

EVALUATING THE DICTOGLOSS TECHNIQUE FOR VOCABULARY MASTERY AMONG LOW-PROFICIENCY EFL LEARNERS

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Abstract

This experimental quantitative research aimed to assess the effectiveness of the Dictogloss technique in improving vocabulary mastery among eighth-grade students at MTs. Al-Khairaat Pandere. Using a one-group pre-test and post-test design, the study involved 30 students who participated in a pre-test, followed by six sessions utilizing the Dictogloss technique, and concluded with a post-test. Data analysis was conducted using statistical methods, including the calculation of mean scores, deviations, and t-test analysis. The results showed a significant improvement in students' vocabulary mastery, with the mean score of the pre-test being 23.53 and the post-test rising to 45.13. The t-test revealed a t-counted value of 8.75, which was significantly higher than the t-table value of 2.045, confirming that the Dictogloss technique was effective in enhancing vocabulary mastery. Based on these findings, it can be concluded that the Dictogloss technique significantly improved the vocabulary mastery of the students at MTs. Al-Khairaat Pandere.

Keywords: Dictogloss technique, vocabulary mastery, junior high school students.

BACKGROUND

Vocabulary mastery constitutes the foundational pillar of language acquisition and communicative competence. In the context of English as a Foreign Language (EFL), possessing a rich and varied vocabulary is a prerequisite for learners to comprehend texts, construct written discourse, and engage in meaningful oral communication (Nation, 2001). While grammatical knowledge dictates how words are structured, it is vocabulary that carries the core meaning of any message. However, mastering and retaining new vocabulary remains one of the most formidable challenges for EFL learners (Schmitt, 2008). Insufficient vocabulary not only impedes students' receptive and productive language skills but also severely undermines their motivation and confidence in language learning.

These challenges are highly prevalent in the Indonesian EFL context,

particularly at MTs. Al-Khairaat Pandere. Preliminary observations revealed that eighth-grade students struggle significantly with vocabulary retention and application. This deficiency is largely rooted in traditional, teacher-centered instructional methods. Vocabulary is predominantly taught through rote memorization of decontextualized word lists, leaving students as passive recipients. Furthermore, the lack of interactive learning media and the absence of opportunities to negotiate meaning collaboratively result in a monotonous classroom environment. Consequently, students fail to internalize the vocabulary and are unable to retrieve or apply the words in real-life communicative contexts. To address this pedagogical stagnation, an innovative, interactive, and context-rich instructional technique is urgently required.

One highly promising approach is the Dictogloss technique. Originally designed as a grammar-dictation activity, Dictogloss is a collaborative learning technique where the teacher reads a short text at a normal speed, students take fragmentary notes of key content words, and then work in small groups to reconstruct the text as closely as possible to the original meaning (Jacobs & Small, 2003). This technique shifts the learning paradigm from passive listening to active negotiation of meaning. By forcing students to pool their linguistic resources, Dictogloss creates what Bjork and Kroll (2015) term as desirable difficulties, a cognitive struggle that ultimately leads to deeper processing and more robust long-term memory retention.

Several previous studies have demonstrated the efficacy of the Dictogloss technique in language learning. For instance, Vasiljevic (2010) highlighted its success as an interactive method for teaching listening comprehension, while Wulandari (2019) empirically proved its effectiveness in improving general vocabulary mastery. However, a critical research gap remains in the current literature. The majority of existing studies on Dictogloss have heavily focused on its impact on listening comprehension (Elahifar et al., 2022; Nurdia et al., 2024; Rezaei, 2019) or writing coherence (Al-Obaydi & Al-Mosawi, 2018; Alshireedi & Khairuddin, 2025; Azmoon, 2021; Hassan, 2023), often targeting university students or advanced adult learners. There is a paucity of empirical research investigating the specific impact of Dictogloss on the vocabulary mastery of young, low-proficiency EFL learners, such as junior high school students, within highly under-resourced educational settings. It remains under-explored whether the cognitive demands of reconstructing texts collaboratively are effective for eighth graders who possess extremely limited foundational vocabulary.

