



PROCEEDING AISELT

(Annual International Seminar on English Language Teaching)

Available online at <https://jurnal.untirta.ac.id/index.php/aiselt>

e-ISSN: 2597-4955 and p-ISSN 2597-4947

DEVELOPING HARMONY OF DIGITAL TRANSFORMATION IN ELT

Teaching English Vocabulary by Using Mobile Application “Drops” For Senior High School

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APA Citation:

Rahmandika, M. G., Rachmawati, D., Rima, R. (2023). “Teaching English Vocabulary by Using Mobile Application “Drops” For Senior High School”. PROCEEDING AISELT (Annual International Seminar on English Language Teaching), 8(1), 228-239.

Abstract

The use of ICT in teaching and learning the English language is inevitable. Lots of the ICT learning media are already used by English teachers for instance mobile apps, computer-based learning modules, etc. This research explored the use of the DROPS mobile app for teaching English vocabulary to senior high school students and how they respond to it. This research was done in a public senior high school in Cikeusal. Design-Based Research (DBR) was employed to address the research questions. The participant observation, semi-structured interview, and documentation were used to answer how the teaching vocabulary by using DROPS Apps was carried out. The questionnaire was used to answer how the students responded to the teaching vocabulary by using DROPS. Data analysis of the observation, interview, and documentation revealed that first, it took two phases two to carry out DROPS in the vocabulary teaching in the classroom i.e. preparation and execution phases. The preparation covers identifying the required Competence Base (KD), selecting the Indicators of Achievement of Competence (IPK), and developing the Lesson Plan. The execution phase includes the pre-teaching phase, whilst teaching, and post-teaching. Second, the DROPS Apps could be integrated into the discovery learning method in the stimulation phase, which was intended to make the student ready and motivated to learn. Moreover, data analysis of the Questionnaire from the students showed that 92% of the respondents stated that teaching using the DROPS app was well-received and beneficial for vocabulary learning. 8% of respondents stated that the DROPS app was still improper to use. It implied that teaching and learning vocabulary by using the DROPS app indicates a positive trend and the effectiveness of smartphone-based applications for students' vocabulary enhancement. In Conclusion, teaching using DROPS apps could be an alternative to teaching English vocabulary.

Keywords: Design-Based Research (DBR), DROPS App, English vocabulary, mobile application.

INTRODUCTION

Vocabulary mastery is a critical part of English language learning due to the basics of the English language. Moreover, vocabulary is used as a bank word to enrich the skills of reading, writing, listening, and speaking English. Vocabulary is primarily taught as a set of unique words. Vocabulary relates to a list of words or a group of words for a certain language or a set of words used by the speakers (Hatch & Brown, 1995). Moreover, for students, vocabulary mastery is challenging. It is because the student may find it difficult to store all vocabulary in mind. This thing might be getting worse if the student is only learning vocabulary without any adequate learning media to support it.

The students and teachers might face several obstacles in teaching vocabulary. There are several obstacles to teaching vocabulary, (1) pronunciation problems (2) misspellings (3) the words are too complex (4) grammar association, (5) overlapped meaning, and (6) range, connotation, and idiomaticity (Thornbury, 2013).

The rapid development of technology has triggered the creation of many programs to help language learners improve their language skills (Miranty & Fargianti, 2018). The statement implied that the use of ICT is inevitable in the teaching and learning process including English vocabulary learning. Does the teacher have the ability to master ICT to assist and mobilize teaching and learning vocabulary, due on the ability to communicate in a foreign language, especially English, has become an absolute necessity for someone to master in today's era (Hakim & Rima, 2022).

There was only one research done by Najmi and Naserbakht (2021) which used DROPS Apps as Vocabulary learning media. It turned out that most of the research in vocabulary teaching and learning (Hassan Taj et al., 2017), (Wijaya et al., 2019), (Lolita, 2018), and (Najmi & Naserbakht, 2021) employed experimental studies. The research method like “Design-based Research” is still underresearched. Thus, this researcher is interested in using Design-based research in teaching English vocabulary and wanted to do the research entitled “Teaching English Vocabulary by Using Mobile Applications “DROPS” For Senior High School”

METHOD

This research aimed to find out how the DROPS App is employed and how the students respond to learning vocabulary using DROPS Apps. The research used Design-based Research (McKenney & Reeves, 2019) properly. The next question is about the obstacle to teaching English vocabulary by the English teacher. English learning especially in the vocabulary section had several challenges for instance students are not well known for learning English, moreover the English teaching in this school is only active once a week. So, it can be difficult to teach English in this school.

