# STUDENTS' PERCEPTIONS ON THE USE OF ONLINE ROLE-PLAYING GAMES TO ENHANCE THEIR VOCABULARY KNOWLEDGE 

Tiara Sonita ${ }^{1 *}$, Nurlaily $^{2}$, Hilarius Raditya Priambada ${ }^{3}$<br>Universitas Internasional Batam, Indonesia<br>${ }^{1}$ tiarasonita25@gmail.com, ${ }^{2}$ nurlaily@uib.ac.id, ${ }^{3}$ hilarius@uib.ac.id


#### Abstract

Nowadays, teaching and learning activities are not only in the classroom. There are many resources from the internet that can be used as learning tools outside the classroom. One of the activities is playing online games. Even though it sounds like something usual, online games can help students to improve their English skills, especially their vocabulary. Online games provide various vocabulary to the students and help them to enhance their vocabulary knowledge from the in-game facilities. This research aimed to explore students' perceptions towards RPG online games enhancing their vocabulary knowledge. This research's results will find out; 1) How the students perceive the online RPGs in enhancing students' vocabulary knowledge? and 2) How do the students enhance their vocabulary knowledge other than online RPGs? The participants of this research are students from Universitas Internasional Batam who played any online role-playing games. By using descriptive quantitative, this research will gather the data via questionnaire. This research gets positive feedback from the participants. They are agreed that online RPGs is helping them to enhance their vocabulary knowledge from in-game features. There are also some of other apps that participants' use to enhance their vocabulary knowledge. Researcher hopes this research can give new insights of online games to be used as a learning media for both students and teachers.


Keywords: Learning Media; Online Role-Playing Games; Perceptions; Students; Vocabulary

## INTRODUCTION

Nowadays, technology keeps on arising and evolving within human civilization. Octaberlina \& Rofiki (2021) state that this era is marked by increasingly sophisticated technology. Those technology's advances are used for many kinds of importance and interest. Online games, as one of technological advances creation with various creative and challenging games, are currently increasing in demand by many users for various reasons and purposes (Firmannandya et al., 2021). In teaching and learning activities, learning media is crucial in order to deliver the materials properly and adequately to the students. According to Octaberlina \& Rofiki (2021) and Suryani et al. (2020), learning media is one of a learning source which used for assisting students consciously and independently in the learning process and cannot be separated due to its essential role in delivering messages and information for the students. Within this era, teachers are retrieving many new benefits in teaching as technology keeps on evolving. In learning vocabulary, the teachers need to pay attention to learning media selection to properly deliver the meanings to the students. Octaberlina \& Rofiki (2021) claims that learning media that commonly used for learning vocabulary is picture in books, or flash card since using pictures in books is not practical in getting the students to grasp the actual meaning from it. Vocabulary learning need learning medias that considered interactive so that they can focus on it and comprehend the meaning. Octaberlina \& Rofiki (2021) state that vocabulary learning
needs a more sophisticated media because vocabulary is way too important to be neglected. Therefore, online game can be used as learning media for vocabulary learning. Qin \& Hua (2020) findings indicate that players of non-educational games can be motivated to expand their vocabulary by using in-game instructions. Lin \& Guo (2021) also revealed that in-class setting activities for EFL adolescent vocabulary learners are effective by using online-single player RPG method. Therefore, the researcher conducted this research to find out in which aspect the online games would enhance students' vocabulary knowledge and what are the students' perceptions of online game to enhance their vocabulary knowledge. Game (in language teaching) is defined as an organized activity that usually has the following properties: (a) a particular task or objective, (b) a set of rules, (c) competition between players, and (d) communication between players by spoken or written language (Richards \& Schmidt, 2010 p. 239). However, there is no formal definition of online games. Online games are commonly defined as any gaming activities that require an internet network in order to play smoothly. There are some previous studies on a similar topic, such as findings by Rasti-Behbahani (2021) about the reasons online games are advantageous in vocabulary learning, Bin-hady (2021) findings about the role of games in enhancing EFL students' vocabulary acquisition, research conducted by Lin \& Guo (2021) about enhancing EFL adolescent learners' vocabulary acquisition via single online player role-play games, and many more. Online game that is going to be discussed in this paper is RPG (Role-Playing Game). Online RPGs are able to create an entertaining learning environment for students. While enjoying the game, the players could obtain new vocabulary from it. For instance, there are sentences in the story with one or two new vocabularies. Since the player is curious about the story, they would search up the new vocabulary and then obtain the new words easily by frequent encounters with those words. In addition, every word in in-game menu also could bring up the chance to players to learn a new vocabulary, such as "evolve" or "ally" word in the hero menu.
However, Octaberlina \& Rofiki (2021) findings suggest that more shots of the game (in this case, SpellingCity) will help them more to acquire vocabularies, especially through clear direction and instruction. In other words, the players also need to choose the most suitable game for themselves in terms of its genres and in-game style. In Indonesia, especially in Batam, many students play various online games, including online RPGs. Considering that Batam is near some its neighbourhood countries such as Singapore, Malaysia, and so on, the students' English exposure might be little bit different compared to students in other provinces. However, that doesn't rule out the possibility that the students obtain new vocabulary from the online RPGs that they play. Therefore, the researcher wants to know the view of students' perception regarding the online RPGs as a tool to enhance their vocabulary knowledge. With that being said, the researcher would like to conduct the research under the title "Students' Perceptions on the Use of Online Role-Playing Games to Enhance their Vocabulary Knowledge".
From the described background, games can help students in many aspects of their vocabulary learning. Interactive online RPG video games are attractive from its own world and in-game features. In the other words, the students also absorb the language from the game, mainly from the lore. The following questions will be discussed in the study:

1. How do the students perceive the online RPGs in enhancing students' vocabulary knowledge?
2. How do the students enhance their vocabulary knowledge other than online RPGs?

