



***The Use of Undercover Game Application In Teaching  
Vocabulary To Students Of Seventh Grade  
At Junior High School***

**Nina Resiana<sup>1</sup>, Endang Susilawati<sup>2</sup>, Eka Fajar Rahmani<sup>3</sup>, Sumarni<sup>4</sup>, Yanti Sri Rezeki<sup>5</sup>**  
<sup>1,2,3,4,5</sup> Fakultas Keguruan dan Ilmu Pendidikan, Universitas Tanjungpura, Pontianak, Indonesia

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**ABSTRAK**

Penelitian ini dilakukan untuk menguji keefektifan Aplikasi Undercover Game untuk meningkatkan kosakata siswa. Penelitian ini menggunakan penelitian pra-eksperimental. Sampelnya adalah siswa kelas VII SMP N 25 Pontianak pada Tahun Pelajaran 2022/2023. Berdasarkan analisis data diperoleh hasil bahwa Aplikasi Game Undercover meningkatkan kosakata siswa. Nilai t-hitung komputasi lebih besar dibandingkan dengan t-tabel ( $10,50 > 1,697$ ) yang berarti hipotesis alternatif ( $H_a$ ) diterima dan hipotesis nol ( $H_0$ ) ditolak. Skor effect size sebesar  $1,78 > 1,00$ , dikategorikan 'kuat'. Antusiasme siswa juga terlihat selama proses belajar mengajar. Mereka antusias memainkan Aplikasi Game Undercover dengan menjelaskan kata-kata rahasianya dan mendapatkan kosakata baru. Kesimpulannya, Aplikasi Game Undercover meningkatkan kosakata siswa.

**ABSTRACT**

This research was conducted to examine the effectiveness of the Undercover Game Application to enhance the students' vocabulary. This research employed pre-experimental research. The sample was the seventh-grade students in SMP N 25 Pontianak in the Academic Year of 2022/2023. Based on the data analysis, the result showed that the Undercover Game Application increased the students' vocabulary. The t-test computation was higher than the t-table ( $10,50 > 1,697$ ), which means the alternative hypothesis ( $H_a$ ) is accepted, and the null hypothesis ( $H_0$ ) is rejected. The score of effect size was  $1,78$ , and it is  $>1,00$ , categorized as 'strong.' The students also showed enthusiasm during the teaching and learning process. They were enthusiastic about playing Undercover Game Application by describing their secret word and getting new vocabulary. To conclude, the Undercover Game Application enhanced the students' vocabulary.

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**Corresponding Author:**

**Nina Resiana**  
Fakultas Keguruan dan Ilmu Pendidikan, Universitas Tanjungpura,  
Pontianak, Indonesia  
Email: [ninaresiana@student.untan.ac.id](mailto:ninaresiana@student.untan.ac.id)

## 1. INTRODUCTION

The English language is the most widely spoken language by native and non-native speakers. Learners must learn four basic skills in English to master the language such as speaking, reading, writing, and listening. According to Iqahtani [1] vocabulary knowledge is typically seen as a key tool for a second-language student because limited vocabulary impedes successful communication in a second-language learner. Vocabulary is critical for acquiring English mastery because it allows learners to deliver messages accurately and avoid misunderstandings. Furthermore, a large percentage of words students have learnt is utilized to assess their English language proficiency.

According to Krisnayanti and Winarta [2] problems in learning English vocabulary for EFL learners have two factors such as linguistics and non-linguistics factor. In the linguistics factor, it is related to the language difficulties such as grammar and the language used. In the non-linguistics factor, it has two kinds factors, it is internal and external factors. Internal factors are related to the students' motivation, students' interest and how students memorized the word, in external factors are related to the environment, teaching method and situation.

According to Game Edukasi the Undercover game is a board game. Undercover is a game of guessing the identity of the opponent (and ourselves) to eliminate enemies as quickly as possible using the secret word given by the application. This game was developed by Yanstar Studio OU, which is available on mobile phones and can be downloaded on Android and iOS mobile phones. The focus of this research was to see if the Undercover Game Application may help students enhance their vocabulary while playing the Undercover Game Application in seventh grade students in SMP N 25 Pontianak. The researcher chose SMP 25 Pontianak because this was one of Junior High School which have English subject and this school was feasible for me to conduct this research.

