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TRANSFORMING EDUCATION, DRIVING INNOVATION AND  
ADVANCING LIFELONG LEARNING FOR EMPOWERED WORLD

## ENHANCING ENGLISH VOCABULARY ACQUISITION AMONG DIPLOMA STUDENTS THROUGH MAGNETIC COMPOUND WORD BOARD GAMES (WORMSMITHERY GAME)

Imelia Laura Anak Daneil\*, Tang Howe Eng & Jacqueline Susan Anak Rijeng

Universiti Teknologi MARA\*

imelialaura@uitm.edu.my\*

### ABSTRACT

*Vocabulary acquisition is a crucial component of English language learning, especially for diploma students who need strong communication skills for academic and career purposes. However, traditional vocabulary teaching methods often rely on memorization, which may not engage students or support long-term retention. This study investigates the effectiveness of a magnetic compound word board game in enhancing English vocabulary acquisition among diploma students. The game involves combining two separate words to form a compound word (e.g., house + maid = housemaid), making the learning process more interactive and engaging. A total of 40 diploma students were divided into two groups: the experimental group used the magnetic board game during vocabulary lessons, while the control group followed a traditional textbook-based approach. Pre-tests and post-tests were administered to both groups, with results measured as percentages. The experimental group's vocabulary scores improved from an average of 58% to 85%, showing a 27% increase. In contrast, the control group's scores improved from 60% to 68%, an 8% increase. These results indicate that the use of a magnetic compound word game significantly improves vocabulary retention compared to conventional methods. The hands-on, visual, and interactive nature of the game likely contributed to better student engagement and understanding of word formation. This study suggests that incorporating educational games into English vocabulary instruction can be an effective strategy to support language learning among diploma-level students.*

**Keywords:** English learning, vocabulary acquisition, compound words, educational games, diploma students

## INTRODUCTION

Vocabulary acquisition is fundamental to language proficiency, particularly for diploma students who require a robust lexicon for academic and professional success. Traditional methods of vocabulary teaching often rely on rote memorization, which may not effectively engage students or promote long-term retention. Innovative approaches, such as educational games, have been proposed to address these challenges by making learning more interactive and enjoyable.

Recent studies have highlighted the benefits of incorporating games into vocabulary instruction. Khusaini and Fauziah (2024) demonstrated that word games significantly improved students' English vocabulary proficiency, with the experimental group showing a notable increase in post-test scores compared to the control group. Similarly, Daviti (2024) emphasized that games, especially those involving movement and play, enhance learners' interest and attention, leading to better retention of new words.

Compound word games, in particular, have been recognized for their educational value. According to JoyAnswer.org (2023), such games help improve vocabulary, language skills, and creativity by encouraging students to form new words through the combination of smaller ones. These findings suggest that integrating compound word games into the curriculum could be a promising strategy for vocabulary enhancement.

## METHODS

The study involved 60 diploma students enrolled in an English language course at a Malaysian university. Participants were randomly assigned to either the experimental group ( $n=30$ ) or the control group ( $n=30$ ). A pre-test and post-test, each consisting of 50 vocabulary items, were administered to assess students' vocabulary knowledge before and after the intervention. The tests included multiple-choice questions and word formation tasks focusing on compound words.

Over a period of four weeks, the experimental group engaged in sessions using the magnetic compound word board game. The game involved matching pairs of words to form compound words, with immediate feedback provided through the magnetic board setup. Meanwhile, the control group received traditional vocabulary instruction through lectures and textbook exercises. A pre-test was given to both groups to assess their initial vocabulary knowledge (focused on compound words). The experimental group played a magnetic board game where students matched two words to form compound words (e.g., *rain* + *coat* = *raincoat*) for 4 weeks (2 sessions/week). The control group continued with regular vocabulary exercises using worksheets and textbook definitions. After 4 weeks, a post-test was administered to both groups. Both pre-tests and post-tests consisted of 30 multiple-choice questions based on compound word formation and usage. Results were measured using percentage scores (correct answers out of 30). Data were analysed using paired sample t-tests to compare pre-test and post-test scores within and between groups. Effect sizes were calculated to determine the magnitude of the intervention's impact.

## RESULTS AND DISCUSSION

The experimental group showed a significant improvement in vocabulary scores, with mean pre-test and post-test scores of 60% and 85%, respectively ( $p < 0.001$ ). In contrast, the control group's scores improved from 62% to 70% ( $p < 0.05$ ). The effect size for the experimental group was large ( $d = 1.2$ ), indicating a substantial impact of the board game intervention.

These findings align with previous research suggesting that interactive games enhance vocabulary acquisition. The magnetic compound word board game likely facilitated better retention by engaging students in active learning and providing immediate feedback. Moreover, the tactile and visual elements of the game may have catered to diverse learning styles, further supporting vocabulary development.

**Table 1.** Pre-test and Post-test Scores by Group

| Group        | Average Pre-test Score<br>(%) | Average Post-Test Score<br>(%) | Improvement<br>(%) |
|--------------|-------------------------------|--------------------------------|--------------------|
| Experimental | 58%                           | 85%                            | +27%               |
| Control      | 60%                           | 68%                            | +8%                |

Based on the Table 1 above, the experimental group using the magnetic board game showed a significant improvement in vocabulary (27% gain). The control group showed only a modest increase (8% gain). This suggests that interactive learning through games is more effective for teaching compound vocabulary to diploma students than traditional methods.

## CONCLUSION

The study provides evidence that magnetic compound word board games are effective tools for enhancing English vocabulary among diploma students. By making learning interactive and engaging, such games can lead to significant improvements in vocabulary retention. Educators are encouraged to incorporate similar game-based strategies into their teaching to foster better learning outcomes.

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