The purpose of this research is to identify students' perception towards online RPGs in enhancing their vocabulary knowledge and to find out other tools that are being used by students to enhance their vocabulary knowledge other than online RPGs. Nowadays, learning English is not limited to books. There are many sources for learning outside the classroom resources, especially from internet, such as E-books, articles, journals, educational websites and blogs, and even online games. Therefore, we can take this advantage to use online RPGs as learning
media for students. The aspect of language that can best be enhanced by online RPGs is vocabulary. With online RPGs, students can unconsciously enhance their vocabulary knowledge. Learning vocabulary from the online games makes the students unconsciously enhance their vocabulary knowledge by simply searching up any new words that they have found in the game. Vocabulary is crucial in any language acquisition. Saputro \& Rusli (2020) stated that vocabulary is like a brick used for building a house. Just like a house, a language also needs words to build it. Awalludin et al. (2019) stated that those who want to be competent in language should have sufficient vocabulary to communicate with that particular language. Without mastering vocabulary, communication will be misleading and will create a misunderstanding between the speakers. Hasnine \& Wu (2021) stated that vocabulary is an integral part of language development since people cannot read, write, and communicate without good vocabulary commands. Vocabulary indeed plays a vital role to helps every individual to communicate in order to improve their language skills. Vocabulary is the central of English language teaching since students rely to the vocabulary the most to understand others and express their own ideas (Saputro \& Rusli, 2020). Saputro \& Rusli (2020) added that a lack of vocabulary could lead into incomprehension, inarticulate English speaking skills and unable to improve English. When reading or communicating with others without knowing specific word or many words, it may be a hindrance to be able to understand or be understood (Hynam, 2021). The communication between speakers will get distracted if they don't get the meaning from the incomplete or wrong vocabulary selection. From some statements above, it can be concluded that vocabulary is the most important point in English language learning in order to produce proper communication, understand others and express one's ideas. Suryani et al. (2020) and Octaberlina \& Rofiki (2021) point out that learning media is one of the learning sources that can consciously and independently support learners in the learning process. Learning media is the medium for the teachers to deliver the learning materials to the students properly in order to realize the learning objectives. Without the media, knowledge and materials cannot be best communicated to students, in more dangerous conditions it can create a misunderstanding when the students absorb it (Octaberlina \& Rofiki, 2021). The most common media for students to learn vocabulary is an image, picture in books, etc. since those can help the students to memorize the words. However, Octaberlina \& Rofiki (2021) stated that the students will not understand and comprehend what they are learning fully if the teacher use picture in books. Learning vocabulary is not an easy matter for students. According to Octaberlina \& Rofiki (2021), one of the most complicated problems in teaching vocabulary is the media. Similarly, Bin-hady (2021) claims the grammar translation method (and any other old teaching method), which usually requires the students to memorize lists of words belonging to a reading text with their meanings in L1, are considered no more relevant to the students and can easily make them feel bored. The teachers can help the students to acquire and enhance their vocabulary by engaging the teaching and learning process (Awalludin et al., 2019). With that being said, the proper learning media is needed to be considered for the students.
Research conducted by Octaberlina \& Rofiki (2021) investigated the outcome of using an online game named SpellingCity to enrich vocabulary, which is a part of modern gamification. The research design is to have 22 students finish one turn game of SpellingCity and then fill out a survey and interview for the data collection process. The result was that all of the participants (students) agreed that using SpellingCity increase their vocabulary acquisition as well as learning pronunciation. The simple interface design of SpellingCity is also found to be one of the factors why SpellingCity is considered interesting and easy to play by these students. Another study was conducted about online game towards the students' vocabulary at University in Sorong, Indonesia by Saputro \& Rusli (2020). The research was quantitative with a preexperimental research design. The population was the student of technology and Information,
and the sample were first, third, and fifth semesters. The researchers used tests (pre-test and post-test) as the instrument for collecting data. The test consisted of 20 questions, which were divided into multiple choice, matching, gap in the filling and making sentences form. The result shows a significant influence of using game online to improve the students' vocabulary at University in Sorong, Indonesia. Similar research conducted by Bin-hady (2021) which explores the advantages of (digital) games for developing EFL students' vocabulary acquisition and discusses some of the most widely games used to enhance students' vocabulary acquisition and introduces them to EFL instructors so they can be widely used in their classroom teaching practices. The results revealed that games make lessons' enjoyable to students, minimize students' anxiety, help students recall vocabulary easily and naturally, and bring context to the classroom. The review also revealed that games such as The Sims, and Semantic Boggle are amongst the most widely used games for vocabulary retention. From the previous studies above, they commonly revealed how the games would help students to improve their learning skills, such as Octaberlina \& Rofiki (2021) who point out that one particular game can increase students' vocabulary acquisition besides also learning the pronunciation. However, there are only a few findings that focused on the perceptions of students about online games enhancing their vocabulary knowledge. Therefore, this research intended to find the answers by conducting this research.

## METHOD

This research used quantitative with descriptive research. According to Kothari, (2004 p.30), the quantitative method applies to the phenomena that can be expressed in terms of quantity since it is based on the quantity for the measurement. In addition, quantitative research usually emphasizes quantification in the collection and analysis of data (Bryman, 2012 p.715). Meanwhile, Kothari (2004) stated that descriptive research includes surveys and fact-finding enquiries of different kinds in order to state the affairs as it exists at present. The researcher collected the data quantitatively and served it with SPSS descriptive statistics. The data collection of this research is using questionnaire. The questionnaire contained both close-ended questions and open-ended questions by using Likert scale. According to Bryman (2012), the Likert scale is a widely used format developed by Rensis Likert for asking attitude questions to measure the intensity with which respondents feel about an issue since the respondents are typically asked their degree of agreement with a series of statements that together form a multiple-indicator or -item measure. The target population of the research's participants is students from Universitas Internasional Batam, while the accessible population is Universitas Internasional Batam students from 1st semester - 7th semester from all departments. This research used random sampling in order to get as many suitable participants as possible, which are those who actively play any kind of online RPG for 2-3 hours or more per day. The number of participants is depending on how many of those who are suitable for the prerequisites. As mentioned before, the research instrument is a questionnaire with a combination of close-ended questions and open-ended questions. These questions led students to explain how they would use the online games on a daily basis, what they feel about the game's usability and access, and so on. Then, the researcher sorts those who met certain requirements with what the researcher needs (e.g., Playing RPG online games for more than 3 hours, interactions with the entire ingame aspects, etc.). With that being said, the researcher could gather clear data about how the students would use online games in helping them learn vocabulary and how online games would play a role to help them enhance their vocabulary knowledge. There are some steps that occurred in order to collect the data. First, the researcher compiled the data and concluded the opinions from the questionnaire. Next, the researcher served the results from the questionnaire in the form of SPSS descriptive statistics to know about the students' perception of online RPGs
to enhance their vocabulary knowledge. Some questions about other possible tools for enhancing vocabulary knowledge will also include in the questionnaire.

