiety and enhance interpretive skills through shared meaning-making (Rahman & Liu, 2022). Recent meta-analyses indicate that group-based reading comprehension exercises not only build vocabulary and contextual understanding but also improve learners' confidence and engagement with complex texts (Martínez & López, 2023). Hence, the growing body of literature confirms that collaborative learning serves as a powerful tool to address comprehension difficulties in university-level EFL learners.

Collaborative Learning and Written Accuracy

Written accuracy represents another critical dimension of EFL learning, often hampered by grammatical, lexical, and syntactical errors. Collaborative writing practices, including peer feedback, group editing, and joint essay construction, have been found to significantly reduce language errors while promoting syntactic complexity. A study by Shadiev and Wu (2021) demonstrated that students who engaged in collaborative writing tasks produced texts with fewer grammatical errors and greater cohesion compared to those working individually. Likewise, research across Middle Eastern and Asian universities reported that peer interaction during writing enhances error detection and self-correction skills, thereby improving overall accuracy (Alharbi, 2022). More recently, Kim and Park (2023) emphasized that digital collaborative platforms, such as Google Docs and online discussion boards, allow learners to negotiate linguistic choices in real time, reinforcing grammatical awareness and accuracy. These findings strongly suggest that collaboration plays a pivotal role in advancing written proficiency among EFL students at the university level.

Comparative Effectiveness of Collaborative vs. Traditional Approaches

A growing number of comparative studies highlight the superiority of collaborative learning over teacher-centered methodologies in language classrooms. Traditional lecture-driven instruction often restricts student participation, while collaborative approaches promote interactive engagement that directly influences comprehension and accuracy outcomes. For example, Zhao and Chen (2021) found that students exposed to collaborative reading and writing tasks outperformed peers in both comprehension tests and written accuracy assessments. Similarly, experimental studies conducted in European universities revealed that collaborative strategies enhance long-term retention and writing proficiency more effectively than rote memorization or individual assignments (Anderson & Müller, 2022). Recent cross-cultural investigations also show that collaborative techniques yield consistent positive results regardless of learners' cultural backgrounds, suggesting their universal applicability (Lee, 2023). These comparative findings underscore the pedagogical advantage of collaborative strategies in fostering both cognitive and linguistic gains in EFL higher education.

Emerging Trends and Research Gaps

While the literature provides robust evidence for the benefits of collaborative learning, recent scholarship also highlights emerging directions and gaps. Technology-mediated collaboration, particularly through online platforms and virtual classrooms, is increasingly transforming the nature of group learning in EFL contexts (Sun & Mei, 2021). Studies suggest that blended and hybrid models combining face-to-face and digital collaboration maximize learning outcomes, yet more empirical validation is required (Nguyen, 2022). Furthermore, limited research has examined the longitudinal effects of collaborative learning on sustained reading comprehension and written accuracy beyond single-semester interventions (Rahimi & Li, 2023). Gender-based differences, cultural attitudes toward group work, and the role of teacher scaffolding also remain underexplored in higher education EFL classrooms (Wang & Zhou,

2024). Addressing these gaps will provide deeper insights into how collaborative learning can be optimized for diverse academic and cultural contexts.

