

AUDIO-RECORDING PRACTICE TO IMPROVE VOCABULARY RECOGNITION IN RECOUNT-TEXT LISTENING AMONG GRADE X STUDENTS

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Abstract

Listening comprehension is widely regarded as one of the most essential skills in English language learning, yet many EFL students still face significant difficulties due to limited vocabulary knowledge. This study aims to investigate the effectiveness of using audio recordings as a strategic pedagogical tool to enhance listening comprehension and vocabulary recognition among Grade X students. The research employed a one-group pretest–posttest design involving systematic pre-test, treatment, and post-test stages. The intervention was conducted over three sessions, utilizing authentic pre-recorded audio materials with native-speaker accents, each lasting approximately 2 to 4 minutes. The assessment utilized specialized fill-in-the-blank listening tasks based on recount texts to measure student progress accurately. The participants consisted of 33 students from Class X who participated in the intervention sessions. The findings revealed a significant improvement in students' listening comprehension and vocabulary recognition, as evidenced by the substantial increase in the mean score from 63.94 in the pre-test to 80.61 in the post-test, representing an overall gain of 26.1%. Furthermore, the percentage of students achieving the Minimum Mastery Criterion (KKM = 75) rose dramatically from 42.4% to 81.8%. The results indicate that audio-recording-based instruction effectively enhances phonetic recognition and fosters academic motivation. Therefore, integrating authentic audio recordings into EFL instruction provides a practical, efficient, and replicable method to improve students' vocabulary recognition in modern classrooms.

Keywords: Audio recordings, EFL learners, listening comprehension, recount texts, vocabulary recognition.

1. INTRODUCTION

Listening comprehension is widely recognized as one of the most fundamental skills in English language learning, serving as the cornerstone for effective communication. As a receptive skill, listening allows learners to interpret spoken messages and construct meaning from auditory input in real-time. This process is cognitively demanding, especially for English as a Foreign Language (EFL) learners who must decode phonetic sounds while simultaneously retrieving lexical meanings. In Indonesia, listening often presents substantial challenges due to restricted interaction with native speakers and limited vocabulary knowledge. Vandergrift and Goh (2023) emphasize that vocabulary competence is critical for listening success, as comprehension depends heavily on the ability to link sounds to known words.

At the senior high school level, specifically for Grade X students, the mastery of listening is often hindered by inadequate lexical resources. At SMA Taman Siswa Pematangsiantar, many students struggle to follow the flow of speech when they encounter unfamiliar terms, leading to fragmented understanding and listening anxiety. This issue is compounded by the use of conventional materials that lack the natural prosody, stress patterns, and rhythm of real spoken English. While textbook-based

exercises are common, they often fail to prepare students for the complexities of real-world auditory input. Therefore, there is a pressing need for instructional tools that provide repetitive and controlled exposure to authentic language.

The integration of audio recordings offers a practical solution to these linguistic barriers. Unlike video materials, pure audio recordings force learners to focus entirely on auditory cues, fostering better phonetic recognition and word segmentation skills. Through audio-based instruction, students can engage in self-paced learning, replaying challenging segments to infer meanings from contextual cues. Brown and Lee (2024) note that such repeated exposure facilitates vocabulary acquisition and enhances learners' ability to process narrative texts. This strategy is particularly relevant for mastering recount texts, a genre that requires students to understand sequences of events and past-tense vocabulary as mandated by the Indonesian English curriculum.

Despite the abundance of research on multimedia in language learning, a notable gap exists regarding the exclusive use of audio-only materials for addressing vocabulary recognition in recount texts. Previous studies have heavily favored video-assisted learning, which often provides visual support that allows students to bypass the actual listening process. While general listening strategies have been widely researched, there is a lack of empirical evidence focusing specifically on how standalone audio recordings impact vocabulary recognition in recount texts among secondary students in Pematangsiantar. Most existing research tends to group listening with other skills, leaving the specific relationship between audio-only input and lexical development in recount texts under-explored.

This study aims to fill this gap by investigating the effectiveness of audio recordings in enhancing listening comprehension among Grade X students at SMA Taman Siswa Pematangsiantar. By providing a specific contribution to the use of audio-only practice for recount texts, this research seeks to address the following research questions: Does the use of audio recordings improve listening comprehension scores based on recount texts? How much has the proportion of students who achieve a minimum passing grade of 75 increased?

