

Research Article

Cite this article: Al-Azzam, A., & Al-Jamal, D. (2025). Learning Together: Buddy Reading as a Tool for Vocabulary Building. *Educational Process: International Journal*, 18, e2025442. <https://doi.org/10.22521/edupij.2025.18.442>

Received June 21, 2025

Accepted August 18, 2025

Keywords: Buddy Reading, Vocabulary development, EFL students, Tutors, Jordan

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Learning Together: Buddy Reading as a Tool for Vocabulary Building

Ahmad Al-Azzam , Dina Al-Jamal

Abstract

Background/purpose. This investigation centres on the effectiveness of the Buddy Reading approach in promoting vocabulary progression among fifth-grade EFL students in Jordan. Recognizing vocabulary as fundamental to linguistic aptitude, the research addresses the ongoing challenge instructors face in selecting fruitful instructional tactics. Guided by Vygotsky's Social Constructivism theory, the examination explores how collaborative, peer-encouraged discovering environments backtrack vocabulary procurement.

Materials/methods. A quasi-trial design was utilized, involving 40 male pupils split into an experimental group (Buddy Reading) and a management group (standard teaching). Pre- and post-tests grounded on Nation's Vocabulary Information Framework were directed to assess four vocabulary measurements: No Recognition, Basic Awareness, Conceptual Understanding, and Progressive Implementation.

Results. The outcomes uncovered statistically significant improvements in the experimental group across all vocabulary measurements, with the most noteworthy advancements in Conceptual Understanding and Progressive Implementation.

Conclusion. Students in the experimental group indicated that working with peers to examine and talk about word implications expanded their vocabulary retention and utilization over the long run.

1. Introduction

A single word or group of words, such as idioms and phrases, that are crucial for language development is referred to as vocabulary. Gaining vocabulary mastery improves a learner's ability to listen, speak, read, and write (Pan & Xu, 2011; Loraine, 2008). Clouston (2013) asserts that vocabulary encompasses all the individual words, phrases, or word combinations utilized in a language to express meaning.

Building a strong vocabulary is key to mastering English. Learners with limited word knowledge often face challenges in writing, speaking clearly, understanding texts, and communicating effectively (Uchihara et al., 2022). A broad vocabulary supports all aspects of language use and enables learners to convey their thoughts more clearly (Saputro et al., 2024; Nation & Coxhead, 2014). Difficulties in expressing ideas, forming proper sentences, and understanding English materials can lower students' confidence and hinder their use of both receptive and productive vocabulary (Sharma, 2022). To improve vocabulary retention and language skills, researchers have suggested integrating 21st-century competencies, such as critical thinking, collaboration, creativity, and effective communication, into English instruction (Ratama et al., 2021).

Recent research indicates that teaching vocabulary may be problematic because many teachers are not confident about the best methods for vocabulary learning and teaching. Teaching vocabulary is a critical aspect of learning a foreign language, as languages are based on words. It is hard to acquire a language without words, as communication between individuals relies on them. Therefore, both teachers and students agree that vocabulary acquisition is the main factor in teaching a language. During the teaching and learning processes, various problems arise for teachers. Teachers should develop and identify suitable strategies to apply to students. Consequently, they must use diverse and modern techniques. Teachers need to master the material to ensure that students understand it and remain interested and engaged in the learning process inside the classroom (Walters, 2004; Berne & Blachowicz, 2008).

Recent studies suggest that vocabulary instruction remains a challenge, as many teachers are uncertain about the most effective methods for teaching and learning vocabulary. Since language is fundamentally built on words, vocabulary instruction plays a crucial role in foreign language acquisition. Communication depends on words, making vocabulary development essential for both teachers and learners. Both parties often recognize that mastering vocabulary is a central aspect of language education. However, throughout the teaching and learning process, teachers frequently encounter various obstacles. To address these, teachers must identify and apply appropriate strategies tailored to their students' needs. It is important for teachers to adopt diverse, up-to-date teaching methods and to have a strong grasp of the subject matter. Doing so helps ensure students understand the content and remain engaged and motivated in the classroom (Walters, 2004; Berne & Blachowicz, 2008).

One reason vocabulary development can be challenging is that many teachers are uncertain about the most effective methods to teach vocabulary (Walters, 2004). According to Al-Jamal, Al-Hawamleh, and Al-Jamal (2013) and Al-Qatawneh (2005), students have trouble identifying vocabulary, which has a detrimental effect on their comprehension of texts. Marzuki (2019), Assaf, Al-Jamal, and Rababeh (2020), and Alkhawaldeh (2011) noted that vocabulary development for EFL learners is difficult due to teachers' uncertainty in teaching vocabulary. Students find it challenging to identify vocabulary, which, in turn, hinders their comprehension of texts.

To develop students' vocabulary and improve their English skills and attitudes toward studying English as a foreign language, the use of an effective instructional strategy is essential. The Buddy Reading strategy is particularly well-suited to meet the needs of both younger and older learners. This strategy, which involves cross-age or peer tutoring, helps students develop reading fluency,

expand their vocabulary, and gain important literacy and social skills. Research has shown that supplementing traditional classroom teaching with one-on-one interactions, such as those in the Buddy Reading strategy, can significantly boost students' oral vocabulary development. In addition to academic benefits, this strategy supports the development of interpersonal skills. The Buddy Reading strategy is flexible and does not follow a rigid format. Its core feature is simply two or more students working together with a shared text. Common models include cross-age tutoring, where older students mentor younger ones, and peer tutoring, where students of similar ages collaborate (Mak, Coniam, & Chan, 2008).