The data was analysed from the questionnaire, and the researcher served the questionnaire data in the form of SPSS descriptive statistics. The statistics were served in the form of charts and conclude mean, median, and modus from each the of question's results.

## RESULTS AND DISCUSSION

## Results

The data are collected from the questionnaire and calculated by using SPSS. There are total of 113 participants from Universitas Internasional Batam, consisting of 34 students from the 1st semester, 23 students from the 3rd semester, 20 students from the 5th semester and 36 students from the 7 th semester. The age of participants ranged from 17 to 25 years old. As for departments, the participants' department are shown in table 1 below.

Table 1. Participants' Department
Department

| Valid | Teknik Sipil | Frequency | Cumulative <br> Percent |
| :--- | :--- | :---: | :---: |
|  | Arsitektur | 8 | 7.1 |
|  | Sistem Informasi | 5 | 11.5 |
|  | Teknik Informasi | 30 | 38.1 |
|  | Manajemen | 19 | 54.9 |
|  | Akuntansi | 24 | 76.1 |
|  | Pariwisata | 6 | 81.4 |
|  | Ilmu Hukum | 3 | 84.1 |
|  | Pendidikan Bahasa Inggris | 7 | 90.3 |
|  | Total | 11 | 100.0 |

From table 1, there are 8 participants ( $7.1 \%$ ) from the civil engineering department, while 5 participants ( $4.4 \%$ ) are from the architecture department. Most are from the system information department with 30 participants ( $26.5 \%$ ). The information techniques department has 19 participants ( $16.8 \%$ ), the management department has 24 participants ( $21.2 \%$ ), the accounting department are having 6 participants ( $5.3 \%$ ), and the tourism department has 3 participants ( $2.7 \%$ ). Other 7 participants ( $6.2 \%$ ) are from the law department, and 11 participants $(9.7 \%)$ are from the english language education department.
There are 4 languages that participants use when playing online RPGs. The details and calculations are shown below.

Table 2. Participants' in-game Language

|  | Language used in-game |  |  |
| :--- | :--- | :--- | :---: |
|  |  | Frequency | Percent |
| Valid | Indonesian | 12 | 10.6 |
|  | English | 84 | 74.3 |
|  | Japanese | 11 | 9.7 |
|  | Others | 6 | 5.3 |
|  | Total | 113 | 100.0 |

From table 2, 84 participants ( $74.3 \%$ ) are using English as their in-game language, while 12 participants ( $10.6 \%$ ) are using Indonesian, 11 participants ( $9.7 \%$ ) are using Japanese, and 6 participants ( $5.3 \%$ ) are using others. From these results, it can be concluded that most of the participants are using English as their in-game language.

Table 3. Participants' Online RPGs
Online RPGs that being played

|  |  | nline RPGs that being played |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Genshin Impact | 73 | 64.6 | 64.6 | 64.6 |
|  | Tower of Fantasy | 9 | 8.0 | 8.0 | 72.6 |
|  | Arknights | 3 | 2.7 | 2.7 | 75.2 |
|  | Azur Lane | 2 | 1.8 | 1.8 | 77.0 |
|  | Others | 26 | 23.0 | 23.0 | 100.0 |
|  | Total | 113 | 100.0 | 100.0 |  |

Table 3 shows that 73 participants ( $64.6 \%$ ) are playing Genshin Impact, while 9 participants ( $8 \%$ ) are playing Tower of Fantasy. There are 3 participants ( $2.7 \%$ ) who are playing Arknights, 2 participants ( $1.8 \%$ ) are playing Azur Lane, and 26 participants are playing other games. For cumulative percent, Genshin Impact's cumulative percent is $64.6 \%$, while Tower of Fantasy is $72.6 \%, 75.2 \%$ for Arknights, $77 \%$ for Azur Lane, and $100 \%$ for other games. In this category, mean, median and mode will also be discussed using the statistics table below:

Table 4. Mean, Median and Mode for Online RPGs
Statistics
Online RPGs that being played

| N | Valid | 113 |
| :--- | :--- | ---: |
|  | Missing | 0 |
| Mean | 2.11 |  |
| Median | 1.00 |  |
| Mode | 1 |  |

From table 4, it can be concluded that the mean for the online RPGs that participants played is 2.11 while the median and mode is 1 (refers to the first option, "Genshin Impact" in table 3 ). Therefore, from this table, it can be concluded that the majority of the participants are playing Genshin Impact.

Table 5. Participants' Playing Time in a Day

| Playing time in a day |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |  |
| Valid | Less than an hour | 27 | 23.9 | 23.9 | 23.9 |
|  | More than an <br> hour | 53 | 46.9 | 46.9 | 70.8 |
|  | More than 3 <br> hours | 14 | 12.4 | 12.4 | 83.2 |
|  | More than 5 <br> hours | 15 | 13.3 | 13.3 | 96.5 |
|  | Others | 4 | 3.5 | 3.5 | 100.0 |


| Total | 113 | 100.0 | 100.0 |
| :---: | :---: | :---: | :---: |

From table 5, there are 27 participants ( $23.9 \%$ ) are playing for less than an hour a day, while 53 participants $(46.9 \%)$ are playing for more than an hour, 14 participants $(12.4 \%)$ are playing for more than 3 hours, 15 participants (13.3\%) are playing for more than 5 hours, and 4 participants $(3.5 \%)$ are choosing others. They might be playing for more than 5 hours.

