

## POST-DISASTER RECOVERY: ENHANCING VOCABULARY MASTERY THROUGH EDUCAPLAY IN ENGLISH TEACHING

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**Abstract.** Jorong Dusun Tuo is one of the villages affected by flash floods in May 2024, which caused huge losses to the local community, including trauma for victims. For this reason, the Community Service Team together with the Sumatra Volunteer Foundation carried out recovery activities in the form of teaching English. The focus of the activity is teaching vocabulary. Vocabulary is the key to mastering the language, but the memorisation method has not been able to improve students' vocabulary mastery. For this reason, a digital game, Educaplay, is used in teaching activities to improve students' vocabulary mastery. This activity was conducted 8 times with quantitative methods with a pre-experimental approach. Based on the posttest results, it was found that the use of the digital game, Educaplay, can improve learners' vocabulary mastery. This can be seen from the pretest average value is 75.33 while after receiving treatment, the average value increases to 87.78. Therefore, this service activity can improve their mastery of English vocabulary and heal the psychological condition of the children of Jorong Dusun Tuo

**Keywords:** Recovery, Teaching English, Vocabulary, Educaplay

**Abstrak.** Jorong Dusun Tuo merupakan salah satu desa yang terkena dampak banjir bandang pada Mei 2024 yang menimbulkan kerugian besar bagi masyarakat setempat, termasuk trauma bagi para korbannya. Untuk itu Tim Pengabdian Masyarakat bersama Yayasan Relawan Sumatera melakukan kegiatan pemulihan berupa pengajaran bahasa Inggris. Fokus kegiatannya adalah pengajaran kosakata. Kosakata merupakan kunci penguasaan bahasa namun metode menghafal belum mampu meningkatkan penguasaan kosakata siswa. Oleh karena itu, permainan digital Educaplay digunakan dalam kegiatan pengajaran untuk meningkatkan penguasaan kosakata siswa. Kegiatan ini dilakukan sebanyak 8 kali dengan metode kuantitatif dengan pendekatan pra eksperimen. Berdasarkan hasil posttest ditemukan bahwa penggunaan permainan digital Educaplay dapat meningkatkan penguasaan kosakata peserta didik. Hal ini terlihat dari nilai rata-rata pretest sebesar 75,33 sedangkan setelah mendapat perlakuan nilai rata-ratanya meningkat menjadi 87,78. Oleh karena itu, kegiatan pengabdian ini dapat meningkatkan penguasaan kosakata bahasa Inggris dan menyembuhkan kondisi psikologis anak-anak Jorong Dusun Tuo.

**Kata Kunci:** Pemulihan, Pengajaran Bahasa Inggris, Kosakata, Educaplay

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### INTRODUCTION

Jorong Dusun Tuo, Nagari Limo Kaum, Limo Kaum Sub-district, Tanah Datar Regency, West Sumatra Province is one of the villages affected by flash floods in May 2024, which caused huge losses to the local community. The flood not only damaged infrastructure such as

houses, roads and public facilities, but also triggered deep trauma for the victims, especially children and the elderly. Many people lost their homes and belongings, while others are still struggling to recover from the sudden and devastating event. The government and various parties have endeavoured to aid, both in the form of basic needs and mental support, to help the people of Jorong Dusun Tuo recover from this disaster. One of the parties involved in this trauma healing effort is Yayasan Sumatera Volunteer. An independent non-profit foundation that focuses on community development, environmental sustainability, and social welfare in Sumatra, Indonesia. As a response to this natural disaster, the Foundation has three main programmes that focus on education, mitigation, and conservation. Among the three programmes, 'Education Recovery Action Program' is one of the programmes that takes place every Sunday at Surau Kariang which aims to teach English and recover the trauma of children in Jorong Dusun Tuo.

In implementing this programme, the Foundation receives volunteers, one of which is from students who are conducting the *Praktek Lapangan Bersama (PLB) Nagari* which is another name for the KKN (Real Work Lecture) programme from the Faculty of Tarbiyah and Keguruan Sciences of UIN Mahmud Yunus Batusangkar. In this programme, three students majoring in English Education collaborated with the Foundation to carry out English teaching activities carried out at Surau Kariang every Sunday at 2-4 pm. The teaching and learning activities were attended by children of Jorong Dusun Tuo with an elementary school age range (6-12 years old).