Lev Vygotsky's work serves as the foundation for the Buddy Reading Strategy's social constructivism. This method emphasizes the social nature of knowledge construction. Vygotsky argued that social interactions significantly impact learning (Cianca, 2014). Nes Ferrara (2005) advocates for Buddy Reading based on Vygotsky's theories. According to Flint (2010), this strategy stems from the belief that interacting with adults who are more knowledgeable and skilled helps children's cognitive development.

1.1. Statement of the Problem

The researcher has observed that many fifth-grade EFL students struggle with English vocabulary, affecting their understanding of meanings and correct word usage. This difficulty leads to poor reading comprehension and hampers their ability to answer questions within the allotted time. Additionally, these students often disengage from texts, resulting in a lack of interest in reading tasks. Their limited vocabulary restricts their ability to comprehend passages. English teachers, supervisors, and educators have noted this common struggle, which ultimately contributes to weak reading comprehension skills (Bataineh & Al-Kofeiri, 2018; Al-Damiree & Bataineh, 2016; Al-Jamal, Al-Hawamleh & Al-Jamal, 2013; Alkhawaldeh, 2011).

1.2. Limitations of the Study

The generalizability of the findings could be bound to the following:

1. School Type and Sample: The generalizability of the study is limited to the EFL fifth-grade male students at a public Secondary School for Boys in the Irbid Directorate for Education during the second semester of the academic year (2024/2025). So, the results can be generalized to similar samples or contexts.
2. Intervention Period: The duration of the study was eight weeks. A longer duration may have different results.

2. Literature Review

2.1. Vocabulary

Vocabulary consists of single words or chunks, including idioms or phrases, used to build a language. Mastery of vocabulary enables learners to read, write, listen, and speak effectively (Pan & Xu, 2011). Clouston (2013) pointed out that vocabulary encompasses all the words used to convey meaning in a language, whether they are single words, phrases, or chunks of several words.

2.1.1. Vocabulary Development

Vocabulary development is defined as the process of expanding "the stock of words which a person, class, or profession uses" (Burns & Broman, 1975, p. 295). "The endeavor to improve the words we must know in order to communicate effectively—expressive vocabulary for speaking and receptive vocabulary for listening"—is known as vocabulary development, according to Neuman and Dwyer (2009, p. 385). Braze, Tabor, Shankweiler, and Mencl (2007) provided a thorough definition of vocabulary development, which encompasses both the growing understanding of word meanings

and the ideas connected to those meanings. Language acquisition necessitates the development of vocabulary in order to communicate effectively (Fauziati & Endang, 2010; Cameron, 2001). Due to its relevance, expanding vocabulary can facilitate language acquisition (Godwin-Jones, 2010). Beck and McKeown (2007) argue that extensive vocabulary knowledge is required for reading ability. Reading becomes easier when students understand word meanings, which improves comprehension.

2.1.2. Skills for Vocabulary Development

Three key sub-skills for vocabulary development were identified by McWhorter (2005): using dictionaries, understanding word parts, and interpreting context clues. She further explained that context clues can be categorized into definitions, examples, contrasts, and logical clues. Similarly, Cronbach (1942) outlined various dimensions of vocabulary knowledge, including generalization (defining a word), application (using a word appropriately), breadth (understanding synonyms and multiple meanings), precision (applying a term accurately across situations), and availability (using a word effectively in communication). These skills have been supported by numerous researchers, such as Ahangari and Behzady (2011) and Hamadouche (2010).

2.1.3. Teaching Vocabulary

Learning vocabulary is a key part of acquiring English, as it helps students understand and use new words while developing both receptive (listening and reading) and productive (speaking and writing) skills (Dobakhti et al., 2020). Vocabulary plays a role in all four language areas, making it a foundation for overall language progress. For learners who find vocabulary difficult, certain methods—such as using visuals, switching between languages, and combining basic English with their first language—can be effective (Rungwaraphong, 2020). Although teaching vocabulary can be challenging, it is essential for better communication and reaching language goals (Pratiwi et al., 2024). A well-planned method that includes six steps: explaining, rephrasing, applying, discussing, reflecting, and using words in real situations has been shown to support better results (Manyak et al., 2021). To meet these needs, the Buddy Reading strategy was chosen to enable students to use readily available resources that encourage peer interaction and assist students in developing their vocabulary and improving their comprehension skills (Vernon-Feagans et al., 2018).

2.2. Social Constructivism

Social constructivism, a theory of learning introduced by Russian psychologist Lev Vygotsky, emphasizes that individuals actively construct knowledge through their interactions with others (Schreiber & Valle, 2013). Vygotsky asserted that learning is deeply rooted in social and cultural contexts, rather than being an isolated, internal process (Schreiber & Valle, 2013). This theory places significant emphasis on collaborative learning within pairs or small groups (Johnson & Bradbury, 2015). For example, students gain understanding through interactions with peers, teachers, and parents, while teachers guide and enrich learning by encouraging meaningful classroom dialogue (Powell & Kalina, 2009). According to social constructivism, effective teaching and learning rely heavily on social interaction and dialogue, with a focus on students' comprehension of the discussion (Prawat, 1992).

A key component of Vygotsky's theory is the zone of proximal development (ZPD), which highlights the importance of instructional support in the learning process. Developing cognitive abilities requires support through collaborative tasks, where learners engage in problem-solving or exploratory activities with guidance from more knowledgeable individuals (Vygotsky, 1978). Through these social interactions, students internalize the language and strategies used during collaboration, gradually acquiring the ability to perform these tasks independently. A core principle of social constructivism is that education equips learners with the linguistic, symbolic, and communicative tools needed to engage in more advanced and abstract thinking (Olson, 1986).