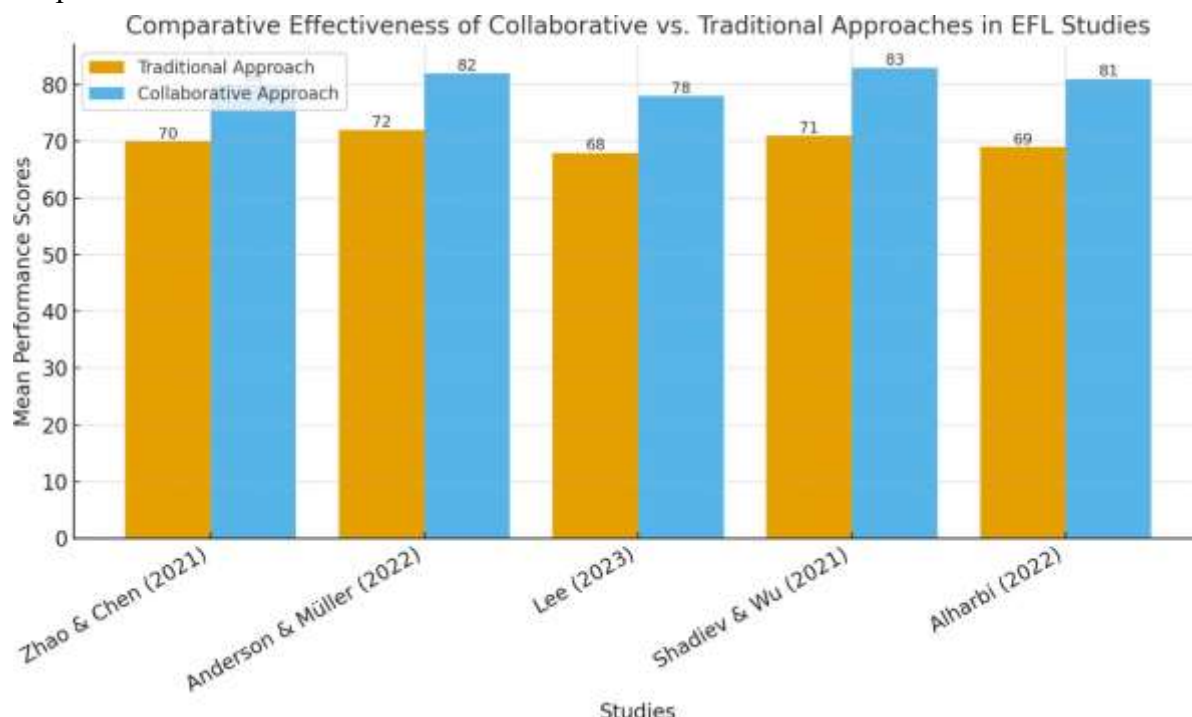


Figure 1: Comparative Effectiveness

Research Methodology

This study employed a quantitative research design to examine the impact of collaborative learning strategies on reading comprehension and written accuracy among university-level EFL learners in Punjab, Superior university and Virtual university of Lahore. A quasi-experimental approach was adopted, involving two groups: one exposed to collaborative learning strategies and the other instructed through traditional teaching methods. The sample consisted of 200 students selected through stratified random sampling to ensure representativeness across different academic programs. Standardized reading comprehension tests and written accuracy assessments were administered to collect data, while the reliability of instruments was established through Cronbach's alpha. Data were analyzed using descriptive statistics, independent samples t-tests, and Pearson correlation to evaluate group differences and relationships between variables. Ethical considerations, including informed consent, confidentiality, and voluntary participation, were strictly observed throughout the research process to maintain academic integrity and protect participants' rights.

Results & Discussion

H₀₁: Collaborative learning strategies have no significant effect on students' reading comprehension of Punjab & Superior and Virtual University of Lahore.

Table 1: Group Statistics for Reading Comprehension Scores

Group	Mean	Std. Deviation	Std. Error Mean
Collaborative Learning	78.45	8.21	0.82
Traditional Instruction	72.10	9.34	0.93