2. METHODS

This study employed a descriptive quantitative research design to evaluate the effectiveness of audio recordings in enhancing listening comprehension and vocabulary recognition. A descriptive quantitative approach was selected as it allows for the systematic measurement of students' progress and the presentation of findings through numerical data. According to Creswell (2018), this design is appropriate for describing a phenomenon or a specific ability using measurable statistical results. The research was conducted through a structured process involving a pre-test, treatment, and post-test to capture the improvement in students' linguistic performance.

2.1 Participants

The population of this research consisted of all Grade X students at SMA Taman Siswa Pematangsiantar for the 2025/2026 academic year. A purposive sampling technique was utilized to select the sample, based on the specific instructional needs identified during preliminary observations (Sugiyono, 2019). The sample included 33 students from Class X Merdeka 6. This group was specifically chosen due to their

identified challenges in listening proficiency and limited English vocabulary recognition, which hindered their ability to comprehend spoken English texts effectively.

2.2 Instruments

The primary research instrument was a specialized fill-in-the-blank listening test. The test was designed to measure both listening comprehension and vocabulary recognition by requiring students to identify and transcribe missing words from a spoken discourse. The content was based on recount texts, a genre central to the Grade X English curriculum, adapted to ensure linguistic relevance. The test consisted of 10 items, where each correct response was awarded 10 points and incorrect responses received 0, totaling a maximum possible score of 100. This instrument provided objective and quantifiable data for statistical analysis.

2.3 Data Collection

Data collection was executed in three distinct stages:

- a. Pre-test: A pre-test was administered to establish the students' baseline listening ability and initial vocabulary recognition levels.
- b. Treatment Phase: The intervention was conducted over three sessions, each lasting 45 minutes. The sessions took place in a controlled classroom environment at SMA Taman Siswa, ensuring minimal external noise. The audio was played using a laptop connected to high-quality external speakers to maintain acoustic clarity. The treatment utilized authentic pre-recorded audio materials with native-speaker accents. Each session involved the following structured student activities:
 - 1) Prediction: Students predicted keywords based on the title of the recount text.
 - 2) Dictation & Checking: The audio was played three times. Students listened for the general gist during the first play, followed by two repetitions for decoding specific sounds and word boundaries through partial dictation.
 - 3) Vocabulary Logs: Students maintained logs to record and infer the meanings of new terms found in the recount texts.
 - 4) Strategy Reflection: Students reflected on their listening difficulties at the end of each session.
 - 5) Controls: To ensure validity, no transcripts or written texts were provided during the listening process, and teacher assistance was limited to technical guidance.
- c. Post-test: An identical post-test was conducted to assess the extent of improvement in students' vocabulary recognition and comprehension skills following the intervention.

2.4 Data Analysis

The collected data were analyzed using descriptive quantitative statistics. To determine individual student progress, each score was calculated using the formula adapted from Arikunto (2018):

- *Individual Score* :

$$S = \frac{R}{N} \times 100$$

Where:

- S = Student's score
- R = Number of correct answers
- N = Total number of test items

The overall classroom performance was determined by calculating the Mean Score (\bar{X}) of both the pre-test and post-test using the following formula:

Mean s

- *Mean Score :*

$$\bar{X} = \frac{\sum X}{N}$$

Where:

- \bar{X} = Mean score
- $\sum X$ = Total sum of students' scores
- N = Total number of students

To measure the effectiveness of the audio-based instruction, the percentage of improvement (P) was calculated:

- *Percentage of Improvement :*

$$P = \frac{\bar{X}_{post} - \bar{X}_{pre}}{\bar{X}_{pre}} \times 100\%$$

Additionally, the percentage of students achieving the Minimum Mastery Criterion (KKM = 75) was calculated to evaluate the instructional success rate. All analyzed data were subsequently organized into tables and charts for a clear comparative discussion of the findings

3. RESULTS

This section presents the empirical findings regarding the improvement of students' listening comprehension and vocabulary mastery. The data includes a comparison of test scores and qualitative perspectives from the participants.

3.1 Comparison of Pre-Test and Post-Test Results

The data indicates a substantial improvement in students' linguistic performance following the instructional treatment. Table 1 summarizes the collective progress of the participants.

Table 1. Comparison of Pre-Test and Post-Test Results

No.	Test Type	Total Score	Mean Score	Students ≥ 75	Percentage
1.	Pre Test	2110	63.94	14	42.4%
2.	Post Test	2660	80.61	27	81.8%

Based on Table 1, the mean score improved from 63.94 to 80.61, representing a net gain of 26.1%. The mastery rate referring to students meeting the Minimum Criterion increased significantly from 42.4% to 81.8%.

3.1.1 Individual Student Achievement

The individual score distribution in Table 2 illustrates how the treatment effectively addressed vocabulary deficiencies across the 33 students of Grade X.