2.3. Buddy Reading Strategy

The Buddy Reading Strategy, which is a type of peer-assisted learning, promotes mutual educational support among learners through collaborative reading practices. This intervention can significantly enhance literacy development for both underperforming and proficient readers through social interaction. Such collaborative groups aim to improve students' reading skills and capabilities while also cultivating positive self-esteem and confidence (Schmidt, 2008).

According to Gutheie (2017), Buddy Reading occurs when a more proficient reader collaborates with a less proficient reader. Reading aloud enables them to exchange roles, allowing them to model and teach appropriate behavior while also determining when to correct or provide feedback. This strategy recognizes each student's efforts while encouraging peer collaboration, self-confidence, and skill development. Learners with a variety of abilities can benefit from the Buddy Reading Strategy in multiple ways. Students can join reading groups in the classroom, connect younger readers with more advanced peers in higher grades, or collaborate with older students reading at a lower level (Lowery et al., 2008).

Research has shown that Buddy Reading has significant benefits for children, as it can provide immense joy in the act of reading, increasing their motivation to learn and self-efficacy. Furthermore, it enhances students' vocabulary and comprehension skills (Wang & Lin, 2019). Efforts to promote literacy development through Buddy Reading are considered economically efficient in impoverished school districts. Financial constraints limit resources and compel educational institutions to innovate in their instructional strategies. Buddy Reading enables students to utilize readily available resources that encourage peer interaction and assist students in developing their vocabulary and improving their comprehension skills (Vernon-Feagans et al., 2018).

The Buddy Reading Strategy aligns with social constructivism, a theory proposed by Lev Vygotsky, which emphasizes the importance of social interaction in learning. In this framework, learning occurs through active engagement and interaction with peers or more knowledgeable others.

By pairing older students (tenth-graders) with younger students (fifth-graders), the Buddy Reading Strategy fosters collaboration, where the tenth-grade tutors help fifth-grade tutees in vocabulary development. This peer interaction allows the students to learn from one another, with the more knowledgeable students supporting their peers in the Zone of Proximal Development (ZPD) the gap between what a learner can do independently and what they can do with guidance.

In the context of your research, the tenth-grade tutors provide the scaffolding that enables fifth-grade students to develop vocabulary and comprehension skills that they might not have achieved through conventional learning alone. The strategy supports independent learning by encouraging the fifth-grade students to take an active role in their own learning process through peer interaction, which enhances their self-efficacy and confidence.

2.4. Buddy Reading Implementation Process

The Buddy Reading intervention was carried out in three main stages:

1. Pre-Reading Stage:

Objective: Prepare the tutees (fifth-grade students) by activating prior knowledge and introducing relevant vocabulary.

Process: The tenth-grade tutors began by introducing the reading topic to the fifth-grade tutees. They used visual aids, such as pictures or flashcards, to highlight new vocabulary words that would appear in the text. The tutors asked questions to engage students and prompt discussions that related to their experiences or knowledge about the topic, ensuring that they were familiar with the vocabulary before reading.

2. While-Reading Stage:

Objective: Foster collaborative reading while allowing the tutors to model fluent reading and provide assistance.

Process: The tenth-grade tutors and fifth-grade students read the text together, taking turns reading aloud. They paused periodically to ask the tutees questions about the new vocabulary mentioned in the text, encouraging them to infer meanings from context, thereby actively engaging them in understanding and processing the text. The tutors also encouraged the tutees to ask questions about unfamiliar words or phrases to promote active participation.

3. Post-Reading Stage:

Objective: Review the new vocabulary and ensure comprehension of the text.

Process: After reading, the tutors and tutees discussed the content of the text. The tenth-grade tutors asked comprehension questions. The tutees were encouraged to express their opinions and connect the new vocabulary to their own experiences. Finally, they engaged in post-reading activities such as vocabulary games or creative exercises that reinforced the learning of the new words and phrases.

2.5. The Question of the Study

– Are there any statistically significant differences at $\alpha = 0.05$ in fifth-grade students' vocabulary development post-test that can be attributed to the instructional strategy (Buddy Reading vs. conventional)?

3. Methodology

In this study, a quasi-experimental design was employed, involving one control group taught by an English teacher following the instructions of the Teacher's Book and one experimental group taught using the Buddy Reading strategy under the researcher's supervision. The independent variable is the Buddy Reading Strategy, while the dependent variable is the participants' vocabulary development.

3.1. Participants

The participants in the study are 40 male EFL fifth-grade students who were purposefully chosen from two sections at a public Secondary School in the Irbid Directorate for Education during the second semester of the academic year 2024/2025. Fifth-grade students were chosen because they are at a critical stage of developing foundational English vocabulary, which is essential for their future language learning. The Buddy Reading strategy used in this study aligns with social constructivism, where older students guide and support younger students to enhance their learning. This approach encourages collaborative learning, where more knowledgeable peers (in this case, tenth-grade students) help younger students (fifth-graders) to develop language skills and foster independence in their learning. The participants consisted of one group that was randomly assigned as the experimental group (by tossing a coin) and was taught using the Buddy Reading strategy, while the other group served as the control and was taught using the conventional method, with 20 students in each group. The participants are males who share the same learning materials, schedule, instructors, and tests. Each week, students participated in two sessions, with each session lasting 30 minutes. This resulted in a total of 16 sessions throughout the duration of the intervention. A pre-post test will be designed to measure the students' development in vocabulary.

Additionally, a group of tenth-grade students served as tutors, teaching, guiding, and assisting the fifth-grade tutees during the Buddy Reading sessions. These tutors were carefully selected from

the same school based on their academic performance to ensure they could effectively support the younger students in improving their vocabulary development.