To bridge this empirical and pedagogical gap, this research is conducted

to apply the Dictogloss technique in a specific, under-researched demographic. Therefore, this study is guided by the following Research Question (RQ): "*Does the implementation of the Dictogloss technique significantly improve the vocabulary mastery of eighth-grade students at MTs. Al-Khairaat Pandere?*"

LITERATURE REVIEW

The Concept of Vocabulary Mastery in EFL

Vocabulary is widely acknowledged as the central prerequisite for language acquisition. While grammatical rules provide the structural framework of a language, vocabulary provides the essential building blocks for conveying meaning. According to Thornbury (2002), without grammar, very little can be conveyed, but without vocabulary, nothing can be conveyed. In the context of English as a Foreign Language (EFL), vocabulary mastery encompasses not merely the superficial memorization of word translations, but a deep cognitive understanding of a word's form, meaning, and contextual usage (Nation, 2001).

Despite its critical importance, vocabulary remains a highly problematic area for EFL learners. Schmitt (2008) argues that instructed second language vocabulary learning often fails because it heavily relies on decontextualized rote memorization. When students are only exposed to isolated word lists, they are deprived of the contextual clues necessary to understand how words function in natural discourse (Harmer, 2001). Consequently, interactive and meaning-focused pedagogical interventions are required to shift vocabulary instruction from passive reception to active production (Richards & Renandya, 2002).

The Dictogloss Technique

Dictogloss is an interactive and collaborative language learning technique

originally designed to integrate listening, speaking, reading, and writing skills. Unlike traditional dictation where the teacher reads slowly and students transcribe exactly what they hear word-for-word, Dictogloss involves a more complex cognitive process. As outlined by Jacobs and Small (2003), the procedure typically consists of four stages: (1) Preparation, where the teacher introduces the topic and pre-teaches difficult vocabulary; (2) Dictation, where the teacher reads a short text at a normal conversational speed while students take fragmentary notes of key content words; (3) Reconstruction, where students work in small collaborative groups to pool their notes and reconstruct their own version of the text; and (4) Analysis and Correction, where students compare their reconstructed texts with the original one to identify linguistic errors.

Vasiljevic (2010) highlights that Dictogloss serves as a highly interactive method that transforms passive listening into an active process of meaning negotiation. By requiring students to reconstruct the text, the technique forces them to apply their existing grammatical and lexical knowledge to fill in the missing gaps from their notes.

Theoretical Framework: Cognitive and Collaborative Benefits

The efficacy of the Dictogloss technique in enhancing vocabulary mastery can be explained through cognitive psychology and socio-cultural learning theories. From a cognitive perspective, the challenge of retrieving words from memory and reconstructing a text creates what Bjork and Kroll (2015) term as desirable difficulties. This concept suggests that when learners engage in cognitively demanding tasks, such as struggling to recall a specific vocabulary word to complete a sentence, it creates stronger and more durable neural connections in the brain, leading to better long-term retention compared to easy, passive reading.

From a collaborative standpoint, Dictogloss heavily promotes peer

scaffolding. Jacobs and Small (2003) assert that combining Dictogloss with cooperative learning effectively reduces the anxiety typically associated with foreign language production. During the reconstruction phase, students negotiate meaning, correct each other's lexical choices, and learn new vocabulary from their peers in a supportive, low-affective-filter environment. Previous empirical research, such as the study conducted by Wulandari (2019), confirms that this collaborative text reconstruction significantly improves students' vocabulary mastery by embedding new words within a meaningful, negotiated context.

METHOD OF THE RESEARCH

Research Design

This study employed a pre-experimental quantitative research design, specifically utilizing a one-group pre-test and post-test design. This approach was selected to measure the causal impact of the independent variable (the Dictogloss technique) on the dependent variable (students' vocabulary mastery) by comparing their baseline performance before the intervention with their performance after the intervention.

Participants

The research was conducted at MTs. Al-Khairaat Pandere. The population comprised the eighth-grade students at the school. Employing a total sampling technique, 30 students were selected to participate in this study. This specific demographic was chosen based on preliminary observations indicating their low foundational vocabulary and the urgent need for interactive instructional intervention.

