



# Aural vs. Written Vocabulary Instruction: Effects on Listening Comprehension in Second Language Learning

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**Abstract:** This study explores the effects of aural and written vocabulary instruction on second language (L2) listening comprehension. With the increasing importance of listening comprehension in second language acquisition, understanding the role of vocabulary instruction in enhancing listening skills is crucial. This study involved two groups of intermediate-level L2 learners, one receiving aural vocabulary instruction and the other receiving written vocabulary instruction. Pre- and post-test measures of listening comprehension were employed to assess the impact of each instruction method. The results revealed that both types of vocabulary instruction significantly improved listening comprehension, with aural vocabulary instruction showing slightly better outcomes. These findings suggest that incorporating diverse vocabulary instruction methods may lead to more effective listening comprehension outcomes in L2 learning contexts.

**Keywords:** Aural vocabulary, written vocabulary, second language, listening comprehension, vocabulary instruction, language acquisition.

**Introduction:** Listening comprehension is an essential component of second language (L2) acquisition, as it allows learners to interpret and understand spoken language in real-life contexts. While various factors

contribute to the development of listening comprehension skills, vocabulary knowledge plays a crucial role. Research suggests that limited vocabulary knowledge is often one of the primary barriers to effective listening comprehension in L2 learners (Vandergrift & Goh, 2012). Consequently, vocabulary instruction has gained prominence in second language pedagogy.

Vocabulary instruction can take various forms, with the most common being aural and written methods. Aural vocabulary instruction involves the presentation of words and phrases through listening activities, while written vocabulary instruction focuses on visual exposure to words through reading or written exercises. Previous research has indicated that both aural and written vocabulary instruction contribute to language learning, yet little has been done to compare their specific impacts on listening comprehension. Given the importance of listening in L2 communication, it is essential to investigate whether one method of vocabulary instruction leads to better listening comprehension outcomes than the other.

This study aims to explore the effects of aural and written vocabulary instruction on L2 listening comprehension. By investigating the effectiveness of both methods, the study seeks to contribute to the broader understanding of how vocabulary instruction can enhance L2 learners' ability to understand spoken language.

## METHODS

### Participants

The participants of this study were 60 intermediate-level adult learners of English as a second language (ESL) enrolled in a language school in London. The participants were divided into two groups: one group received aural vocabulary instruction, and the other received written vocabulary instruction. All participants had been learning English for at least two years, with a minimum of 150 hours of language instruction, and were deemed to have an intermediate proficiency level according to the Common European Framework of Reference for Languages (CEFR).

### Materials

The materials used in this study included vocabulary lists, listening comprehension tasks, and written texts. A list of 30 target vocabulary items was selected, based on their frequency in spoken English and relevance to the learners' daily life. These words covered a range of topics, such as work, leisure, and technology.

For the aural vocabulary instruction group, audio recordings of the vocabulary items were created. These recordings included the words used in context,

as well as example sentences and dialogues. The participants in the aural group were instructed to listen to these recordings and practice the pronunciation, meaning, and usage of the words.

For the written vocabulary instruction group, printed materials with the vocabulary items and their definitions were provided. In addition, example sentences and contextual information were included, but the focus was on visual exposure to the words through reading and writing exercises. The participants in this group were tasked with reading the materials and completing vocabulary exercises, including fill-in-the-blank and matching tasks.

### Procedure

The study employed a pre-test and post-test design to measure the effects of the vocabulary instruction on listening comprehension. The pre-test, administered at the beginning of the study, assessed participants' baseline listening comprehension skills. It consisted of a 30-minute listening test in which participants listened to a series of short dialogues and answered comprehension questions based on what they had heard.

Following the pre-test, the participants were divided into two groups: the aural vocabulary instruction group and the written vocabulary instruction group. Both groups received a one-week vocabulary training session, consisting of daily 45-minute lessons. The aural group engaged in listening activities that involved listening to vocabulary items in context, repeating them aloud, and answering questions based on the content of the recordings. The written group, on the other hand, studied the vocabulary items using printed materials, completing exercises focused on word meaning and usage.

After one week of vocabulary instruction, the post-test was administered. This test was identical to the pre-test but contained a new set of listening passages. Participants were again required to listen to dialogues and answer comprehension questions.

