

**The Effect of Influent Video Game
for Hospitality Students' English
Vocabulary Mastery at SMK Kertha
Wisata Sawan**

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Abstract

This study aimed to determine the effect of implementing the Influent video game on hospitality students' English vocabulary mastery at SMK Kertha Wisata Sawan. This study applied a quantitative method with a pre-experimental design. The sample of this study was 25 tenth-grade students of the Hospitality class at SMK Kertha Wisata Sawan in the academic year 2021/2022. Data was collected through a one-group pretest-posttest including 25 multiple-choice questions. The data obtained were analyzed descriptively and inferentially. Paired t-test results showed that the mean scores after being taught using the Influent video game ($Me =$) were higher than before this video game was implemented ($Me = 51.92$). The effect size of Cohen's d obtained was large ($1.35 > 0.80$). H_a was accepted because t-table test obtained $df = 26$, $t_{count} = 7.031$, $t_0 = 1.706$, then $t_{7.031} > t_{1.706}$. The implementation of the Influent video game had a significant effect on students' vocabulary mastery.

Keywords: Influent video game, hospitality, English vocabulary mastery

Abstrak

Penelitian ini bertujuan untuk mengetahui efek dari penggunaan permainan video Influent bagi penguasaan kosakata siswa jurusan perhotelan di SMK Kertha Wisata Sawan. Penelitian ini menerapkan metode kuantitatif dengan desain pra-eksperimental. Sampel penelitian ini adalah 25 siswa kelas 10 perhotelan di SMK Kertha Wisata Sawan tahun ajaran 2021/2022. Pengumpulan data dilakukan melalui pretest-posttest berisi 25 soal pilihan ganda. Data yang diperoleh dianalisis secara deskriptif dan inferensial. Hasil uji-t berpasangan menunjukkan bahwa skor rata-rata siswa setelah diajarkan dengan menggunakan metode ini ($Me = 64,67$) lebih tinggi daripada menggunakan metode konvensional sebelum metode ini digunakan ($Me = 51,92$). Ukuran efek Cohen's d yang diperoleh besar ($1,35 > 0,80$). Pengujian hipotesis melalui uji t-tabel diperoleh $df = 26$, $t_{hitung} = 7,031$, $t_0 = 1,706$, maka $t_{7,031} > t_{1,706}$, sehingga H_a diterima. Penerapan permainan video Influent memberikan efek signifikan terhadap penguasaan kosakata Bahasa Inggris siswa. .

Kata Kunci: permainan video Influent, perhotelan, penguasaan kosakata bahasa Inggris

1. Introduction

In this modern era, English is very important to be taught because it is spoken by 1.35 billion people worldwide (Szmigiera, 2021) and it is used in various aspects of life (Nunan, 2020). It implies that people around the globe should learn English as well as Indonesian.

Sadly, Indonesia earned a low rank of 80 out of 112 countries on the English proficiency index according to Education First (2021) report. Several potential factors stated by Mbato (2013) and Sulistiyo (2016) lead to the conclusion that students in Indonesia have lack engagement in learning English subjects. According to (Prensky, 2011), students nowadays are from the digital native generation who are advanced and tech-savvy. The students adore the dynamic delivery related to technology more than an old-fashioned class with a textbook-oriented delivery.

Despite various teaching media out there, video games can be potentially suitable for today's students' learning preferences to learn English. Because, video games give language exposure and huge engagement levels that can enhance language skills (Qasim, 2021). Besides that, it also activates the realism sense, motivation, and chill effect. (O'Brien & Levy, 2008). One of the video games that can be used to improve English language skills, especially vocabulary mastery, is Influent. It is a PC game specially designed for language learning in addition to its function as entertainment. This video game also can be defined as a COTS video game because it has an educational purpose besides a recreational purpose.

So, the effect of teaching using this video game in English class will certainly be very interesting to explore considering that English basic skills like vocabulary mastery is very necessary for hospitality students in Indonesia vocational school because in the future they will be faced with practical work in the hospitality

industry such as housekeeping, front office, food and beverage services, and food production.

2. Research Questions

Based on the background of the study above, the statement of the problem in this study can be formulated as follows.

- 1) Is there any significant effect of teaching English using the Influent video game on tenth-grade hospitality students' English vocabulary mastery at SMK Kertha Wisata Sawan?

3. Methodology

In carrying out the study, the researcher used a methodological reference to obtain valid results. In order to be more detailed, a description of the research design, research instruments, and data analysis techniques used is described in the following sub-topic.

1) Research Design

This study applied pre-experimental design which involved one-group pretest-posttest by Creswell et al. (2003). It is done with three steps: pre-test (O_1), treatment (X), and post-test (O_2). In addition, a pre-experimental design with a one-group pretest-posttest is not intended to focus on the group of participants because it is only using one group, in this context a group that consist of 25 tenth-grade hospitality students. But, it is focused on the test score which is measured twice, once before and once after exposing one-group of sample to treatment. So, this kind of research design is intended to seek the correlation between the independent variables (X) and the dependent variable (O_2).