Data Collection Procedure

The data collection process was systematically divided into three main phases. First, a pre-test was administered

prior to any treatment to assess the students' initial vocabulary mastery and establish a baseline score. Second, the treatment phase was conducted over six instructional sessions. During these sessions, the students were taught using the Dictogloss technique, which involved listening to short texts, taking fragmentary notes, and working collaboratively in small groups to reconstruct the original meaning of the texts. Finally, a post-test, identical in format and difficulty to the pre-test, was administered to measure the vocabulary gains achieved following the six-session intervention.

Data Analysis

The data obtained from both the pre-test and post-test were analyzed quantitatively. Initially, the students' raw scores (correct answers) were computed and converted into standard scores on a 0–100 scale to ensure comparability. Descriptive statistics were then applied to calculate the mean scores and the mean deviation between the two tests. To determine whether the improvement in vocabulary mastery was statistically significant, inferential statistics were employed. Specifically, a paired-sample t-test was conducted to compare the pre-test and post-test mean scores. The resulting t-counted value was evaluated against the critical t-table value at a 0.05 level of significance with 29 degrees of freedom ($df=N-1$) to test the formulated hypothesis.

FINDING AND DISCUSSION

Findings

This chapter presents the statistical analysis of the data collected from the pre-test and post-test. The data are analyzed to determine the effectiveness of the Dictogloss technique in improving students' vocabulary mastery. To ensure clarity and comparability, all raw scores (correct items) obtained by the students were converted into standard scores (on a scale of 100).

Findings

The research results were divided into pre-test result and post-test result, both have different presentations in each test. The explanation of the two tests is discussed below.

Pre-Test Results

The pre-test was administered on September 24, 2024, to the 30 eighth-grade students of MTs. Al-Khairaat Pandere. Based on the test calculation (refer to Table 1), the highest standard score was 38, and the lowest was 6.

Table 1. Students' Pre-Test Standard Scores

No	Student Initial	Standard Score
1	ARH	34
2	AA	24
3	AAI	28
4	AAA	20
5	AF	36
6	AA	32
7	APA	24
8	DRT	38
9	FBG	20
10	FI	18
11	FA	22
12	FN	14
13	GA	12
14	HAM	26
15	HT	12
16	MN	16
17	ML	12
18	MFN	26
19	NA	28
20	NDI	26
21	RFZA	36
22	RDE	6
23	RPA	20
24	RHT	22
25	SSA	32
26	SA	18
27	SA	36
28	SN	22
29	VJ	22
30	WN	24
Total		$\Sigma X = 706$

The pre-test was administered on to the 30 eighth-grade students of MTs. Al-Khairaat Pandere. Based on the test, the highest standard score was 38, and the lowest was 6. The accumulated standard score for all 30

students was 706. The mean score for the pre-test was calculated as follows:

$$M = \frac{\Sigma X}{N} = \frac{706}{30} = 23.53$$

The pre-test mean score of 23.53 indicates that the students' baseline vocabulary mastery was generally low prior to the intervention.

Post-Test Results

Following the implementation of the Dictogloss technique, the post-test was administered on October 12, 2024. The results (refer to Table 2) showed a marked improvement. The highest standard score achieved was 88, and the lowest was 26.

Table 2. Students' Post-Test Standard Scores

No	Student Initial	Standard Score
1	ARH	68
2	AA	32
3	AAI	72
4	AAA	32
5	AF	80
6	AA	34
7	APA	84
8	DRT	76
9	FBG	32
10	FI	36
11	FA	54
12	FN	56
13	GA	58
14	HAM	58
15	HT	26
16	MN	44
17	ML	60
18	MFN	68
19	NA	36
20	NDI	58
21	RFZA	44
22	RDE	58
23	RPA	32
24	RHT	40
25	SSA	88
26	SA	34
27	SA	46
28	SN	38
29	VJ	38
30	WN	34
Total		$\Sigma X = 1354$

The accumulated standard score for the post-test was 1,354. The mean score for the post-test was calculated as follows:

$$M = \frac{\Sigma X}{N} = \frac{1354}{30} = 45.13$$

Comparing the pre-test mean (23.53) to the post-test mean (45.13) reveals a substantial increase, indicating a positive impact of the treatment on students' vocabulary mastery.