For cumulative percent, it is started with $23.9 \%$ for those who play for less than an hour, $70.8 \%$ for those who play for more than an hour, $83.2 \%$ for those who play for more than 3 hours, $96.5 \%$ for those who play for more than 5 hours, and $100 \%$ for those who choose others as their playing time. In this category, mean, median and mode will also be discussed using the statistics table below:

Table 6. Participants' Mean, Median and Mode for Playing Time in a Day

|  | Statistics |  |
| :--- | :--- | ---: |
|  | Playing time in a day |  |
| N | Valid | 113 |
|  | Missing | 0 |
| Mean |  | 2.26 |
| Median | 2.00 |  |
| Mode | 2 |  |

From table 6, it can be concluded that the mean for participants' playing time in a day is 2.26 while both median and mode are 2 (refers to the second option, "more than an hour" in table 4). Hence, it can be concluded that most of the participants are playing online RPGs for at least more than an hour a day.

Table 7. Participants' Preference with In-game Story
Reading lore/story in-game

|  |  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Valid | Yes | 92 | 81.4 | 81.4 | 81.4 |
|  | No | 21 | 18.6 | 18.6 | 100.0 |
|  | Total | 113 | 100.0 | 100.0 |  |

From table 7, there are 92 participants ( $81.4 \%$ ) are reading the lore/story in the game, while 21 participants ( $18.6 \%$ ) are not reading the story. For cumulative percent, it is $81.4 \%$ for those who read the story and $100 \%$ for those who are not reading the story. In this category, mean, median and mode will also be discussed using the statistics table below:

Table 8. Participants' Mean, Median and Mode for In-game Story's Preference

|  | Statistics |  |
| :--- | :--- | ---: |
|  | Reading lore/story in-game |  |
| N | Valid | 113 |
|  | Missing | 0 |
| Mean |  | 1.19 |
| Median |  | 1.00 |
| Mode |  | 1 |

The mean is 1.19 while the median and mode are 1 (refers to the first option, "yes" in table 6). In conclusion, most of the participants are reading the lore/story in the game.

As mentioned in the previous chapter, this research adopts the questionnaire questions from (Chen et al., 2019) to answer the first research question. There are three main categories in the questionnaire: potential effectiveness (of online RPGs), usability, and satisfaction. Each of the categories is going to be elaborate in the form of the table below, along with the statements.

Table 9. Participant's Percentage Answers on First Category
Potential Effectiveness

| Statements |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Strongly Disagree (\%) | Disagree (\%) | Neutral <br> (\%) | Agree <br> (\%) | $\begin{gathered} \hline \text { Strongly } \\ \text { Agree } \\ \text { (\%) } \\ \hline \end{gathered}$ | Mean |
| Online RPGs that I played are effective for learning vocabulary | $\begin{gathered} 1 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} \hline 1 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 10 \\ (8.8 \%) \end{gathered}$ | $\begin{gathered} 58 \\ (51.3 \%) \end{gathered}$ | $\begin{gathered} 43 \\ (38.1 \%) \end{gathered}$ | 4.25 |
| Online RPGs motivates me for learning vocabulary | $\begin{gathered} 1 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 21 \\ (18.6 \%) \end{gathered}$ | $\begin{gathered} 45 \\ (39.8 \%) \end{gathered}$ | $\begin{gathered} 45 \\ (39.8 \%) \end{gathered}$ | 4.17 |
| Online RPGs allows me to accomplish learning tasks more efficiently | $\begin{gathered} 5 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (14.2 \%) \end{gathered}$ | $\begin{gathered} 29 \\ (25.7 \%) \end{gathered}$ | $\begin{gathered} 42 \\ (37.2 \%) \end{gathered}$ | $\begin{gathered} 21 \\ (18.6 \%) \end{gathered}$ | 3.51 |
| Online RPGs help me to enlarge vocabulary size | $\begin{gathered} 1 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 11 \\ (9.7 \%) \end{gathered}$ | $\begin{gathered} 42 \\ (37.2 \%) \end{gathered}$ | $\begin{gathered} 59 \\ (52.2 \%) \end{gathered}$ | 4.40 |
| Online RPGs entitles me to greater control over learning process | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 14 \\ (12.4 \%) \end{gathered}$ | $\begin{gathered} 27 \\ (23.9 \%) \end{gathered}$ | $\begin{gathered} 42 \\ (37.2 \%) \end{gathered}$ | $\begin{gathered} 28 \\ (24.8 \%) \end{gathered}$ | 3.71 |
| Mean Total |  |  |  |  |  | 4.0071 |

According to table 9, the first statement of the category (Online RPGs that I played are effective for learning vocabulary) has each 1 participant ( $0.9 \%$ ) who answered strongly disagree and disagree, while 10 participants ( $8.8 \%$ ) answered neutral, 58 participants ( $51.3 \%$ ) answered agree, and 43 participants ( $38.1 \%$ ) answered strongly agree. The mean for the first statement is 4.25 .

The second statement (Online RPGs motivates me for learning vocabulary) also has each 1 participant ( $0.9 \%$ ) who answered strongly disagree and disagree, 21 participants ( $18.6 \%$ ) answered neutral, and each of 45 participants ( $39.8 \%$ ) answered agree and strongly agree. The mean for the second statement is 4.17 .

In the third statement (Online RPGs allows me to accomplish learning tasks more efficiently), 5 participants ( $4.4 \%$ ) answered strongly disagree, 16 participants ( $14.2 \%$ ) answered disagree, 29 participants $(25.7 \%)$ answered neutral, 42 participants ( $37.2 \%$ ) answered agree, and 21 participants ( $18.6 \%$ ) answered strongly agree. The mean for the third statement is 3.51 .

Meanwhile, in the fourth statement (Online RPGs help me to enlarge vocabulary size), surprisingly, only 1 participant ( $0.9 \%$ ) answered strongly disagree and no one answered disagree. However, 11 participants ( $9.7 \%$ ) answered neutral, 42 participants ( $37.2 \%$ ) answered agree, and 59 participants ( $52.2 \%$ ) answered strongly agree. The mean for this fourth statement is 4.40 .