Table 1. Demographic Information of Participants

Group	Number of Students	Age Range	Gender	English Proficiency Level	Selection Criteria
Experimental Group	20	10-11	Male	Intermediate	Purposeful selection based on consent, attendance, and willingness
Control Group	20	10-11	Male	Intermediate	Purposeful selection based on consent, attendance, and willingness
Tenth-Grade Tutors	20	15-16	Male	Advanced	Selected based on academic performance and proficiency in English

3.2. Data Collection Procedures

Vocabulary Development Test:

The Vocabulary Knowledge Scale (VKS) test was designed to assess fifth-grade students' vocabulary development (recognition, understanding, and usage). The pre- and post-tests were applied to both the experimental and control groups to determine whether there were statistically significant differences in vocabulary development that could be attributed to the Buddy Reading Strategy. The researcher developed a pre- and post-vocabulary test based on Nation's Vocabulary Knowledge Framework and adapted it according to the learners' levels and the vocabulary items taught during the intervention.

The test measures vocabulary development across four levels: no recognition, basic awareness, conceptual understanding, and advanced application. Each vocabulary item is evaluated by the teacher, who is also the researcher for the study, using a 4-point rubric based on the students' demonstrated knowledge and usage of the word. For levels 3 and 4, students are required to provide supporting evidence, such as a synonym (Level 3) or a sentence demonstrating contextual use (Level 4), which are then evaluated by the researcher using clear scoring guidelines.

The total number of words included in the test is 25, with a maximum possible score of 100. The grading scale is categorized as follows: 90–100 points indicate exceptional vocabulary mastery, 80–89 reflect strong vocabulary understanding, 70–79 suggest satisfactory vocabulary knowledge, 60–69 represent developing vocabulary skills, and scores below 60 require additional vocabulary support.

3.3. Validity and Reliability of Vocabulary Development Test

To verify the content validity of the Vocabulary Development Test, the test was presented to a group of arbitrators consisting of Jordanian university faculty members, educational supervisors, and teachers. They were asked to evaluate the study tools in terms of the linguistic validity of the items and their suitability for measuring the intended purpose. Their opinions, amendments, and

suggestions regarding the test items were taken into account concerning clarity, comprehensiveness, and suitability for students. The amendments suggested by the arbitrators were implemented by rewording some items and modifying some options, resulting in a final test consisting of 25 items. To extract construct validity, the construct validity of the Vocabulary Development Test was verified by applying it to a pilot sample of students outside the study population, consisting of 20 students. Correlation coefficients for each item with the test as a whole were extracted, as shown in Table 2.

Table 2. Item-Total Correlations for Vocabulary Development Test

No	Correlation coefficients	No	Correlation coefficients
1	**0.78	16	**0.67
2	*0.54	17	**0.69
3	**0.66	18	**0.76
4	**0.65	19	**0.68
5	*0.52	20	*0.52
6	**0.76	21	**0.65
7	**0.72	22	**0.63
8	**0.72	23	**0.73
9	**0.68	24	*0.58
10	*0.55	25	*0.56
11	**0.69		
12	**0.66		
13	*0.49		
14	**0.62		
15	**0.61		

**Statistically significant at the significance level ($\alpha \leq 0.01$).

*Statistically significant at the significance level ($\alpha \leq 0.05$).

It appears from Table 2 that the correlation coefficients between the paragraphs and the overall level ranged from 0.52 to 0.78, and all of them were statistically significant. Difficulty coefficients were extracted, and discrimination coefficients were calculated, which indicate the ability of the test and its items to distinguish between the upper group and the lower group of the characteristic measured by the test. Table 3 shows the difficulty and discrimination coefficients for the test items.

Table 3. Difficulty and Discrimination Coefficients for Vocabulary Development Test

No	Difficulty	Discrimination	No	Difficulty	Discrimination
1	0.500	0.67	16	0.455	0.50
2	0.318	0.83	17	0.455	0.33
3	0.455	0.50	18	0.364	0.67
4	0.545	0.67	19	0.500	0.83
5	0.500	0.83	20	0.409	0.67
6	0.409	0.50	21	0.455	0.50
7	0.455	0.67	22	0.318	0.67
8	0.500	0.50	23	0.409	0.67
9	0.364	0.50	24	0.500	0.67
10	0.409	0.83	25	0.409	0.67
11	0.455	0.83			
12	0.578	0.67			
13	0.364	0.67			
14	0.300	0.67			
15	0.455	0.33			

The Table indicates that the difficulty coefficient values for the test questions ranged from 0.300 to 0.578, which are deemed acceptable, with an ideal target around 50%. Additionally, the discrimination coefficient values ranged from 0.33 to 0.83, also falling within acceptable limits.

The reliability of the test for vocabulary development was verified by applying it to a survey sample of students from outside the study population and community. The researcher calculated the Kuder-Richardson 20 (KR-20) coefficient, where the reliability coefficient value reached 0.917, which is an acceptable value for the purposes of this study.

4. Results

Results Related to the Research Question:

The first question reads: Are there any statistically significant differences at $\alpha = 0.05$ in fifth-grade students' vocabulary development post-test that can be attributed to the instructional strategy (Buddy reading vs. conventional)? This question was answered by extracting the means and standard deviations for the participants in the experimental and control groups on the vocabulary development test and its sub-dimensions. Table 4 shows means, standard deviations, standard errors, and adjusted mean scores for the performance of the experimental and control groups before and after applying Buddy reading in the vocabulary development test and its sub-dimensions.