Data Analysis

To determine whether the improvement from the pre-test to the post-test was statistically significant, a paired-sample t-test was conducted. The calculation was based on the students' standard scores (Y_1 for pre-test and Y_2 for post-test). The deviation (d) and the square of the deviation (d^2) are presented in Table 3 below.

Table 3. The Result of Deviation between Pre-Test and Post-Test Standard Scores

No	Initial	Pre-test (Y1)	Post-Test (Y2)	Deviation (d) (Y2-Y1)	Square Deviation (d ²)
1	ARH	34	68	34	1156
2	AA	24	32	8	64
3	AAI	28	72	44	1936
4	AAA	20	32	12	144
5	AF	36	80	44	1936
6	AA	32	34	2	4
7	APA	24	84	60	3600
8	DRT	38	76	38	1444
9	FBG	20	32	12	144
10	FI	18	36	18	324
11	FA	22	54	32	1024
12	FN	14	56	42	1764
13	GA	12	58	46	2116
14	HAM	26	58	32	1024
15	HT	12	26	14	196
16	MN	16	44	28	784
17	ML	12	60	48	2304
18	MFN	26	68	42	1764
19	NA	28	36	8	64
20	NDI	26	58	32	1024
21	RFZA	36	44	8	64
22	RDE	6	58	52	2704
23	RPA	20	32	12	144
24	RHT	22	40	18	324
25	SSA	32	88	56	3136
26	SA	18	34	16	256
27	SA	36	46	10	100
28	SN	22	38	16	256
29	VJ	22	38	16	256
30	WN	24	34	10	100
Total		ΣY_1 = 706	ΣY_2 = 1354	Σd = 810	Σd^2 = 30144

Based on the table, the mean deviation (Md) is calculated as follows:

$$Md = \frac{\Sigma d}{N} = \frac{810}{30} = 27$$

Next, the sum of the squared deviation ($\Sigma x^2 d$) is computed:

$$\Sigma x^2 d = \Sigma d^2 - \frac{(\Sigma d)^2}{N}$$

$$\Sigma x^2 d = 30144 - \frac{(810)^2}{30}$$

$$\Sigma x^2 d = 30144 - \frac{656100}{30}$$

$$\Sigma x^2 d = 30144 - 21870 = 8274$$

Finally, the t-counted value is determined using the statistical t-test formula:

$$t = \frac{Md}{\sqrt{\frac{\Sigma x^2 d}{N(N-1)}}}$$

$$t = \frac{27}{\sqrt{\frac{8274}{30(29)}}}$$

$$t = \frac{27}{\sqrt{\frac{8274}{870}}}$$

$$t = \frac{27}{\sqrt{9.51}}$$

$$t = \frac{27}{3.084}$$

$$t - \text{counted} = 8.75$$

Discussion

The statistical analysis reveals that the t-counted value (8.75) is significantly higher than the t-table value (2.045) at a 0.05 level of significance. This empirical evidence firmly demonstrates that the use of the Dictogloss technique yielded a highly

significant improvement in the vocabulary mastery of eighth-grade students at MTs. Al-Khairaat Pandere.

The success of this intervention can be explained through several theoretical frameworks. First, Dictogloss shifts the vocabulary learning paradigm from passive memorization to active, meaning-focused negotiation. As Nation (2001) emphasizes, vocabulary is best acquired when learners encounter and use words within a rich, meaningful context rather than in isolated lists. During the Dictogloss procedure, students are compelled to actively listen, take notes, and collaboratively reconstruct the text. This interactive process aligns with Jacobs and Small (2003) and Vasiljevic (2010), who assert that combining dictation with cooperative learning effectively lowers students' anxiety and promotes peer-scaffolding, allowing learners to pool their linguistic resources to retrieve and reconstruct target vocabulary.