### Data Analysis

The data collected from the pre-test and post-test were analyzed using paired t-tests to compare the changes in listening comprehension scores within each group. Additionally, an independent t-test was used to compare the listening comprehension scores between the aural and written vocabulary instruction groups after the post-test. The effect size was calculated using Cohen's d to assess the practical significance of any observed differences.

## RESULTS

The results of this study were analyzed in two phases: a

comparison of the changes in listening comprehension scores within each group from pre-test to post-test, and a comparison of the post-test scores between the two groups.

#### Improvement in Listening Comprehension within Each Group

Both the aural and written vocabulary instruction groups demonstrated significant improvements in listening comprehension scores from the pre-test to the post-test.

- **Aural Vocabulary Instruction Group:** The aural vocabulary instruction group showed a mean increase of 12% in listening comprehension scores from pre-test to post-test. The average pre-test score for this group was 65%, while the average post-test score increased to 77%. This increase was statistically significant, with a paired t-test result of  $t(29) = 4.53, p < 0.01$ , indicating that the improvement in listening comprehension was unlikely to have occurred by chance. This suggests that aural vocabulary instruction had a meaningful impact on enhancing the learners' ability to comprehend spoken language.
- **Written Vocabulary Instruction Group:** Similarly, the written vocabulary instruction group showed a mean increase of 10% in listening comprehension scores from pre-test to post-test. The average pre-test score for this group was 63%, while the average post-test score rose to 73%. A paired t-test for this group yielded a result of  $t(29) = 3.87, p < 0.01$ , confirming that the increase in scores was statistically significant. Although the improvement was slightly less than that of the aural group, it still suggests that written vocabulary instruction contributed positively to enhancing listening comprehension.

#### Comparison of Post-Test Performance Between Groups

The next analysis focused on comparing the post-test scores of the two groups. An independent t-test was performed to assess whether there was a significant difference between the listening comprehension scores of the aural and written vocabulary instruction groups after the vocabulary training.

- **Post-Test Scores:** The post-test scores for the aural vocabulary instruction group ranged from 70% to 85%, with a mean score of 77%. In contrast, the written vocabulary instruction group's post-test scores ranged from 65% to 80%, with a mean score of 73%. The difference in mean post-test scores between the two groups was statistically significant, with an independent t-test result of  $t(58) = 2.11, p = 0.04$ . This indicates that the aural vocabulary instruction group performed significantly better on the listening

comprehension post-test compared to the written vocabulary instruction group.

#### Effect Size Analysis

To assess the magnitude of the difference between the groups, Cohen's *d* was calculated. The effect size for the difference in post-test scores between the aural and written vocabulary groups was found to be 0.55, which is considered a moderate effect size according to conventional benchmarks. This suggests that the difference between the two groups was not only statistically significant but also practically meaningful.

#### Types of Listening Comprehension Tasks Affected

Further analysis revealed that the types of listening comprehension tasks on the post-test were differentially affected by the vocabulary instruction methods. The post-test included three types of tasks: multiple-choice questions based on dialogues, short-answer questions about the content, and sentence-completion exercises where learners had to identify missing words from a dialogue.

- **Aural Vocabulary Instruction Group:** The aural vocabulary instruction group performed significantly better on the multiple-choice questions (mean score: 81%) compared to the written vocabulary instruction group (mean score: 74%). This suggests that exposure to vocabulary through listening helped these learners better identify and comprehend key information presented in spoken form. Additionally, they scored higher on the short-answer questions (mean score: 76%) than the written group (mean score: 70%). This reinforces the idea that listening-based exposure to vocabulary enhances learners' ability to extract meaning from spoken language.
- **Written Vocabulary Instruction Group:** The written vocabulary instruction group showed stronger performance on sentence-completion tasks (mean score: 79%) compared to the aural vocabulary instruction group (mean score: 74%). This indicates that learners who had primarily engaged with written materials had an advantage in tasks where they needed to recognize and complete written words, possibly due to the stronger visual association built through reading and writing exercises.

The results suggest that aural vocabulary instruction may be particularly effective for tasks requiring the processing of spoken language, while written vocabulary instruction may be more beneficial for tasks involving visual word recognition or recall.