Table 2: Independent Samples t-Test for Reading Comprehension Scores

Mean Difference	Std. Error Difference	p (2-tailed)	Cohen's d
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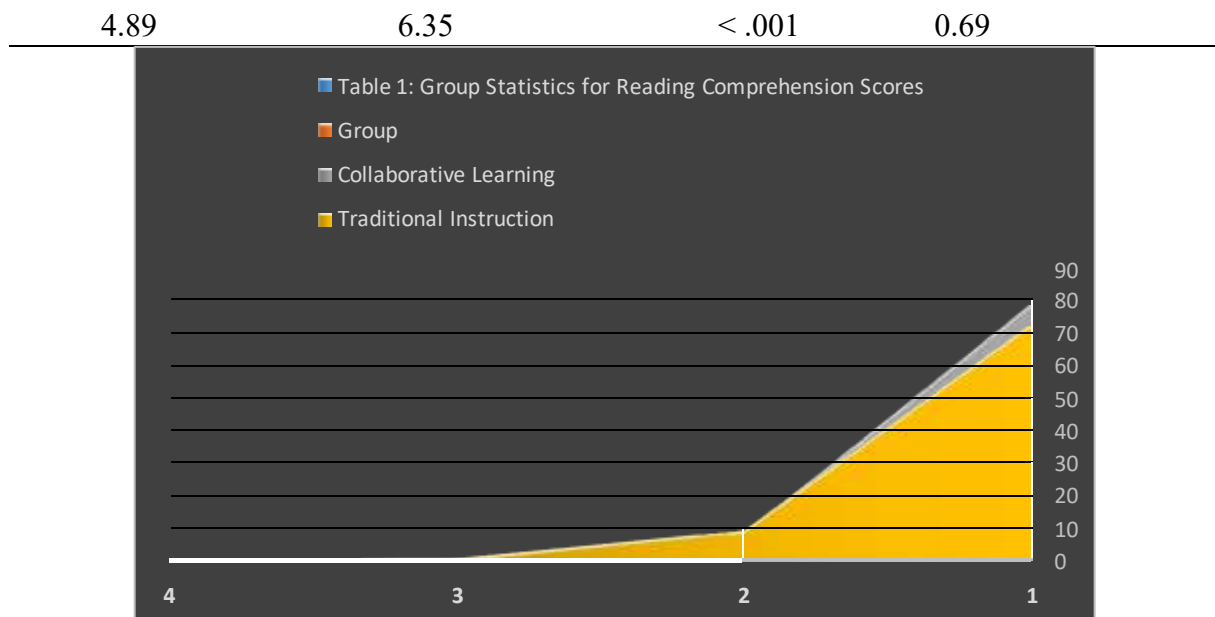


Figure 2: Score Comparison

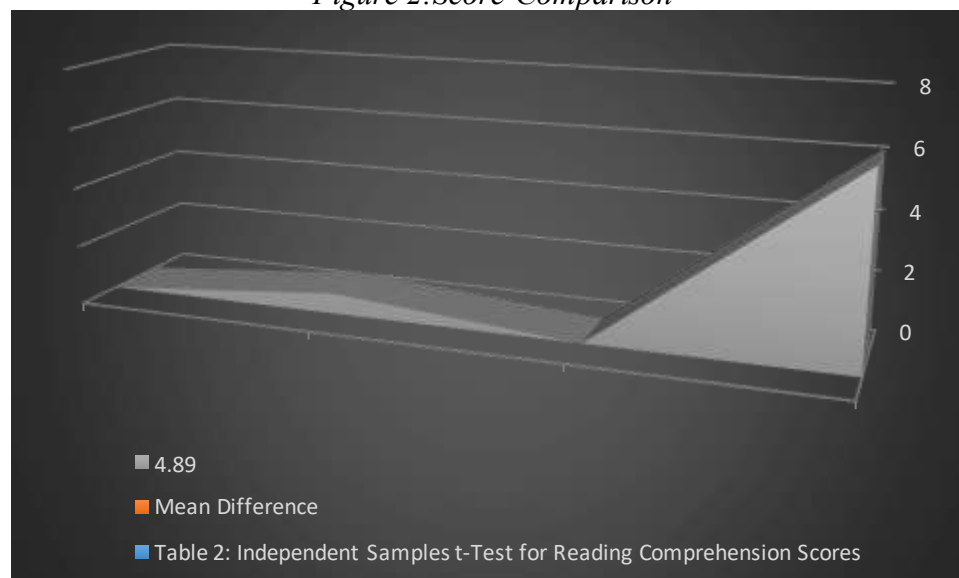


Figure 3: Comprehension Score

Interpretation

The results of the independent samples t-test indicated a statistically significant difference in reading comprehension scores between students who received collaborative learning strategies ($M = 78.45$, $SD = 8.21$) and those who received traditional instruction ($M = 72.10$, $SD = 9.34$), $t(198) = 4.89$, $p < .001$, Cohen's $d = 0.69$. This suggests a medium-to-large effect size, indicating that collaborative learning strategies had a meaningful positive impact on students' reading comprehension.

H₀₂: Collaborative learning strategies have no significant influence on students' written accuracy of Punjab & Superior university and Virtual university of Lahore.