From a cognitive psychology perspective, the effectiveness of Dictogloss in this study perfectly illustrates the concept of "desirable difficulties" proposed by Bjork and Kroll (2015). The technique is inherently challenging; it forces students to strain their memory to recall words and grammatically reconstruct sentences based on fragmentary notes. This cognitive struggle creates a deeper, more robust memory trace compared to passive reading, leading to better long-term vocabulary retention. The positive outcome of this cognitive engagement strongly corroborates the empirical findings of Wulandari (2019), who also reported that the Dictogloss technique significantly enhanced students' vocabulary mastery through collaborative reconstruction.

However, a critical examination of the data reveals a nuanced reality. While the statistical improvement is undeniable (a nearly 100% increase from the pre-test), the absolute post-test mean score remains at 45.13 out of 100. This indicates that, despite the significant gains, the students' overall

vocabulary mastery has not yet reached a standard level of proficiency. This phenomenon presents a crucial counter-narrative: while the "desirable difficulty" of Dictogloss (Bjork & Kroll, 2015) triggers cognitive engagement, it may also lead to cognitive overload for learners with severely limited foundational vocabulary. When the baseline vocabulary is too low (as evidenced by the pre-test mean of 23.53), the gap between the students' prior knowledge and the linguistic demands of reconstructing a text might be too wide for peer collaboration alone to bridge completely.

In conclusion, the findings suggest that while Dictogloss is a powerful, theoretically sound, and empirically proven technique for driving vocabulary growth (Vasiljevic, 2010; Wulandari, 2019), it is not a standalone magic bullet. For low-proficiency EFL learners, Dictogloss should ideally be supplemented with explicit, targeted vocabulary pre-teaching to ensure that the cognitive load remains manageable and the difficulties remain truly desirable.

CONCLUSION AND SUGGESTION

Conclusion

Based on the statistical analysis and the theoretical discussion, this study concludes that the implementation of the Dictogloss technique significantly improves the vocabulary mastery of eighth-grade students at MTs. Al-Khairaat Pandere. The empirical data demonstrated a substantial increase in students' performance, with the t-counted value (8.75) significantly exceeding the t-table critical value (2.045), which strictly confirms the acceptance of the alternative hypothesis. The technique effectively transforms passive vocabulary memorization into an active, collaborative, and meaning-focused learning experience.

However, the study also concludes a critical pedagogical caveat: while the Dictogloss technique is highly effective in stimulating vocabulary growth through

cognitive engagement and peer scaffolding, it may not be a sufficient standalone solution for learners with a very low baseline proficiency. Given that the final post-test mean score (45.13) remained below the standard mastery threshold, the technique should ideally be strategically combined with explicit vocabulary pre-teaching. This combined approach is necessary to manage the students' cognitive load, prevent overwhelming difficulties, and ultimately maximize long-term vocabulary retention.

Suggestion

Based on the empirical findings and the pedagogical implications discussed, the following recommendations are proposed:

1. For English Teachers: While the Dictogloss technique is highly recommended for fostering collaborative vocabulary building, it should be implemented strategically, particularly for low-proficiency learners. Teachers are strongly advised to incorporate explicit vocabulary pre-teaching or scaffolding sessions prior to the dictation phase. Equipping students with foundational keywords beforehand will reduce cognitive overload and maximize the effectiveness of the text reconstruction process. Additionally, teachers should explore various text genres and vocabulary sets tailored to the students' specific proficiency levels.
2. For Students: Learners are encouraged to maximize their active participation during the collaborative reconstruction phase of the Dictogloss technique. Actively engaging in peer discussions, pooling linguistic resources, and practicing focused listening will significantly aid in internalizing new vocabulary and transferring it into active language use.
3. For Future Researchers: Future studies are encouraged to investigate the long-term retention of vocabulary acquired through the Dictogloss technique. Furthermore, researchers could explore a

comparative experimental design that contrasts the standalone Dictogloss method with a blended approach (Dictogloss paired with explicit vocabulary pre-teaching) across different demographic groups and proficiency levels to determine its most optimal pedagogical application. Future research could also expand the scope to assess the technique's impact on other integrated skills, such as grammar accuracy and writing coherence.

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