In the last statement (Online RPGs entitles me to greater control over learning process), only 2 participants ( $1.8 \%$ ) answered strongly disagree while 14 participants ( $12.4 \%$ ) answered disagree, 27 participants ( $23.9 \%$ ) answered neutral while 42 participants ( $37.2 \%$ ) answered agree and standing as a majority. The rest of the 28 participants ( $24.8 \%$ ) answered strongly agree. The mean for the last statement is 3.71 and the mean for this category is 4.0071 . The scale range of this category (already counted from the mean of each participant's answer using SPSS) is shown in the table below.

Table 10. Participant's Scale Range of First Category

| Options | Total |
| :---: | :---: |
| 1 (Strongly Disagree) | $1(0.9 \%)$ |
| 2 (Disagree) | $4(3.6 \%)$ |
| 3 (Neutral) | $37(32.8 \%)$ |
| 4 (Agree) | $61(53.9 \%)$ |
| 5 (Strongly Agree) | $10(8.8 \%)$ |

From table 10, it can be concluded that the majority of participants by $53.9 \%$ agrees that online RPGs have potential effectiveness in terms of helping them enhancing their vocabulary while $32.8 \%$ are neutral, $8.8 \%$ are strongly agree, $3.6 \%$ are disagree, and $0.9 \%$ are strongly disagree.

Table 11. Participant's Percentage Answers on Second Category
Usability

| Statement | Strongly Disagree (\%) | Disagree (\%) | Neutral (\%) | Agree (\%) | Strongly <br> Agree <br> (\%) | Mean |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Online RPGs' resolution is adequate in terms of overall use | $\begin{gathered} 1 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 22 \\ (19.5 \%) \end{gathered}$ | $\begin{gathered} 51 \\ (45.1 \%) \end{gathered}$ | $\begin{gathered} 37 \\ (32.7 \%) \end{gathered}$ | 4.07 |
| Online RPGs' pixel is adequate in terms of overall use | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} \hline 3 \\ (2.7 \%) \end{gathered}$ | $\begin{gathered} \hline 19 \\ (16.8 \%) \end{gathered}$ | $\begin{gathered} \hline 51 \\ (45.1 \%) \end{gathered}$ | $\begin{gathered} 38 \\ (33.6 \%) \end{gathered}$ | 4.06 |
| Learning to operate online RPGs for learning vocabulary is easy | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (14.2 \%) \end{gathered}$ | $\begin{gathered} 42 \\ (37.2 \%) \end{gathered}$ | $\begin{gathered} 51 \\ (45.1 \%) \end{gathered}$ | 4.22 |
| Interaction with online RPGs | $\begin{gathered} 4 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 46 \\ (40.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 38 \\ (33.6 \%) \\ \hline \end{gathered}$ | 3.95 |


| requires little <br> mental effort |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Generally | 2 | 1 | 12 | 48 | 50 | 4.27 |
| speaking, online | $(1.8 \%)$ | $(0.9 \%)$ | $(10.6 \%)$ | $(42.5 \%)$ | $(44.2 \%)$ |  |
| RPGs is easy to |  |  |  |  |  |  |
| use |  |  |  |  |  | 4.1133 |
| Mean total |  |  |  |  |  |  |

From table 11, it is shown that the first statement (Online RPGs' resolution is adequate in terms of overall use) have 1 participant ( $0.9 \%$ ) who answered strongly disagree, 2 participants ( $1.8 \%$ ) answered disagree, 22 participants (19.5\%) answered neutral. In contrast, 51 participants ( $45.1 \%$ ) answered agree and 37 participants ( $32.7 \%$ ) answered strongly agree. The mean for this first statement is 4.07 .

In the second statement (Online RPGs' pixel is adequate in terms of overall use), there are 2 participants ( $1.8 \%$ ) who answered strongly disagree, 3 participants ( $2.7 \%$ ) answered disagree, 19 participants ( $16.8 \%$ ) answered neutral, 51 participants ( $45.1 \%$ ) answered agree, and 38 participants ( $33.6 \%$ ) answered strongly agree. The mean for the second statement is 4.06 .

Meanwhile, in the third statement, Learning to operate online RPGs for learning vocabulary is easy, there are each 2 participants ( $1.8 \%$ ) who answered strongly disagree and disagree while 16 participants ( $14.2 \%$ ) answered neutral, 42 participants ( $37.2 \%$ ) answered agree, and the rest of 51 participants $(45.1 \%)$ answered strongly agree. The mean for the third statement is 4.22 .

However, in the fourth statement (Interaction with online RPGs requires little mental effort), there are 4 participants ( $3.5 \%$ ) who answered strongly disagree, 7 participants ( $6.2 \%$ ) answered disagree, 18 participants ( $15.9 \%$ ) answered neutral, 46 participants ( $40.7 \%$ ) answered agree, and 38 participants $33.6 \%$ ) answered strongly agree. The mean for this fourth statement is 3.95 .

In the last statement (Generally speaking, online RPGs is easy to use), there are 2 participants $(1.8 \%)$ who answered strongly disagree, 1 participant $(0.9 \%)$ answered disagree, 12 participants ( $10.6 \%$ ) answered neutral while 48 participants ( $42.5 \%$ ) answered agree and 50 participants $(44.2 \%)$ answered strongly agree. The mean for this last statement is 4.27 while the mean for this category is 4.1133 . The scale range of this category (already counted from the mean of each participant's answer using SPSS) is shown in the table below.

Table 12. Participant's Scale Range of Second Category

| Options | Total |
| :---: | :---: |
| 1 (Strongly Disagree) | $1(0.9 \%)$ |
| 2 (Disagree) | $4(3.6 \%)$ |
| 3 (Neutral) | $27(23.9 \%)$ |
| 4 (Agree) | $66(58.4 \%)$ |
| 5 (Strongly Agree) | $15(13.3 \%)$ |

From the table above, it can be concluded that this category has positive feedback from the participants, with the majority of $58.4 \%$ are agree that online RPGs has relevant usability in terms of helping them enhance their vocabulary. The remaining $23.9 \%$ are neutral, $13.3 \%$ strongly agree while $3.6 \%$ disagree, and $0.9 \%$ are strongly disagree.