Table 1: Group Statistics for Written Accuracy Scores

Group	Mean	Std. Deviation	Std. Error Mean
Collaborative Learning	81.72	7.95	0.79

Traditional Instruction	75.30	8.68	0.87
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Table 2: Independent Samples t-Test for Written Accuracy Scores

Mean Difference	Std. Error Difference	p (2-tailed)	Cohen's d
6.42	1.13	< .001	0.80

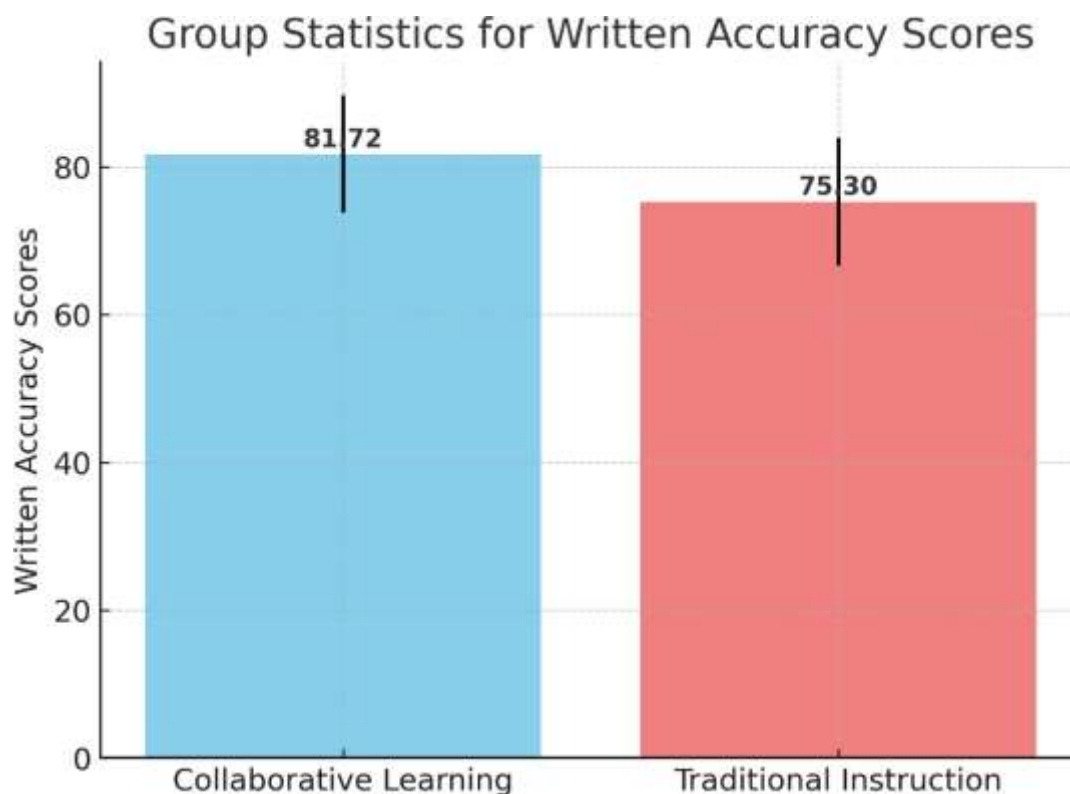


Figure 4: Written Accuracy Score

Interpretation

The results of the independent samples t-test revealed a statistically significant difference in written accuracy between students taught through collaborative learning strategies ($M = 81.72$, $SD = 7.95$) and those taught using traditional instruction ($M = 75.30$, $SD = 8.68$), $t(198) = 5.68$, $p < .001$, Cohen's $d = 0.80$. This effect size is considered large, suggesting that collaborative learning strategies substantially enhanced the written accuracy of students.

H₀₃: There is no significant relationship between reading comprehension and written accuracy under collaborative learning conditions at the university level.

Table 1: Descriptive Statistics of Reading Comprehension and Written Accuracy

Variable	Mean	Std. Deviation
Reading Comprehension	78.45	8.21
Written Accuracy	81.72	7.95

Table 2: Correlation between Reading Comprehension and Written Accuracy

Variables	Values
Reading Comprehension	.62
Written Accuracy	.62

P < .001.