RESULT AND DISCUSSION

This research was conducted on 17th February - until 6th March 2023. The research took place at SMAN 1 Cikeusal in the second semester of the academic year 2022/2023 with students in tenth grade as participants. To answer the research question about how is teaching vocabulary by using DROPS Apps carried out, the student's responses to DROPS Apps utilization, and The result of DROPS Apps implementation in teaching vocabulary, the researcher would describe the data that the researcher discovered in the data description. The researcher would analyze all of the data during data analysis.

1. How is teaching vocabulary by using DROPS Apps carried out?

According to the findings of the observations, interviews, and documentation, students are still constrained by a lack of vocabulary mastery. This statement was supported by interviews by the researcher with the teacher and students from SMAN 1 Cikeusal. In the interview with an English teacher and then the researcher gives six questions to get the answer from the English teacher.

The first question “How is the teaching of English (especially vocabulary) at this school to students?” was answered by her that English learning in SMA 1 Cikeusal was doing well so far. The learning material given by the English teacher was received by the students properly. The next question is about the obstacle to teaching English vocabulary by the English teacher. English learning especially in the vocabulary section had several challenges for instance students are not well known for learning English, moreover the English teaching in this school is only active once a week. So, it can be difficult to teach English in this school.

To answer the third, fourth, and fifth questions about how the teacher and students encounter difficulties in teaching English, the teacher uses social media to make the student adapt to the English language such as TikTok, WhatsApp, and so on. From this method, students learn more English by using social media as the learning medium. This statement might answer the sixth question about the use of learning media in learning English by the teacher. In the seventh question about the response, if there are applications that can help students learn vocabulary, the teacher responded to the question with an enthusiastic response. She stated that the application might be a brand-new learning media that easy to use.

Meanwhile, the researcher interviewed two students from 10th Grade IPA 1 class. There are 2 questions the researcher gave to the students about the difficulties in learning English vocabulary and the responses if there is an application that can help them in learning vocabulary.

The first interviewee was ME. (16) and the second one is MPP (16). The first question “Is there any learning difficulties in learning English (especially vocabulary)?” Me responded, “Yes, there are several difficulties in learning English such as memorizing some words, lack of understanding of meaning, and grammar difficulties”. On the other side, MP also had the same statement as ME like being unhabitual in using English, understanding meaning, and remembering word problems. On the last question, “What if there is a media or application that will help students in learning English (especially vocabulary)?” MPP and ME had a unified answer. They said that “it will be nice if students get learning media”

From the interviews that the researcher did, it could be realized that there were some obstacles in teaching and learning English vocabulary in this school. From the teacher’s perspective, teachers have a limited time to teach English in 10th grade, and also from the students perspective, they are still unable to understand English After the researchers identified the problems in development, the researchers began designing learning methods that would later be used in this study. Based on the statement that was given by the interviewer, the problem in teaching and learning English in the class was the student problem and teaching duration.

In this research, the Discovery-learning method which was integrated into DROPS Apps was used by the researcher as a media to support the learning method and also used as an aliment for students in the English language habituation process. In the meantime, roughly 5 to 15 minutes of regular study

time for students to use DROPS to address the issue of the restricted time in studying English at school. This is done to ensure that students can utilize the software to its full potential. After identifying the problems and designing the learning method, the researcher is ready to implement the teaching method. In this section, the learning methodology using DROPS is tested in the class. The trial was conducted three times in the 10th grade IPA 1 class.

In the first attempt on 20th February 2023, the researcher faced several challenges in the class. The abrupt school event may be the cause of the research obstacle. All female students in X IPA 1 class did not join the class on time which made the application of the learning media not proper. Even though, the student who stayed in the class tried DROPS apps at the time. After the utilization of DROPS Apps, the researcher gave the learning material Descriptive text based on the teaching plan (RPP).

At the moment of the second attempt on 26th February 2023, the researcher once again applied the utilization of DROPS Apps. In a previous attempt, the utilization of the learning method using DROPS apps was not optimal due to school events. Then this moment had several revisions based on reflection at the first attempt for instance the application, internet signal, and device to engage DROPS Apps. In this attempt, all of the students utilized the application properly.