Table 13. Participant's Percentage Answers on Third Category

## Satisfaction

| Statement | Strongly Disagree (\%) | Disagree <br> (\%) | Neutral (\%) | Agree (\%) | Strongly <br> Agree <br> (\%) | Mean |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I think it is interesting while using online RPGs for vocabulary acquisition | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 15 \\ (13.3 \%) \end{gathered}$ | $\begin{gathered} \hline 44 \\ (38.9 \%) \end{gathered}$ | $\begin{gathered} 50 \\ (44.2 \%) \end{gathered}$ | 4.22 |
| I am satisfied with the functions offered by online RPGs | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} \hline 10 \\ (8.8 \%) \end{gathered}$ | $\begin{gathered} \hline 52 \\ (46.0 \%) \end{gathered}$ | $\begin{gathered} 49 \\ (43.4 \%) \end{gathered}$ | 4.29 |
| I am satisfied with online RPGs as a vocabulary learning tool | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} \hline 5 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} 13 \\ (11.5 \%) \end{gathered}$ | $\begin{gathered} \hline 52 \\ (46.0 \%) \end{gathered}$ | $\begin{gathered} 41 \\ (36.3 \%) \end{gathered}$ | 4.11 |
| I am willing to keep using online RPGs for English vocabulary learning | $\begin{gathered} 2 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 8 \\ (7.1 \%) \end{gathered}$ | $\begin{gathered} 17 \\ (15.0 \%) \end{gathered}$ | $\begin{gathered} 43 \\ (38.1 \%) \end{gathered}$ | $\begin{gathered} 43 \\ (38.1 \%) \end{gathered}$ | 4.04 |
| I am willing to keep using online RPGs for vocabulary acquisition | $\begin{gathered} 3 \\ (2.7 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} 22 \\ (19.5 \%) \end{gathered}$ | $\begin{gathered} \hline 40 \\ (35.4 \%) \end{gathered}$ | $\begin{gathered} 43 \\ (38.1 \%) \end{gathered}$ | 4.02 |
| Mean total |  |  |  |  |  | 4.1345 |

From table 13 above, it can be noted that the first statement of this third category (I think it is interesting while using online RPGs for vocabulary acquisition) is having each 2 participants ( $1.8 \%$ ) answering strongly disagree and disagree while 15 participants ( $13.3 \%$ ) answered neutral. However, there are 44 participants ( $38.9 \%$ ) who answered agree and 50 participants $(44.2 \%)$ answered strongly agree. The mean for this first statement is 4.22 .

In the second statement (I am satisfied with the functions offered by online RPGs), there are 2 participants ( $1.8 \%$ ) who answered strongly disagree while surprisingly, no one answered disagree. Even so, there are 10 participants ( $8.8 \%$ ) who answered neutral, 52 participants ( $46.0 \%$ ) answered agree, and 49 participants (43.4\%) answered strongly agree. The mean for the second statement is 4.29 .

In the third statement (I am satisfied with online RPGs as a vocabulary learning tool), there are 2 participants ( $1.8 \%$ ) who answered strongly disagree, 5 participants ( $4.4 \%$ ) who answered disagree, 13 participants ( $11.5 \%$ ) answered neutral while 52 participants ( $46.0 \%$ ) answered agree and 41 participants ( $36.3 \%$ ) answered strongly agree. The mean for this third statement is 4.11 .

For the fourth statement (I am willing to keep using online RPGs for English vocabulary learning), there are 2 participants ( $1.8 \%$ ) who answered strongly disagree, 8 participants ( $7.1 \%$ ) answered disagree while 17 participants ( $15.0 \%$ ) answered neutral and ended with a tie between each of 43 participants ( $38.1 \%$ ) that answered agree and strongly disagree. The mean for this fourth statement is 4.04.

In the last statement, I am willing to keep using online RPGs for vocabulary acquisition, 3 participants ( $2.7 \%$ ) answered strongly disagree, 5 participants ( $4.4 \%$ ) answered disagree, 22 participants (19.5\%) answered neutral while 40 participants ( $35.4 \%$ ) answered agree and 43 participants ( $43.1 \%$ ) answered strongly agree. The mean for this last statement is 4.02, and the total mean is 4.1345 . The scale range of this category (already counted from the mean of each participant's answer using SPSS) is shown in the table below.

Table 14. Participant's Scale Range of Third Category

| Options | Total |
| :--- | :--- |
| 1 (Strongly Disagree) | $2(1.8 \%)$ |
| 2 (Disagree) | $5(4.5 \%)$ |
| 3 (Neutral) | $23(20.4 \%)$ |
| 4 (Agree) | $67(59.3 \%)$ |
| 5 (Strongly Agree) | $16(14.2 \%)$ |
| Ftr) |  |

From the table above, this category has the majority of 67 participants (59.3\%) who are agree with the statements, while 23 participants ( $20.4 \%$ ) are neutral, 16 participants ( $14.2 \%$ ) strongly agree while 5 participants ( $4.5 \%$ ) disagree, and 2 participants (1.8\%) are strongly disagree. Therefore, it can be concluded that this third category also has positive feedback from the participants. Overall, all three categories have positive remarks and are in line with the expected answer for the first research question. As for the second research question, the researcher is using another close-ended question and open-ended questions that can be seen in the table below.