Table 4. Descriptive and Adjusted Means for Groups' Vocabulary Pre- and Post-Scores

Group	Teaching method	dimensions	Pre		Post		Adjusted Mean	Std. Error
			Mean	S. D	Mean	S. D		
experimental group	Buddy reading	No recognition	20.35	0.49	2.70	1.17	2.70	0.28
		Basic Awareness	6.05	1.88	35.05	1.64	35.05	0.40
		Conceptual Understanding	2.00	1.12	27.45	4.02	27.45	0.82
		Advanced Application	1.00	0.65	12.00	1.81	12.00	0.45
		vocabulary development	29.40	2.46	77.20	4.63	77.20	0.97
control group	conventional	No recognition	19.90	1.12	5.05	0.76	5.05	0.15
		Basic Awareness	5.65	2.03	32.00	2.64	32.00	0.65
		Conceptual Understanding	2.50	4.52	20.85	6.30	20.85	1.26
		Advanced Application	0.65	0.59	6.50	4.25	6.50	0.79
		vocabulary development	28.70	5.40	64.40	10.12	64.40	2.25

*Total possible points: 100 (25 words × 4 points maximum)

Recommended Grading Scale:(100-90Exceptional Vocabulary Mastery, 89-80Strong Vocabulary Understanding, 79-70Satisfactory Vocabulary Knowledge, 69-60Developing Vocabulary Skills, Below 60: Requires Additional Vocabulary Support

It is clear from Table (4), that there are apparent differences between the average scores of the study sample members on the dimensions of the vocabulary development test in the experimental and control groups, as the mean of the scores of the experimental group members on the test as a whole in the pre-test (29.40), and the mean of the experimental group in the post-test (77.20), and the mean of the scores of the control group members on the test as a whole in the pre-test (28.70), and the mean of the control group in the post-test (64.40).

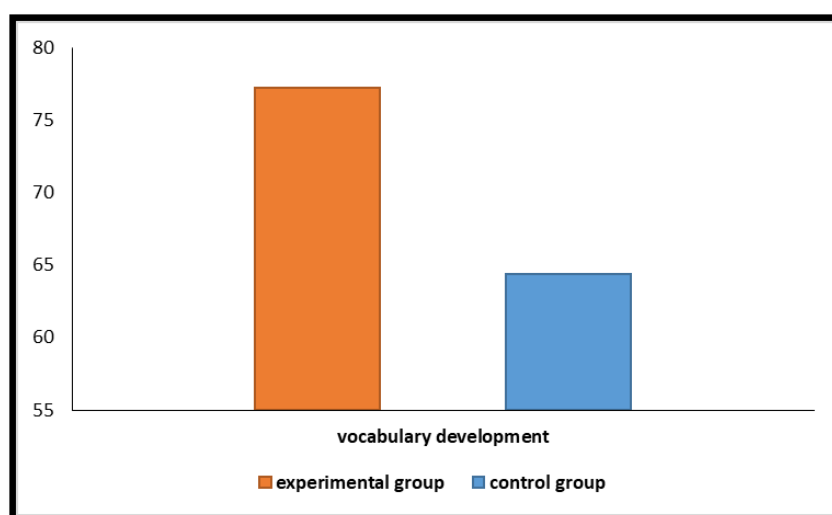
To reveal the significance of the differences between these averages, the analysis of covariance (ANCOVA) method was used on the post-mean scores of the study sample members on the vocabulary development test as a whole, considering the pre-scores as a common variable. Table 5 shows the results of this analysis.

Table 5. ANCOVA Results for Post-Test Vocabulary Development Scores

Source	Type I Sum of Squares	DF	Mean Square	F	Sig.	Partial Eta Squared
Teaching method	1638.400	1	1638.400	26.986*	0.000	0.422
pre	105.605	1	105.605	1.739	0.195	0.045
Error	2246.395	37	60.713			
Total	204496.000	40				
Corrected Total	3990.400	39				

*Statistically significant at the significance level ($\alpha=0.05$).

It is noted from Table 5 that the value of (F) related to the vocabulary development test as a whole reached (26.986), which is statistically significant at the significance level ($\alpha=0.05$), indicating the presence of statistically significant differences between the post-scores of the two groups. Upon reviewing the means, it became clear that the differences were in favor of the experimental group, as the post-means of the experimental group were higher than those of the control group, with the adjusted mean of the experimental group reaching 77.20, while the adjusted mean of the control group reached 64.40. To find the size of the effect of Buddy reading on vocabulary development as a whole, Eta square was calculated, and it reached 0.422, meaning that about 42.2% of the variance in the performance of the study sample individuals on post-vocabulary development is due to Buddy reading. Figure 1 shows the differences in the post-test between the experimental and control groups.

**Figure 1.** Post-Test Vocabulary Development Differences Between Groups

A multivariate analysis of covariance (MANCOVA) was also conducted on the post-means of the study sample members' scores on the dimensions of the post-vocabulary development test, considering the pre-scores as a covariate. Table 6 shows the results of this analysis.

Table 6. MANCOVA Results for Vocabulary Development Test Dimensions

Source	Dependent Variable	Type I Sum of Squares	DF	Mean Square	F	Sig.	Partial Eta Squared
Teaching method	No recognition	55.225	1	55.225	57.538*	0.000	0.629
	Basic Awareness	93.025	1	93.025	17.463*	0.000	0.339
	Conceptual Understanding	435.600	1	435.600	20.621*	0.000	0.378
	Advanced Application	302.500	1	302.500	33.068*	0.000	0.493
pre	No recognition	1.829	1	1.829	1.905	0.177	0.053
	Basic Awareness	0.546	1	0.546	0.103	0.751	0.003
	Conceptual Understanding	0.403	1	0.403	0.019	0.891	0.001
	Advanced Application	29.401	1	29.401	3.214	0.082	0.086
Error	No recognition	32.633	34	0.960			
	Basic Awareness	181.122	34	5.327			
	Conceptual Understanding	718.208	34	21.124			
	Advanced Application	311.030	34	9.148			
Total	No recognition	693.000	40				
	Basic Awareness	45233.000	40				
	Conceptual Understanding	24826.000	40				
	Advanced Application	4130.000	40				
Corrected Total	No recognition	92.375	39				
	Basic Awareness	275.975	39				
	Conceptual Understanding	1497.100	39				
	Advanced Application	707.500	39				

*Statistically significant at the significance level ($\alpha=0.05$).