At the last attempt, the researcher applied the DROPS Apps to the class for the last time. At this moment the researcher also gave an assignment to the student to make a descriptive paragraph about “my house” and perform it in front of the class. After the product is built, and fixed, then the product is reviewed again. Based on the trial activities carried out three times, it can be said that the overall product made is suitable for use. There are several revisions resulting from attempts, one of which is linked to the evaluation of each learning implementation. It can be expected that the evaluation will help the researcher to use DROPS for the students comprehensively and more effectively. They are

- a. Time duration in app utilization
- b. Technical implementation
- c. Situational adjustment

4.1.2 How do students respond to learning vocabulary with Drops Apps?

The researcher employed an instrument to generate the research data, to answer the second research question about how students respond the learning with DROPS Apps, A Questionnaire was used by the researcher to know the student’s responses about the utilization of DROPS apps. Also, the questionnaire becomes the benchmark of the research's success. The Google Form questionnaire was used and spread ed to the participants in the 10th grade of IPA 1 class.

In the first question, the researcher asked the participant who is a student in 10th grade IPA 1 Class about their difficulties in learning new English vocabulary. The purpose of this question was to find out the student’s English language ability.

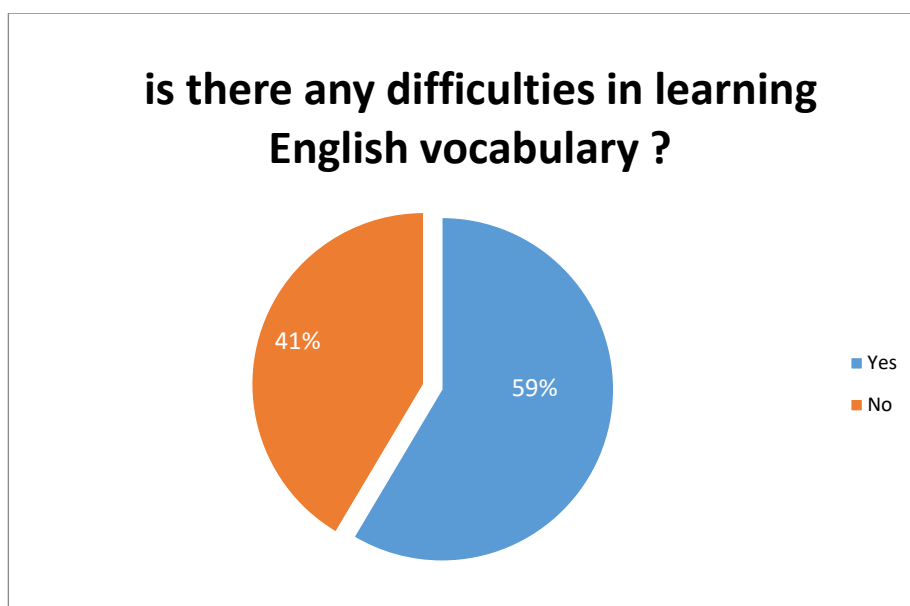


Figure 1. Pie Chart Questionnaire 1

Based on the chart above, it is shown that most of the students were still delicate in comprehending English vocabulary. This is because most of the student did not use English in their life activities. Also in researcher observation in class, most of the students are Indonesian, Javanese, and Sundanese speakers.

Meanwhile, some other students were already used to the English language. It is because the students were privately at the English club or learned it personally at home. English subject was learned by students in Junior high school. It was possible if some other students were already habitual in the English language, especially in vocabulary.

In conclusion, the chart's data and the researcher's observations show a stark difference in the students' understanding of English vocabulary. Due to the limited use of English in their daily lives and the predominance of Indonesian, Javanese, and Sundanese as their primary languages, the majority of students had trouble understanding English vocabulary. A smaller number of students, most likely as a result of their involvement in English clubs or independent study outside of school, however, demonstrated a higher level of proficiency.

In the second question, the researcher asked about past experiences with DROPS Apps to the participant. This question had a function to recognize the students' distinguish DROPS Apps which later made the implementation of the apps in the class easier.