Table 15. Participant's Other Platforms to Enhance Their Vocabulary

## Do you use/access any other platforms that is specified to enhance your

 vocabulary?|  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Valid | Yes | 68 | 60.2 | 60.2 | 60.2 |
|  | No | 45 | 39.8 | 39.8 | 100.0 |
|  | Total | 113 | 100.0 | 100.0 |  |

From table 15, there are 68 participants ( $60.2 \%$ ) are using other platforms to enhance their vocabulary, while 45 participants ( $39.8 \%$ ) are not using another platform. For cumulative percent, it is $60.2 \%$ for those who use another platform and $100 \%$ for those who are not using another platform. In this category, mean, median and mode will also be discussed using the statistics table below:

Table 16. Participant's Mean, Median, and Mode for Other Platforms that Use for Enhancing Vocabulary

## Statistics

Do you use/access any other platforms that is specified to enhance your vocabulary?

| }{} | Valid | 113 |
| :--- | :--- | :--- |
|  | Missing | 0 |
| Mean |  | 1.40 |
| Median | 1.00 |  |
| Mode | 1 |  |

The mean is 1.40 , while the median and mode are 1 (refers to the first option, "Yes"). In conclusion, most of the participants are using other platforms to enhance their vocabulary.

For those who answered "yes" to this question, the majority of the participants are using Youtube, followed by online dictionaries, movies, online language learning apps and other online games. These are some of the reasons of why they chose said platforms.
"As it is a platform for people to upload their fan or original written works, I find myself having the opportunity to read a lot of works across different genres. This, in turn, allows me to know more 'new' words to add to my vocabulary." (Participant A)
"I played Harvest Moon and The Sims (I hope this is counted as RPG also) because this platforms storyline / tutorial is the easiest one to learn english. They use daily words that will be common to use in life." (Participant B)
"In Youtube, the usage of the words is pretty much broad and sometimes, using English caption in Indonesian videos and Mandarin is really helping to deepens vocabulary. Besides, reading comics or online English webtoons is very useful, aside from want to know about its plot, the words in panels need to be conceived." (Participant C)

From the questionnaire, most of the participants also feel that their vocabulary is improved after using said platforms. Therefore, the platforms being used from the participants are mostly effective to help them enhancing their vocabulary size. However, some of the participants who answered "no" to the question felt like they already had enough with obtained vocabularies from online RPGs that they already played and felt like it is not necessary to add source of vocabulary learning media.

These are some of the answers from them regarding not using any other source to enhance their vocabulary.
"I only prefer RPG games such as reading the lore of the story, because I think it has so many vocabulary that we have never seen it before." (Participant A)
"Because it's difficult to use all of the platform at once, so i only played one and stay on track of this one. it will be easy to be consistent in enhancing my vocabulary." (Participant B)

The majority of them also do not have a plan to add any other platforms other than online RPGs.

## Discussion

From the first category (potential effectiveness), most of the participants are agreed that online RPGs that they played is effective for vocabulary learning and motivate them to learn vocabulary. This is in line with Octaberlina \& Rofiki (2021) that state that learning media commonly used for learning vocabulary is picture in books, or flash card since using picture in books is not effective to get the students grasp the actual meaning from it and also similar to Qin \& Hua (2020) findings that indicates players of non-educational games can be motivated to expand their vocabulary by using in-game instructions. It can be concluded that online RPGs are effective and can be used as one of learning media for learning vocabulary. This result is similar with Lin \& Guo (2021) findings that revealed that the use online-single player RPG method worked effectively in in-class setting of vocabulary learning of EFL adolescent learners.

In the second category (usability), most of participants agreed that online RPGs graphics (pixel and resolution) are adequate for the use of learning vocabulary. Most of the participants also agree that online RPGs provide ease of access for them as a player to learn vocabularies. This result is similar with Lin \& Guo (2021) findings that revealed that the use online-single player RPG method worked effectively in in-class setting of vocabulary learning of EFL adolescent learners. This result is align with Avisteva \& Halimi (2021) point about the implementation of technology that tends to help learners in their process of acquiring vocabulary and beneficial in creating a learner-centred environment and improving their vocabulary. This result is also similar to Karraske et al. (2018) and Saputro \& Rusli (2020) findings about the use of games could create some atmosphere to push the student's hopes to learn the language.

In the third category (satisfaction), most of the participants agreed that it is interesting to use online RPGs while using it for vocabulary acquisition. The functions and tools provided by online RPGs are also satisfying for the participants to use it as a media for acquiring vocabulary. Most of the participants are willing to use and keep online RPGs as media for learning vocabulary. This result is aligned with Octaberlina \& Rofiki (2021) statement about vocabulary that is way too important to be neglected, so that vocabulary learning needs more sophisticated media.

Therefore, the students are perceived that online RPGs are effective for them as a vocabulary learning media and motivate them to do so. Furthermore, the usability of online RPGs tools leads them to satisfaction so that they're willing to use and keep online RPGs as their vocabulary learning media. This is the result of the first research question. This result is in line with Qin \& Hua (2020) findings that indicate players of non-educational games can be motivated to expand their vocabulary by using in-game instructions.

However, there are several other platforms that most participant use to enhance their vocabulary size other than online RPGs, such as Youtube, online dictionary, movies and other online games and even online language learning app. They are giving similar testimonies that they felt like the vocabulary provided from those platforms could help them to enrich their vocabulary aside from online RPGs and also have a positive benefit from it. However, some of the participants did not feel like adding any other source of vocabulary learning media.

The rest of the participants believe that it is not necessary to use other platforms to enhance their vocabulary. They prefer to stick to online RPGs and also not interested in adding any other platforms. However, some of these participants are planning or might be planning to use other
platforms in the future. Therefore, this research implicates that students perceive that online RPGs are helping them to enhance their vocabulary knowledge, mainly from its effectiveness in-game, usability from the game itself, and their own satisfaction towards the game.

It also should be noted that some of the participants also using other platforms to enhance their vocabulary knowledge such as YouTube, online dictionaries, movies, other online games and online language learning apps. These participants acknowledge that the app is also helping them to obtain new vocabulary and improve their knowledge. On the other hand, there are also some of the participants who only use online RPGs to enhance their vocabulary knowledge because they think it is not necessary to have more than one app to learn new vocabulary. However, some of these participants are planning to use other apps to enhance their vocabulary knowledge if it is needed.