Table 6 shows statistically significant differences in the sub-dimensions of the vocabulary development test, namely:

1. Dimension (No Recognition): The value of F (6.934) was statistically significant at the significance level $\alpha=0.05$, indicating that there was a decrease in the level of No Recognition in favor

of the experimental group. This decrease is desirable, as a lower level of No Recognition reflects improved vocabulary mastery. The adjusted mean for the experimental group was 2.70, while that of the control group was 4.10. The partial eta squared value was 5.05, meaning that the use of the Buddy Reading strategy explained approximately 18% of the variance between the two groups in the No Recognition dimension.

Figure 2 shows the differences in the post-test between the experimental and control groups.

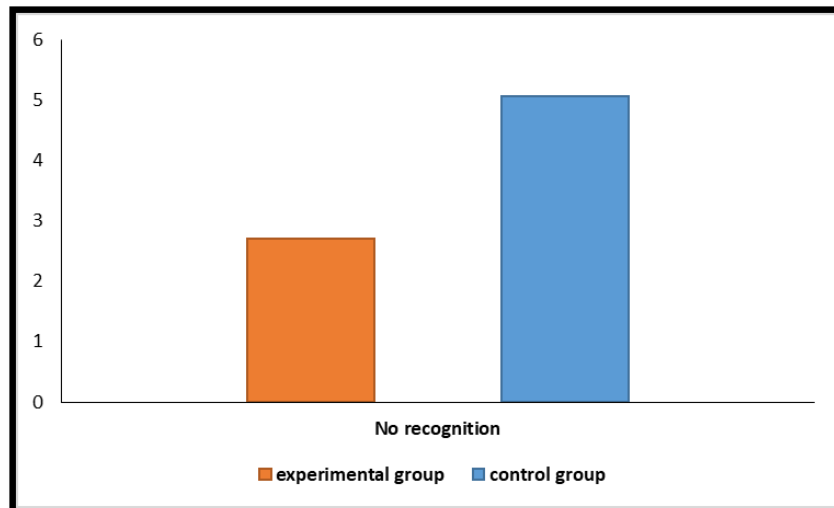


Figure 2. Post-Test Differences in “No Recognition” Scores Between Experimental and Control Groups

2. Dimension (Basic Awareness): The value of (F) (14.463) was statistically significant at the significance level ($\alpha=0.05$), meaning that there was an increase in the level of Basic Awareness in favor of the experimental group. The adjusted mean for the experimental group was 35.05, while the adjusted mean for the control group was 32.00. The partial eta squared value was 0.339, meaning that the use of Buddy reading in teaching explained 33.9% of the variance between the experimental and control groups in the scores on dimension Basic Awareness. Figure 3 shows the differences in the post-test between the experimental and control groups.

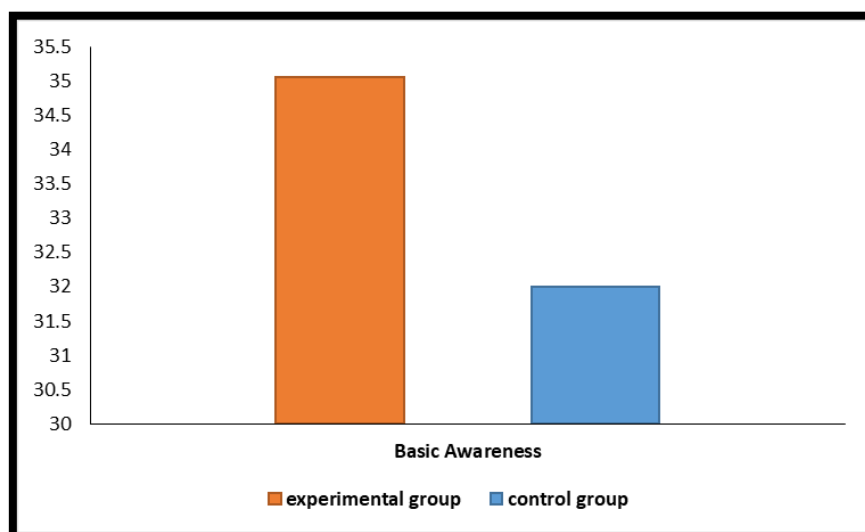


Figure 3. Differences in the Post-Test for (Basic Awareness) between the Two Groups

3. Dimension (Conceptual Understanding): The value of (F) 20.621 was statistically significant at the significance level ($\alpha=0.05$), meaning that there was an increase in the level of Conceptual Understanding in favor of the experimental group. The adjusted mean for the experimental group

was 27.45, while the adjusted mean for the control group was 20.85. The partial eta squared value was 0.378, meaning that the use of Buddy reading in teaching explained 37.8% of the variance between the experimental and control groups in the scores on dimension Conceptual Understanding. Figure 4 shows the differences in the post-test between the experimental and control groups.