Another reason was implementing an Undercover Gaming Application in the classroom, the teacher and students may collaborate to create a successful learning class that will enhance the vocabulary of the students. Pre-experimental research will be used in this study. The researcher conducted the research with the title "The Use of Undercover Game in Teaching Vocabulary to Students in Seven Grade at Junior High School" based on the issues and potentials of enhancing students' vocabulary

## 2. METHOD

This research used quantitative research. The design was an experimental study. Quantitative research was a type of study that involves collecting and evaluating numerical data. According to Apuke [3], the quantitative research method involves the utilization and analysis of numerical data using specific statistical techniques to answer questions like who, how much, what, where, when, and how many statistical techniques to answer questions like who, how much, what, where, when, how many, and how. It also describes the methods of explaining an issue or phenomenon through gathering data in numerical form."

Differences attributed in application of the experimental treatment are evaluated by comparing the pre-test and post-test scores. This research designated to find out whether undercover game application can improve students' vocabulary for eleventh of SMP N 25 Pontianak by comparing pre-test and post-test. Because there is no control variable in this study,

it was classed as pre-experimental design. In this study, the researcher only used one group and used pretest and post-test to determine the test outcomes. The table of one group pre-test and post-test design is seen in this table [4].

Table 1. One group pre-test and post-test design

<i>Pre-test</i>	<i>Treatment</i>	<i>Post-test</i>
X1	T	X2

The participants in the intervention were seventh-grade students enrolled in VII C class at SMP N 25 Pontianak during the Academic Year 2022/2023, totaling 31 students. Data collection utilized a measurement method, which involves assessing the quantity of something. Measures represent the elements in a study to which participants provide responses. The instrument used for data collection was a test developed according to the research inquiries, consisting of ten items. Prior to distributing the test items to students, validity, level of difficulty, discriminatory power, and reliability were analyzed..

## 2.1 Validity

The concept of validity as applied to measurement procedures or research tools used in this study to collect the necessary information from participants and respondents. In this study, the researcher used the questions as a test item, the test is considered to be good if the item data is valid. The term validity refers to what the test assesses and how well it evaluates those characteristics.

## 2.2 Level of difficulty

The level of difficulty refers to how easy or difficult the test items are. The answers provided by each of the students show the level of difficulty. The less the number of students who can correctly answer the question, the more difficult the question is considered. The more students who can correctly answer the question, the more difficult the question is considered. The criterion that is used to classify the level difficulty of the test item as follow:

Table 2. Level of difficulty [5]

<b>Difficulty Level Indicator</b>	<b>Qualification</b>
0,0 - 0.29	Revised (R)
0.30 - 0.49	Difficult (D)
0.50 - 0.79	Moderate (M)
0.80 - 100	Easy (E)

To ascertain the count of students in the high and low groups, 30 students participated in the tryout, with 15 students in each group. The analysis of the level of difficulty indicates that 2 items were deemed easy, 12 items were considered moderate, and 6 items were classified as difficult.

### 2.3 Discriminating Power

Discriminating power involves the ability to differentiate between two groups under measurement, namely the highest and lowest scoring groups. This concept is calculated using the following formula:

$$Disc Power (DC) = \frac{Upper Group - Lower Group}{\frac{1}{2}T}$$

Table 3. Item Qualification of Discriminating Power

DP	Item Qualification (IQ)
Negative	Really poor
<20	Poor
0,20 - 0,39	Satisfactory
0,40 - 0,69	Good
0,70 - 1.00	Excellent

The analysis of discriminating power reveals that 7 items are adequate, 4 items are excellent, and 9 items are highly effective. No item requires revision based on these findings.