## CONCLUSION

Based on the research findings and discussion in the previous chapter, the researcher concluded that the perception of the students toward online RPGs are positive and reveals that online RPGs help them to enhance their vocabulary knowledge. The ease of access provided by online RPGs motivates the participant to learn about new vocabulary, not to mention the usability of the game resolution and operation and the participants' satisfaction as the player are the main points that make the participants enhance their vocabulary knowledge.
Some of the participants have other apps to help them improve their vocabulary, while the rest of the participants not using any other apps other than online RPGs. They believe that it is not necessary to use other apps to help them enhance their vocabulary. However, it is does not rule out their possibility of using other apps to enhance their vocabulary knowledge in the future.
After conducting this research, the researcher would like to give several recommendations for English teachers, students, and other researchers.

1. For English teachers

It is suggested for English teachers to use online RPGs game as a learning media, especially in speaking and writing activities in order to motivates the students to learn new vocabulary. By using online RPGs, the teacher can encourage the students to learn more and create a comfortable atmosphere in the classroom. However, the teachers need to choose the appropriate online RPGs for student to get a suitable game for the students.

## 2. For students

It is suggested for students to use online RPGs game to enhance their vocabulary knowledge outside the classroom activities from the story and/or in-game features. The students also need to choose the suitable online RPGs to their preferences so that they could have a positive experience while learning the vocabulary. By using online RPGs, the students can immerse themselves in the story and able to write down new vocabularies that they found from the story and/or in-game features. It should be noted that the students need to use the game moderately since it is easy for students to lose track of time playing the games.
3. For other researchers

For other researchers with similar topics, it is suggested to explore other kinds of apps other than online RPGs that have a potential to enhance students' vocabulary knowledge and explore more about the students' reasons about choosing that particular app. Therefore, the research can give more references for both English teachers and students and the researcher can have a deeper result from the students.

## ACKNOWLEDGMENTS

The researchers extend their genuine appreciation to the unidentified reviewers for their valuable input and constructive feedback, which significantly improved the coherence and rigor of this manuscript.

## REFERENCES

Avisteva, R. T., \& Halimi, S. S. (2021). The Use of Quizlet as a Vocabulary Acquisition Learning Media for Eleventh Grade Students. Atlantis Press SARL, 593(Inusharts 2020), 254-260.

Awalludin, M. F. N., Rosli, M. S., Saleh, N. S., Atan, N. A., \& Subramanian, T. S. (2019). Video games as vocabulary enhancement instrument in the 21st century classroom. International Journal of Recent Technology and Engineering, 8(2 Special Issue), 285290.

Bin-hady, W. R. (2021). The Role of Games in Enhancing EFL Students’ Vocabulary Acquisition. Faculty of Education Scientific Journal, September 2020, 59-68.
Bryman, A. (2012). Social Research Methods 4th Edition. OUP Oxford.
Chen, C. M., Liu, H., \& Huang, H. Bin. (2019). Effects of a mobile game-based English vocabulary learning app on learners' perceptions and learning performance: A case study of Taiwanese EFL learners. ReCALL, 31(2), 170-188. https://doi.org/10.1017/S0958344018000228
Firmannandya, A., Prasetyo, B. D., \& Safitri, R. (2021). The effect of playing online games on family communication pattern. 5(July), 336-348. https://doi.org/10.25139/jsk.v5i2.3257
Hasnine, M. N., \& Wu, J. (2021). Wordhyve: A context-aware language learning app for vocabulary enhancement through images and learning contexts. Procedia Computer Science, 192, 3432-3439. https://doi.org/10.1016/j.procs.2021.09.116
Hynam, A. (2021). Independent project in Educational Linguistics Strategies for vocabulary acquisition in EFL teaching according to research $-A$ Swedish context $A$ systematic literature review.
Karraske, A. U. I., Nursalim, N., \& Wardani H, R. C. (2018). the Effectiveness of Using Tic Tac Toe Games in Students Understanding on Simple Present Tense At the First Grade of Smp N 1 Kabupaten Sorong. INTERACTION: Jurnal Pendidikan Bahasa, 5(2), 8090. https://doi.org/10.36232/jurnalpendidikanbahasa.v5i2.184

Kothari, C. R. (2004). Research Methodology Methods and Techniques (Second Revised Edition).
Lin, C.-Y., \& Guo, Y.-H. (2021). Enhancing Efl Adolescent Learners’ Vocabulary Acquisition Via Online Single Player Role-Play Games. Language Literacy: Journal of Linguistics, Literature, and Language Teaching, 5(1), 10-22. https://doi.org/10.30743/ll.v5i1.3506
Octaberlina, L. R., \& Rofiki, I. (2021). Using Online Game for Indonesian EFL Learners to Enrich Vocabulary. International Journal of Interactive Mobile Technologies, 15(1), 168-183. https://doi.org/10.3991/JJIM.V15I01.17513
Qin, T. P., \& Hua, T. K. (2020). In-game instructions: The extent of their usefulness in enhancing the vocabulary acquisition of ESL learners. International Journal of Emerging Technologies in Learning, 15(4), 73-89. https://doi.org/10.3991/ijet.v15i04.11647
Rasti-Behbahani, A. (2021). Why digital games can be advantageous in vocabulary learning. Theory and Practice in Language Studies, 11(2), 111-118. https://doi.org/10.17507/tpls.1102.01

Richards, J. C., \& Schmidt, R. (2010). Dictionary of language teaching and applied linguistics. In Proceedings of the 21st Asian Pacific Weed Science Society (APWSS) Conference, 2-6 October 2007, Colombo, Sri Lanka. http://search.ebscohost.com/login.aspx?direct=true\&db=lah\&AN=20163298076\&site =ehost-
live\%0Ahttp://www.cabi.org/cabdirect/showpdf.aspx?PAN=http://www.cabi.org/cabd irect/showpdf.aspx?PAN=20163298076\%0Aemail: javaidleghari@hotmail.com
Saputro, I. E., \& Rusli, S. Z. (2020). Online Game towards the Students’ Vocabulary of Technology and Information Department at UNIMUDA Sorong. INTERACTION: Jurnal Pendidikan Bahasa, 7(1), 27-34.
Suryani, A. I., Anwar, Hajidin, \& Rofiki, I. (2020). The practicality of mathematics learning module on triangles using GeoGebra. Journal of Physics: Conference Series, 1470(1).