In this English teaching activity, the focus is on teaching vocabulary. Vocabulary is very important for English language learners, especially young learners because vocabulary is the key to mastering a particular language, and because English is a foreign language in Indonesia, vocabulary mastery is important because without vocabulary, people cannot say or write what they want (Khafidhoh, 2019). In line with this, vocabulary mastery is very important to understand the language (Cahyani & Adityas, 2024) and with vocabulary language learners can express their ideas and can understand what others say (Susanto in Cahyani & Adityas, 2024).

Due to the importance of vocabulary, teaching this language element is the focus in this activity. In the early stages of the activity, the service team observed that the vocabulary teaching process still used the memorising method. The teacher coordinator recorded some vocabulary then the learners copied it in their own notebooks and then memorised it and at the end of the material there would be a test. Based on the observation, this teaching activity tends to cause learners to be easily bored, lazy, and unenthusiastic in participating in this activity and finally they cannot achieve the learning objective, mastering vocabulary.

To solve the above problems, the service team planned a more interesting English vocabulary teaching activity, by integrating the use of technology, namely by using a digital game, Educaplay. This digital game offers a wide variety of uses, including assessment instruments, reinforcement activities, motivational games, and a collection of games created by users (Páez-Quinde et al., 2022). The use of this digital game was chosen because using this application according to Vargas-Saritama & Espinoza Celi (2024) and Cahyani & Adityas (2024) can improve vocabulary acquisition and retention of learners, especially young learners.

Community service activities about teaching English have been carried out before but no one has used this digital game. Firstly, Sugiasti et al., (2022) conducted community service activities in the form of teaching English by integrating technology. In this community service activity, there is no focus on the use of digital games or applications. It only focuses on learning activities that use hardware such as tablets and mobile phones to conduct virtual classes. Second, the service activity was carried out by Sianipar & Sijabat (2024). In this activity the service team used YouTube to conduct a Digital English programme for elementary school students and the results showed that an integrated approach that combines technology and community support can significantly improve access and quality of education in remote areas. Third, the service activities were carried out by Djumadin et al., (2023). This activity was conducted in Ngawis Village, Karangmojo District, Gunung Kidul Regency with the focus on introducing various approaches and methods including introducing various English learning applications such as *Dualingo*.

Based on literature review, initial observations, and previous community service results, there has been no community service activity that focuses on teaching English as part of post-natural disaster recovery activities and to increase students' motivation and vocabulary mastery by integrating the use of digital games, Educaplay in the learning process. For this reason, this community service activity aims to determine the increase in learner vocabulary through Educaplay games.

## **METHOD**

This service activity was carried out using a quantitative method with a pre-experimental approach. The population in this study were all students who participated in English teaching activities with the provision of attending 8 meetings starting with the pre-test at the initial meeting and the post-test at the 8th meeting with a total of 9 students. The sampling technique used is total sampling because the number of samples is below one hundred and all members of the population are entitled to be research samples (Sugiyono, 2013).

This service activity was carried out for 8 weeks. In the first week, a pre-test was held to measure students' vocabulary mastery before learning using Educaplay. In week 2 to week 7, learning activities using digital games, Educaplay. In Week 8, a post-test was conducted to see the learners' vocabulary mastery after learning English using Educaplay. Then all data will be processed descriptively statistically using SPSS 26. The data analysis technique in this study uses a t-test.

## RESULTS

This community service activity focuses on teaching English as part of post-natural disaster recovery activities and to increase students' motivation and vocabulary mastery by integrating the use of digital games, Educaplay in the learning process. For this reason, this community service activity aims to determine the increase in learner vocabulary through Educaplay games.

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In the first week, pre-test activities were carried out to determine the initial mastery of learner vocabulary before learning by using Educaplay.



**Figure 1.** Pre-test (a) pre-test of female students (b) pre-test of male students

The following are the results of the students' pre-test:

**Table 1.** Pre-test Result

Category	Score
Highest Score	100
Lowest Score	30
Mean	75.33
Standard deviation	23.779

Based on the pre-test results above, out of 9 students, the highest score obtained is 100 and the lowest score is 30 with an overall average of 75.33. Then in week 2 to week 7, Educaplay digital games were used to improve students' vocabulary mastery.



**Figure 2.** (a) first treatment (b) fifth treatment

After using the Educaplay digital game for 6 meetings, in the eighth week a post-test was conducted to determine the mastery of learner vocabulary after learning using the Educaplay digital game.