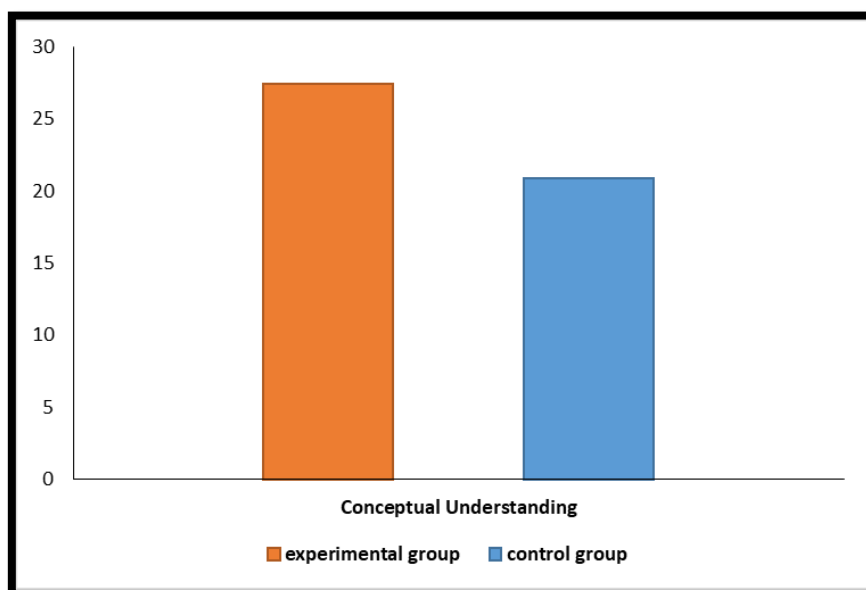


Figure 4. Differences in the Post-Test for (Conceptual Understanding) between the Two Groups

4. Dimension (Advanced Application): The value of (F) 33.068 was statistically significant at the significance level $\alpha=0.05$, meaning that there was an increase in the level of Advanced Application in favor of the experimental group. The adjusted mean for the experimental group was 12.00, while the adjusted mean for the control group was 6.50. The partial eta squared value was 0.493, meaning that the use of Buddy reading in teaching explained 49.3% of the variance between the experimental and control groups in the scores on dimension Advanced Application. Figure 5 shows the differences in the post-test between the experimental and control groups.

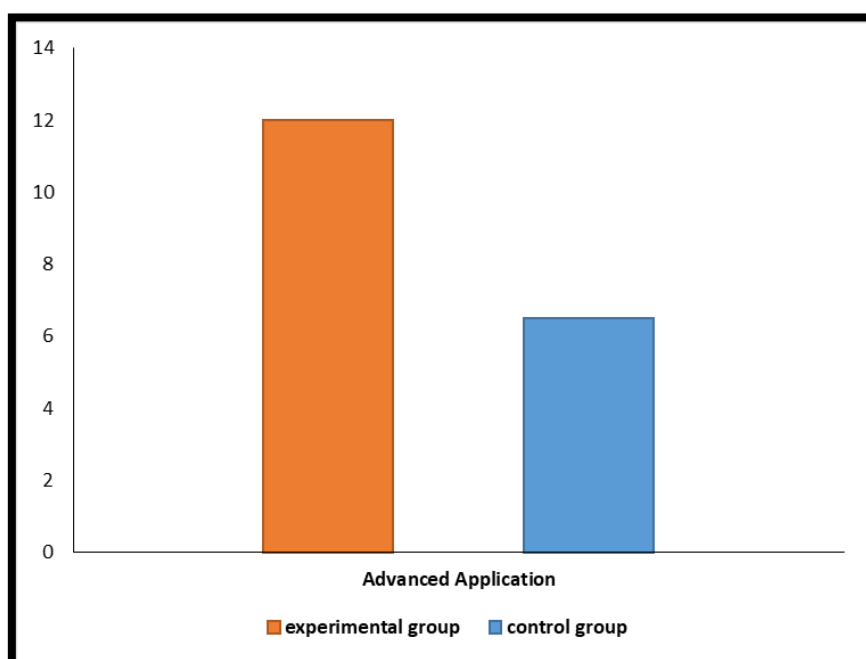


Figure 5. Differences in the Post-Test for (Advanced Application) between the Two Groups

5. Discussion

The purpose of this study was to investigate the effect of using the Buddy Reading instructional strategy on fifth-grade students' vocabulary development compared to conventional teaching methods. The findings reveal significant differences in vocabulary acquisition favoring the experimental group, indicating the effectiveness of the Buddy Reading strategy in enhancing vocabulary learning across all levels measured.

Based on the post-test results, the researcher noticed a clear improvement in the experimental group's vocabulary performance. After participating in Buddy Reading lessons, the experimental group showed notable gains in word recognition. Many of the previously unfamiliar words became recognizable and easier for students to understand and use. The improvement was particularly evident in vocabulary recognition, comprehension, and production. During post-test activities, the experimental group demonstrated a better ability to recall target words, use them appropriately in context, and even show confidence in using newly learned vocabulary in short dialogues or sentences. For example, students who previously could not know the meaning of certain words were now able to recognize, comprehend, and produce sentences using those words.

In contrast, the control group, which received traditional instruction, showed only slight progress. They continued to struggle with vocabulary comprehension and rarely used new words in productive tasks. These findings suggest that the Buddy Reading Strategy provided effective scaffolding and engagement that contributed to greater vocabulary development for the experimental group.