Table 2. Detailed Individual Pre-Test and Post-Test Scores

No.	Initial	Pre-Test	Post-Test
1.	S1	60	80
2.	S2	80	90
3.	S3	50	70

4.	S4	80	90
5.	S5	80	90
6.	S6	90	90
7.	S7	70	80
8.	S8	40	60
9.	S9	40	60
10.	S10	30	50
11.	S11	80	90
12.	S12	30	60
13.	S13	60	80
14.	S14	90	90
15.	S15	40	60
16.	S16	90	90
17.	S17	70	80
18.	S18	90	90
19.	S19	40	60
20.	S20	40	60
21.	S21	50	70
22.	S22	70	80
23.	S23	80	90
24.	S24	30	60
25.	S25	60	80
26.	S26	60	80
27.	S27	80	90
28.	S28	40	70
29.	S29	90	90
30.	S30	30	60
31.	S31	90	90
32.	S32	50	70
33.	S33	90	90
Total		2110	2660

The data reveals that 84.8% of students showed significant improvement. Qualitative evidence suggests that the "replay" feature of audio recordings played a vital role in helping students recognize unfamiliar words at their own pace:

(1) 'The recording was very helpful for me because I could replay the audio many times. I could focus on unfamiliar words and listen to how they were pronounced at my own pace.' (S10)

4. DISCUSSION

The primary finding of this study highlights that audio-recording-based instruction is a highly effective intervention for improving vocabulary recognition among Grade X students at SMA Taman Siswa Pematangsiantar. The 26.1% mean score increase confirms that repetitive auditory exposure allows students to bridge the gap between spoken phonetics and word recognition. Unlike previous studies by Vandergrift (2021) which focused on video-based multimedia, this research demonstrates that audio-only input creates a more focused cognitive environment, forcing students to rely solely on auditory signals without visual crutches. This is consistent with the "Acoustic Priming" theory, where repeated exposure to the same phonological strings enhances the brain's ability to map sounds to lexical meanings.

The mechanism of this improvement lies in how the "replay" and "pause" functions facilitate word segmentation and phonological mapping. In a standard classroom lecture, spoken words are ephemeral and vanish instantly. However, by manipulating the audio recordings, students could freeze the "speech stream," allowing their brains more time for lexical access the process of identifying a word from their mental dictionary. This repetitive loop helps students break down continuous speech into individual units, thereby reducing "listening anxiety" and allowing lower-performing students to gain confidence through self-paced learning.

The significant transition from a 42.4% success rate to 81.8% suggests a shift in students' listening strategies from purely top-down (guessing from context) to a more balanced approach that includes bottom-up processing (decoding actual sounds). However, it is important to consider alternative explanations for these gains. The use of a post-test with an identical format to the pre-test may have created a "testing effect," where students became more familiar with the task demands rather than just the language itself. Additionally, the role of the teacher as a facilitator and the "novelty effect" of using technology in the classroom likely boosted momentary motivation, which could have temporarily enhanced student focus during the intervention sessions. Overall, this approach proves to be a sustainable pedagogical solution for enhancing vocabulary recognition. While textbooks provide the "what" of language, audio recordings provide the "how" of natural speech, making them an essential tool for secondary school contexts where authentic linguistic exposure is often limited.

5. CONCLUSION

This study concludes that audio-recording-based instruction significantly improves listening comprehension and effectively enhances vocabulary recognition among Grade X students at SMA Taman Siswa Pematangsiantar. The substantial increase in the mean score from 63.94 to 80.61, coupled with the rise in the student mastery rate from 42.4% to 81.8%, underscores the pedagogical value of recorded media. The core strength of this method lies in its "replay" functionality, which allows for individualized cognitive processing, reduces listening anxiety, and enables students to internalize accurate pronunciation and word recognition at their own pace. This research contributes to the field of ELT (*English Language Teaching*) by providing an accessible and autonomous learning model for secondary school contexts. However, this study has limitations. The research was conducted within a limited timeframe and focused only on a single class at one specific institution, which may affect the generalizability of the findings to broader populations. Furthermore, the analysis primarily focused on receptive skills (listening and vocabulary recognition) without extensively measuring the students' productive skills, such as speaking or writing, following the intervention.

For future research, it is recommended to conduct similar studies with a larger sample size across multiple schools to validate these findings on a wider scale. Additionally, future researchers could investigate the long-term retention of vocabulary acquired through audio recordings or explore the integration of more diverse digital audio platforms, such as podcasts or interactive voice-response tools, to further enhance student engagement and linguistic proficiency.

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