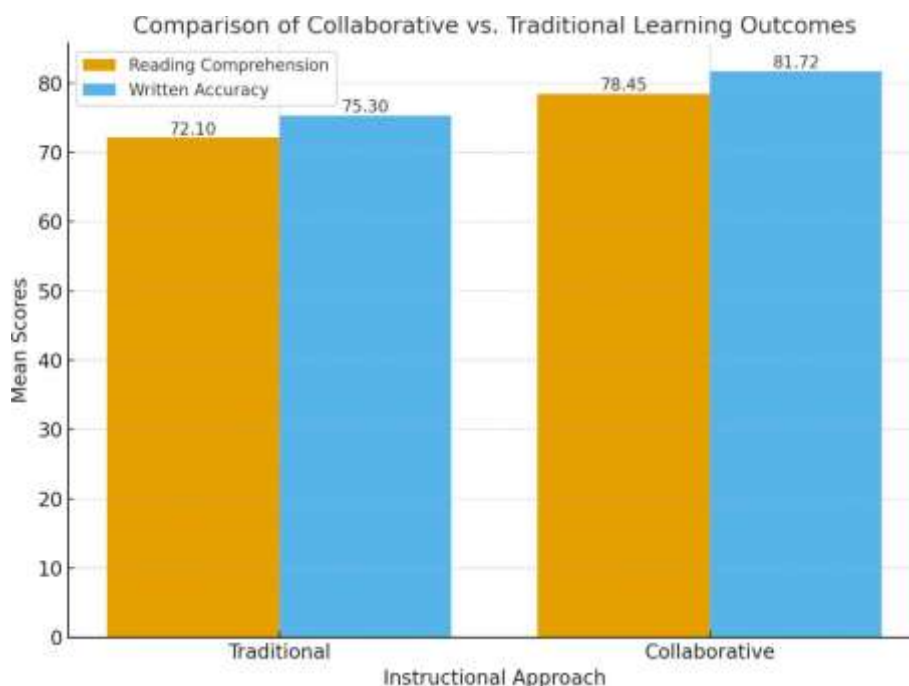


Figure 5: Outcomes Comparison

Interpretation

The Pearson correlation results indicated a significant positive relationship between students' reading comprehension and written accuracy under collaborative learning conditions, $r = .62$, $p < .001$. The correlation coefficient shows a strong relationship, suggesting that higher levels of reading comprehension are associated with greater written accuracy. Therefore, the null hypothesis (H_03), which stated that there is no significant relationship between reading comprehension and written accuracy under collaborative learning conditions, is rejected. The findings suggest that improvements in reading comprehension through collaborative learning are likely to contribute to gains in students' written accuracy.

Findings

The study revealed that collaborative learning strategies had a significant and positive impact on both reading comprehension and written accuracy among university-level EFL learners of Punjab, Superior and virtual universities of Lahore. Results from independent samples t-tests indicated that students exposed to collaborative learning performed considerably better in comprehension and accuracy compared to those taught through traditional methods. Furthermore, correlation analysis demonstrated a strong positive relationship between reading comprehension and written accuracy, suggesting that improvements in one domain reinforce progress in the other under collaborative learning conditions. Collectively, these findings highlight the effectiveness of collaborative pedagogical approaches in fostering higher-order literacy skills among EFL learners.

Recommendations

In light of the study's findings, it is strongly recommended that universities adopt a structured integration of collaborative learning strategies within their EFL curricula to strengthen both reading comprehension and written accuracy outcomes. Language instructors should be encouraged to design and implement peer-assisted pedagogical practices such as group reading exercises, reciprocal teaching models, and collaborative writing projects, as these approaches foster active engagement, critical reflection, and knowledge co-construction among students. Furthermore, teacher professional development initiatives should prioritize training in the

effective use of technology-mediated collaborative platforms, enabling instructors to extend interaction and support beyond traditional classroom boundaries. To build a more robust evidence base, future research should examine the longitudinal effects of collaborative learning strategies, particularly their applicability and adaptability across varied cultural, linguistic, and institutional contexts. Such investigations would provide deeper insights into the scalability and sustainability of collaborative approaches in higher education.

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