Several factors contributed to the effectiveness of the Buddy Reading Strategy in developing students' vocabulary. These factors are both instructional and contextual in nature, and they help create conditions that support language learning. The purposeful pairing of older and younger students, an essential feature of the Buddy Reading tutoring, enabled natural modeling of language and vocabulary usage. Older students often rephrased, explained, or elaborated on unfamiliar vocabulary, which promoted deeper understanding for younger students. Learning occurred interactively and in context, as vocabulary was encountered through shared reading and meaningful discussion rather than isolated drills. This context-rich exposure helped students attach meaning to new vocabulary and retain it more effectively.

The social and collaborative nature of Buddy Reading fostered a sense of engagement and responsibility in both tutors and tutees, making reading more enjoyable and reducing anxiety an important factor in facilitating vocabulary learning. Regular lessons provided consistent repetition and varied exposure to vocabulary, which is essential for long-term retention. The use of age-appropriate and thematically rich texts matched to students' developmental levels and interests further encouraged meaningful interaction with applicable vocabulary.

For example, each tutor demonstrated personal responsibility and accountability by spending time at home studying the vocabulary list so he could read with a tutee the following day. His preparedness enabled him to identify buzzwords during the reading session and help his partner decipher them. This, in turn, boosted his confidence and helped him score better on the test.

Further, collaborative sharing and exploration of ideas facilitated through discussion contribute to active learning, which is one of the key factors for deeper understanding. For example, after reading, two friends talked about the word "fever." One said it means "when your body is very hot," and the other said it means "you might feel tired and need to rest." This talk helped them understand what fever is and how to use the word.

The Buddy Reading Strategy, particularly through a strong emphasis on scaffolding, was crucial. Guided support from older peers, under teacher supervision, plays a central role in prompting,

questioning, and summarizing during reading lessons practices that align with Vygotsky's Zone of Proximal Development. Tasks such as discussions, vocabulary games, and reflection further reinforce newly learned words. Additionally, vocabulary journals, word maps, and structured prompts help students deliberately focus on and apply new vocabulary in context.

The researcher presents examples of scaffolding in a lesson plan to demonstrate how vocabulary development is supported throughout the different stages of the Buddy Reading Strategy.

In the Pre-Reading Stage, the tutor introduces the vocabulary words like fever, headache, flu, and cough using pictures, which allows students to relate the words to their meanings. The tutor facilitates guided questioning like "What's wrong with him/her?" and "What illness may the child have?" to involve students in active thinking and use of the new vocabulary words. During the While-Reading Phase, the tutor reads the new words to the tutee and correctly pronounces them and asks the tutee to repeat them. This scaffolding allows tutees to pronounce and understand new words in context. Feedback through happy and sad face cards reinforces correct use of the words and encourages self-correction. At the Post-Reading Stage, vocabulary expansion is enhanced through the process of asking students to use new words in sentences. Role-play activities, such as acting out a doctor-patient dialogue using the learned words, allow tutees to use vocabulary meaningfully.

For example: Tutor (doctor): "What's wrong?"

Tutee (patient) : "I have got a headache ."

Tutor (Doctor): "You should rest and take some medicine ."

Additionally, quizzes and worksheets reinforce the meanings of words and their application, while homework encourage further practice. Reflection questions such as "What did you learn today?" help students to relate the vocabulary to their real-life situations.

Additional instructional design elements also contributed to the effectiveness of the Buddy Reading Strategy in supporting students' vocabulary development. Tutors received ongoing training and engaged in reflective activities, which helped them improve their communication techniques and vocabulary teaching strategies. The integration of visual aids, such as flashcard and illustrations, assisted students in connecting new vocabulary to concrete meanings. Furthermore, the use of formative assessments, including vocabulary checklists, allowed teachers to monitor students' progress more effectively and adapt instruction based on individual learning needs. These elements provided further scaffolding leading to more meaningful vocabulary learning.

6. Conclusion

The findings from both ANCOVA and MANCOVA analyses strongly suggest that Buddy Reading is an effective instructional strategy for vocabulary development. It significantly outperforms conventional teaching, particularly in helping students recognize, understand, and apply new vocabulary. Teachers are encouraged to incorporate the Buddy Reading strategy into their instructional practices to enhance vocabulary growth, especially for students at early stages of language acquisition. Future research might explore the long-term effects of Buddy Reading, its impact on other language skills, and how it benefits different learner profiles.

7. Suggestion

Based on the results of this study, it is suggested that future research further explore the effectiveness of the Buddy Reading strategy in different educational stages and among various student populations. Since the findings demonstrated a significant improvement in vocabulary development among fifth-grade students, similar studies could be conducted in lower and higher grade levels to determine whether the strategy is equally effective across age groups. Additionally,

applying the Buddy Reading strategy in diverse educational settings, such as urban and rural schools, public and private institutions, and among English language learners, could provide valuable insights into its broader applicability and effectiveness.

Declarations

Author Contributions. The authors solely conducted all aspects of this study, including the design, data collection, analysis, interpretation of results, and writing of the final manuscript. This research represents the authors' original and independent work.

Conflicts of Interest. The authors declare that there are no conflicts of interest related to the content or findings of this study.

Funding. This research did not receive any specific grant or financial support from funding agencies in the public, commercial, or not-for-profit sectors.

Ethical Approval. All procedures performed in this study involving human participants were conducted in accordance with institutional and ethical research standards. IRB (XXXX) was obtained. Necessary permissions were obtained from the relevant educational authorities, and participants' rights to privacy and confidentiality were strictly maintained.

Data Availability Statement. The data supporting the findings of this study are not publicly available due to concerns about participant confidentiality and privacy. However, the data may be made available from the corresponding author upon reasonable request, subject to institutional and ethical guidelines.

Acknowledgment. The authors would like to express sincere gratitude to the school administration, teachers, students, and all those who contributed to facilitating the implementation of this study.

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