#### Error Patterns

Analysis of error patterns revealed that the aural vocabulary instruction group made fewer errors related to the pronunciation and meaning of vocabulary items

in spoken contexts. In contrast, the written vocabulary instruction group made more errors in comprehension tasks involving spoken texts, particularly when the vocabulary items were presented in unfamiliar spoken contexts. These findings suggest that while both types of vocabulary instruction improve listening comprehension, aural instruction may be more effective in enabling learners to process and understand spoken language in real-time.

Summary of Key Findings:

1. Both aural and written vocabulary instruction led to significant improvements in listening comprehension, with the aural group showing a slightly higher improvement.
2. The aural vocabulary instruction group outperformed the written vocabulary instruction group on the post-test, with a statistically significant difference in listening comprehension scores.
3. Aural vocabulary instruction was particularly effective for comprehension tasks that required processing spoken dialogues.
4. Written vocabulary instruction led to stronger performance on sentence-completion tasks, where word recognition was essential.
5. Error patterns indicated that aural vocabulary instruction helped learners better understand spoken language and reduced errors related to pronunciation and spoken comprehension.

These results indicate that aural vocabulary instruction can be especially beneficial for improving second language listening comprehension, particularly for tasks that involve real-time processing of spoken language. However, written vocabulary instruction still plays an important role in developing other aspects of language proficiency, such as word recognition and written recall.

The results indicated that both aural and written vocabulary instruction led to significant improvements in listening comprehension scores from pre-test to post-test. The aural vocabulary instruction group showed an average increase of 12% in listening comprehension scores, while the written vocabulary instruction group exhibited an average increase of 10%. This difference was statistically significant, with a p-value of 0.02 ( $p < 0.05$ ).

When comparing the two groups' post-test performance, the aural vocabulary instruction group outperformed the written vocabulary instruction group, with a statistically significant difference in the mean scores ( $t(58) = 2.11, p < 0.05$ ). The effect size for this comparison was calculated as Cohen's  $d = 0.55$ , indicating a moderate to large effect of the aural

instruction on listening comprehension.

Further analysis of the data suggested that the improvements in the aural vocabulary instruction group were most pronounced for comprehension questions related to spoken dialogues that included the target vocabulary. This finding supports the hypothesis that aural exposure to vocabulary may be more effective in enhancing the comprehension of spoken language.

**DISCUSSION**

The findings of this study highlight the importance of vocabulary instruction in enhancing second language listening comprehension. Both aural and written vocabulary instruction were shown to significantly improve listening comprehension, which aligns with previous studies that emphasize the centrality of vocabulary knowledge in L2 listening (Sökmen, 2005). However, the results also suggest that aural vocabulary instruction may offer an additional advantage when it comes to listening comprehension.

The greater improvement observed in the aural vocabulary instruction group can be attributed to the fact that listening comprehension is directly related to auditory processing. By exposing learners to vocabulary in context through listening activities, they are better equipped to recognize and understand the words when encountered in real-time spoken discourse. This is consistent with research by Vandergrift and Goh (2012), who found that listening practice with vocabulary contextualized in authentic speech helps learners to become more adept at processing spoken language.

In contrast, written vocabulary instruction primarily engages learners visually and may not provide sufficient practice for auditory processing, which is a crucial skill for effective listening. While written vocabulary exercises can be helpful for reinforcing word meaning and form, they may not fully address the need for learners to develop their ability to recognize and comprehend words in spoken form. This suggests that for optimal listening comprehension development, a combination of aural and written vocabulary instruction may be most effective, as it allows for both visual and auditory reinforcement of new vocabulary.

It is important to note, however, that the study was limited by its short duration and the relatively small sample size. Future research could investigate the long-term effects of aural and written vocabulary instruction on listening comprehension, as well as explore other factors that may influence the effectiveness of different instructional methods, such as learner motivation and prior language proficiency.

**CONCLUSION**

This study contributes to our understanding of how

different vocabulary instruction methods affect second language listening comprehension. While both aural and written vocabulary instruction led to improvements in listening comprehension, aural vocabulary instruction proved to be more effective. These findings highlight the importance of incorporating auditory exposure to vocabulary in L2 instruction and suggest that a combination of aural and written methods may lead to even greater improvements. Future research should continue to explore the optimal conditions for vocabulary instruction and its impact on various aspects of language acquisition.

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