Before doing the pre-test, the researcher delivered the material to the students which consisted of related vocabulary by using conventional way like asked the students to take a note to the list of vocabulary that have been written in the blackboard and asked them to pronounce and translate it with including the

word in the sentence. After delivering it with conventional way, the pre-test was administered. Then, the researcher conducted 7 session in treatment phase for one week in a row. It was held both at school hours and outside school hours for 90 minutes/session. After the treatment phase was passed, the researcher then conducted the post-test to find the effect between before and after being taught by using Influent video game.

2) Instrument

The instrument in this study were in the form of pre-test and post-test. Both were similar and only had small differences in the terms of numbering and the sequence of answer items, because the researcher did not want the students to be easily remember the pre-test questions in post-test so that the tests became objective.

The pre-test and post-test consisted of 25 multiple choice tests with questions about vocabulary around hospitality field, such as housekeeping, kitchen, front office, and the common noun that related to the workplace. And all of the vocabulary item in the tests had been showed in the gameplay of Influent video game. The students must be learnt about it while in the treatment phase.

3) Data Analysis Technique

There were several data analysis technique used in this research, that was, finding the mean differences with paired samples t-test and also finding the effect size using Cohen's *d* formula to find how large the effect of before and after students were being taught by using Influent video game. Inferentially, the hypothesis was tested by t-table hypothesis testing, which is if $t_{\text{count}} > t_{\text{table}}$, H_a is accepted, and $t_{\text{count}} < t_{\text{table}}$, H_o is accepted which H_a : there is significant effect of teaching English using Influent video game on students' English vocabulary mastery. H_o : there is no significant effect of teaching English using Influent video game on students' English vocabulary mastery. Besides that, the score result of pre-test and post-test also tested with Shapiro-

Wilk normality test (because, $n < 50$) as the requirement to conduct paired sample t-test to make sure the data is normally distributed.

4. Findings and Discussion

The scores of pre-test and posttest were tested with the Shapiro-Wilk normality test before administering the further analysis to make sure the data had normal distribution. The table of Shapiro-Wilk result can be seen on below *Table 1*. Based on the Shapiro-Wilk normality test, the significance value of the pretest scores was 0.081, whereas the significance value of the posttest score was 0.312. The significance value for both tests was greater than 0.05 ($p > 0.05$). It meant, that both tests were distributed normally.

The findings of paired sample t-test statistics, showed the significant different of Mean scores between before and after being taught by using Influent video game as shown in *Table 2* and *Table 3*, with the Mean paired differences of 16.56 points. It implied that Influent video game gave positive impact to the students vocabulary mastery because there was significant effect after being taught by using this game. And the finding showed that the pre-test scores after being taught by conventional teaching way were lower than after the students being taught by Influent video game. To define the effect size, the researcher administered Cohen's *d* effect size measurement. It showed that a result of 1.607767 which it was higher than 0.80 (>0.80). Furthermore, based on Cohen's effect size level criteria, it proven that Influent video games has a large effect on students' English vocabulary mastery.

The researcher utilized the paired sample t-test result to test the hypothesis using t-table as shown in *Table 4*. It was founded that $t_{\text{count}} = 8.036$, $df = n - 1$ is 24, in the t-table, the $df = 24$ within 0.05 – 0.10 confidence level is 1.711. From the calculation above, $t_{\text{count}} > t_{\text{table}}$ ($t_{8.036} > t_{1.711}$) so that H_a was accepted and H_o was rejected, which means that there was a significant effect in

tenth-grade hospitality students' English vocabulary mastery between before and after being taught by using Influential video game.

As a discussion matters, the results of this study prove that video games can indeed increase the effectiveness of students' English learning in the 21st century because this is related to their characteristics as stated by Prensky (2001) which was later supported by other researchers, such as Muriel and Crawford (2018), Parker (2015), Vásquez and Ovalle (2019), Watson (2012), and many more researchers who believed that video

games can be a culture in education, especially language education.

In conclusion, based on the preceding description, the findings of this study confirmed the idea and backed up prior research. As a result, the findings of this study revealed that students who were taught using the Influential video game showed the improvement in terms of the post-test scores which indicated their English vocabulary mastery. It meant that the Influential video game gave positive effects on tenth-grade hospitality students' English vocabulary mastery at SMK Kertha Wisata Sawan.

Table 1. Shapiro-Wilk Normality Test

	Shapiro-Wilk		
	Statistic	df	Sig.
PRE-TEST	.929	25	.081
POST-TEST	.954	25	.312

Table 2. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	POST-TEST	80.72	25	7.11524	1.42305
	PRE-TEST	64.16	25	8.75443	1.75089

Table 3. Paired Samples T-Test

Paired Differences					t	df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
16.56	10.30	2.06	12.30	20.81	8.036	24	.000

Table 4. Cohen's *d* effect size

POST-TEST (Mean)	PRE-TEST (Mean)
80.72	64.16
Std. Deviation	n
10.30	25

COMPUTE	
Cohen's <i>d</i>	Effect-size
1.607767	1.60 > 0.80 (large)

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