**Figure 3.** Post-test

The following are the results of the students' post test:

**Table 2.** Post-test result

Category	Score
Highest Score	100
Lowest Score	64
Mean	87.78
Standard deviation	12.101

Based on the table above after using Educaplay digital games, there was an increase in students' vocabulary mastery. The highest score obtained is 100. While the lowest score obtained was 64, 34 points higher than the lowest score of the pre-test. Then, the average

increased by 12.45 points from the pre-test score. To draw conclusions, the analysis was done using paired samples test, as in the following table:

**Tabel 3.** Paired samples test

Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2 tailed)
-12.444	12.032	4.011	-21.693	-3.196	-3.103	8	.015

Based on table 3, it is found that there is a significant difference (two-tailed at 0.015) which indicates that the use of Educaplay digital game has an effect on learners' vocabulary acquisition. This means that the alternative hypothesis ( $H_a$ ) is accepted, and the null hypothesis ( $H_o$ ) is rejected. In addition, there is a significant difference in the students' vocabulary mastery after the treatment and before the treatment. The average score of the pretest was 75.33 while after getting the treatment, the average score increased to 87.78 as can be seen in table 4 below.

**Tabel 4.** Paired samples statistics

	Mean	N	Standar Deviasi	Standar Error Mean
Pretest	75.33	9	21.863	7.288
Postest	87.78	9	12.101	4.034

It can be concluded that the use of Educaplay digital games can improve learners' vocabulary mastery, so it is highly recommended to be used for teaching English, especially teaching vocabulary for young learners. For this service activity, it has been found that the use of Educaplay digital games can improve students' vocabulary mastery. However, the service team had problems in obtaining samples for research because the number of students who met the criteria (attended 8 meetings) was only 9 people.

## DISCUSSION

This community service activity focuses on teaching English as part of post-natural disaster recovery activities and to increase students' motivation and vocabulary mastery by integrating the use of digital games, Educaplay in the learning process. For this reason, this community service activity aims to determine the increase in learner vocabulary through Educaplay games. This service activity was carried out for 8 weeks. In the first week, a pre-test was held to measure students' vocabulary mastery before learning using Educaplay. In week 2 to week 7, learning activities using digital games, Educaplay. In the 8th week, a post-test was conducted to see the students' vocabulary mastery after learning English using Educaplay.

The result shows that there is a significant difference in the students' vocabulary mastery after the treatment and before the treatment. The average score of the pretest was 75.33 while after getting the treatment, the average score increased to 87.78. In short, the use of Educaplay digital games can improve learners' vocabulary mastery, so it is highly recommended to be used for teaching English, especially teaching vocabulary for young learners. This finding is in line with Saritama & Espinoza Celi (2024), Ayuningrum (2020), and Cahyani & Adityas (2024). Saritama & Espinoza Celi (2024) conducted research to explore the impact of Educaplay, on vocabulary acquisition among EFL high school students in southern Ecuador. This study found that participants improved their vocabulary proficiency and increased their motivation to study this language. Additionally, the findings unveil that incorporating Educaplay in the classroom promoted a productive and interactive learning environment.

In line with this, Ayuningrum (2020) conducted a research to find out whether the use of Educaplay-Based Teaching is effective for teaching vocabulary to tenth grade students of SMA Negeri 2 Bae Kudus in academic year 2023/2024. This research found that the use of Educaplay-Based Teaching is effective for teaching vocabulary to tenth grade students of SMA Negeri 2 Bae Kudus in academic year 2023/2024. In addition, Cahyani & Adityas (2024) conducted a research to determine the improvement of young learners' vocabulary through playing Educaplay. This research belongs to Classroom Action Research (CAR). This research found that Educaplay helps young learners improve their vocabulary.

## CONCLUSION

Based on the results of community service (PKM), several conclusions can be drawn:

- The use of digital games, Educaplay, can improve learners' vocabulary mastery. This can be seen from the pretest average value is 75.33 while after receiving treatment, the average value increases to 87.78.
- This community service activity is able to improve students' vocabulary mastery and support post-disaster recovery activities in Jorong Dusun Tuo, Nagari Limo Kaum, Pariangan District, Tanah Datar Regency, West Sumatra Province.
- The service team had obstacles in obtaining samples for research because the number of students who met the criteria (attended 8 meetings) was only 9 people.
- For further service activities, it is recommended to use Educaplay for teaching English with a wider population and sample and see how students respond or view the use of digital games

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