

## ABSTRACT

### **Fajarani, Sasna .A. (2025) : Unlocking Vocabulary Mastery Through Randall's ESL Lab Website: A Pre-Experimental Study To Students At a Senior High School In Bogor**

Vocabulary is a crucial component of language learning, serving as the foundation for all four skills: listening, speaking, reading, and writing. However, many students still struggle with vocabulary mastery due to limited and less engaging teaching media. In response to this issue, digital platforms have emerged as innovative solutions to support vocabulary acquisition. One such platform is Randall's ESL Lab website, which provides topic-based vocabulary lessons, quizzes, and contextual examples. This study addresses the gap by investigating the effect of using Randall's ESL Lab website to improve the vocabulary mastery of senior high school students in Bogor through an offline classroom setting.

Theoretically, this research is supported by Nation's (2001) framework on vocabulary breadth and depth, as well as Mayer's (2009) multimedia learning theory, which emphasizes the benefits of combining verbal and visual input to enhance comprehension and retention. Previous studies on Randall's ESL Lab have mainly focused on listening comprehension and university-level learners in online contexts. This study extends the scope to vocabulary learning at the high school level in a face-to-face environment.

This research employed a quantitative pre-experimental design with a one-group pre-test and post-test model. The participants were 36 tenth-grade students of SMAN 1 Cigombong, West Java, selected through purposive sampling. Data were collected using two vocabulary tests (pre-test and post-test) consisting of 30 multiple-choice items each. The treatment involved four sessions of vocabulary learning using materials from Randall's ESL Lab, focusing on contextual application and interactive exercises. Data analysis included normality testing, a paired sample t-test, and N-gain score calculation.

The results revealed that students' mean vocabulary score increased from the pre-test (mean = 64.22) to the post-test (mean = 82.22). The paired sample t-test showed a significance value of  $0.000 < 0.05$ , indicating a statistically significant improvement in vocabulary mastery after the treatment. The N-gain score was 0.50, which falls into the medium category, demonstrating that Randall's ESL Lab was moderately effective in enhancing vocabulary mastery.

In conclusion, Randall's ESL Lab website significantly improved students' vocabulary mastery and proved to be an engaging and accessible learning resource. It is recommended that EFL teachers integrate similar digital tools into classroom instruction to enrich vocabulary learning experiences. Future research may explore other digital platforms, extend the duration of treatment, and apply the method to different language skills to gain a broader understanding of technology integration in language learning.

**Keywords:** *vocabulary mastery, Randall's ESL Lab, digital media, pre-experimental study, EFL learning*