### 2.4 Reliability

The notion of reliability in research maintains the degree of consistency in test measurements when replicated on the same subjects and conditions. Consistent results across multiple measurements signify reliability. In this investigation, a reliability test was employed to assess the consistency of study outcomes upon repetition. A higher level of reliability enhances the credibility of the research. The researchers selected VII A as the test respondents. The overall test reliability in this study will be evaluated using the Kuder Richardson Formula 21 (KR-21), derived from Kubiszyn and Borich [6], presented as follows:

$$KR21 = \left( \frac{k}{k-1} \right) \left( 1 - \frac{M(K-M)}{K(SD^2)} \right)$$

Table 4. The Category of Reliability

Coefficient	Reliability of the Test
0.00-0.19	Negligible
0.20-0.39	Low
0.40-0.59	Moderate
0.60-0.79	Substantial
0.80-1.00	High to Very High

The reliability coefficient of the test was 0.99. It was considered to “high to very high” classification based on the table of criteria of the reliability.

## 3. RESULT AND DISCUSSION

### 3.1 Result

The data analysis revealed that the average score for the pre-test was 60.80, whereas for the post-test it was 72.58. This indicates that the mean score for the post-test surpassed that of

the pre-test. The t-test yielded a value of 10.50, resulting in a t-ratio of 10.50. Calculating the degree of freedom (df) using the formula  $df=n-1$ , where  $n=30$ , yielded 30. Referring to the t-table with a significance level ( $\alpha$ ) of 0.05 and df of 30, the critical t-value was found to be 1,697. As the t-test value (10.50) exceeded the critical t-value (1.697), it indicates a significant improvement in students' vocabulary from pre-test to post-test. The effect size was determined to be 1.78, which, following Cohen's classification [7], indicates a strong effect ( $1.78 > 1.00$ ). Therefore, the use of the undercover game application for teaching vocabulary to seventh-grade students at a junior high school demonstrated a strong impact.

### 3.2 Discussion

Regarding the research findings, the researcher found out that the use of Undercover Game Application in teaching students vocabulary is strongly effective. This finding reconfirms a similar result to the previous research Fadila Ekayanti N [8] she found the effectiveness of Undercover Game Application in students' speaking skills and this research found the effectiveness for students' vocabulary. It can be concluded that Undercover Game Application is not only effective for students' speaking skills but also for the students' vocabulary. In addition, the students showed more enthusiasm and attention to the teacher in learning vocabulary by using this game. This reconfirms the previous research Yang and Dixon [9] and Steiner et.al [10]. In other word, it can increase student motivation, this can be seen during played the game the students looked enthusiastic when their group came to the front of the class to play the Undercover Game Application, students tried to remember and look for lots of new vocabulary to describe secret words according to the role they play. Because the students fell enthusiasm when playing Undercover Game Application, students participated actively without realizing that they were actually taking part in learning English vocabulary. In other word, playing games in the classroom generated a calm and fun atmosphere that encouraged active student participation Karademir [11]. It concluded that the students learned without feeling coercion. They were happy under the atmosphere of playing Undercover Game Application to guessed and eliminated their friends which made them enjoyed to learn more vocabularies based on the description of their secret word.

Nevertheless, during the game not all the students have the same ability, some students were do not know how to describe the secret word they get and some students know how to describe the secret word. It took more time to help them describe the secret word with different description from students who still confused and do know the meaning of their secret word. However, the problem can be solved by help students with clue and feel free for them to asked if the they still confused. After play the game the students write how many new vocabularies they get after play the game. And also, not all the students have the same confidence, some students were shy and some students enjoy to play the game

## 4. CONCLUSIONS

Based on the results of the research and discussion described in the previous chapter, it can be concluded that it is shown that students' scores in teaching vocabulary by using Undercover Game Application increased. These results have answered the research question that the use of Undercover Game Application in teaching vocabulary students in seventh grade is effective. The Undercover Game method is effective for enhanced students' vocabulary in

terms of noun and adjective. This is evidenced by the average score of students in the post-test being greater than the pre-test. The use of Undercover Game Application makes learning vocabulary and learning activities more fun and interesting. The use of Undercover Game Application makes learning vocabulary more fun and interesting. This is because Undercover Game Application help students who have the lack of vocabularies.

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