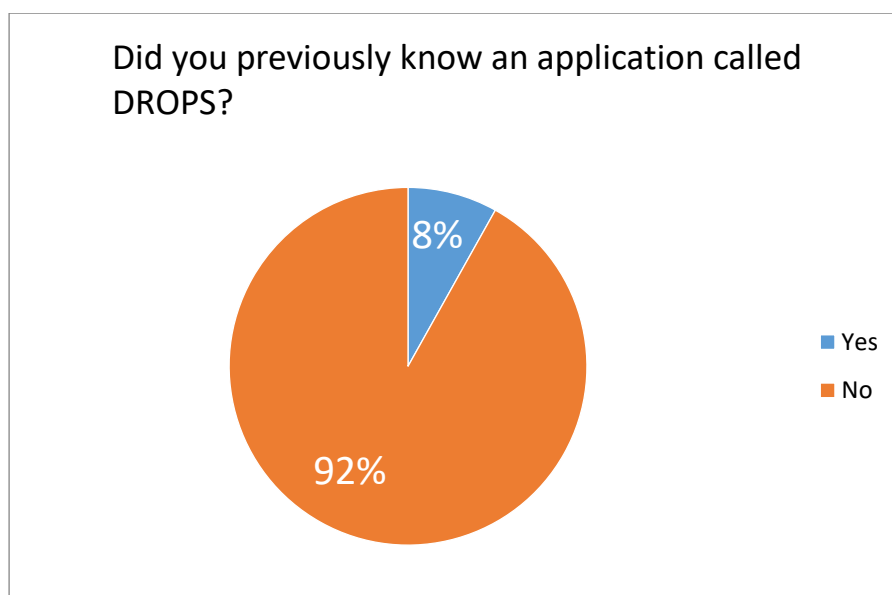


Figure 2. Pie Chart of Questionnaire 2

Based on the pie chart above, only a little bit of the students knew about the DROPS Apps. It was reasonable because DROPS Apps in Indonesia are more unpopular than any English language learning mobile applications like Duolingo, Cake, and even social media like TikTok, Facebook, and Instagram. The participant had not heard about the DROPS Apps yet after the researcher introduced them in class.

It can be concluded that most of the students did not know about DROPS Apps. This result required the researcher to guide the use of DROPS Apps intensively when the apps were used in the class. The researcher needs to give the students clear instructions, give demonstrations, and actively involve them in using the app if they are to successfully integrate the DROPS Apps into the classroom. To make sure that students can navigate and efficiently use the app's resources for vocabulary development, constant supervision, and guidance would be required. The researcher can maximize the potential impact of the app in improving students' vocabulary learning outcomes by addressing the students' lack of awareness and actively supporting their engagement with the DROPS Apps.

For the third question, the researcher tried to ask the participants about their English language ability, especially in vocabulary terms after using DROPS Apps. This question aimed to see the apps' fruitfulness based on participants' vocabulary ability after using the DROPS Apps.

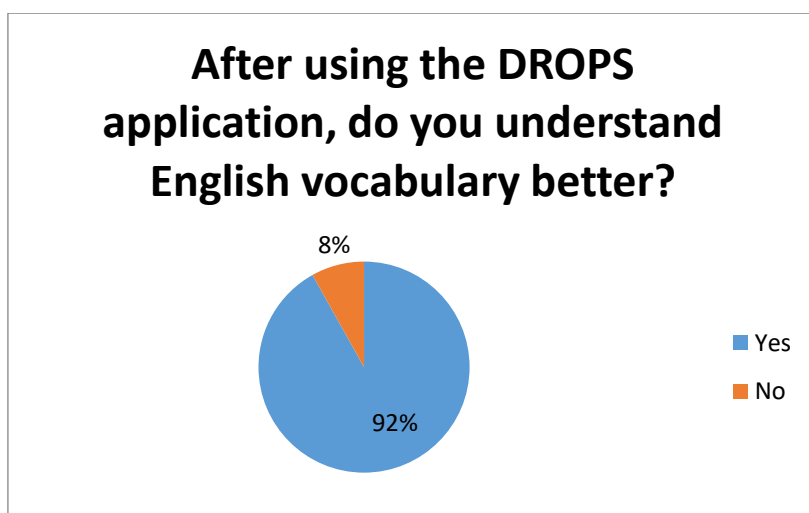


Figure 3. Pie Chart Questionnaire 3

In this question, the researcher found that all of the participants were helped by the DROPS Apps utility in learning English vocabulary. It means that the use of media in teaching vocabulary was effective in increasing the student vocabulary skills, then the use of mobile apps like DROPS simplified learning vocabulary due to the simplicity in utilization.

From these questionnaire results, it may be concluded that the responses of the students or the participants in this research to the utilization of DROPS Apps in learning and teaching had a positive response. Students were helped with DROPS which made the learning vocabulary more interesting and easy.

On the next item, the questionnaire displayed the opinion on Learning English Vocabulary by integrating the DROPS Apps.

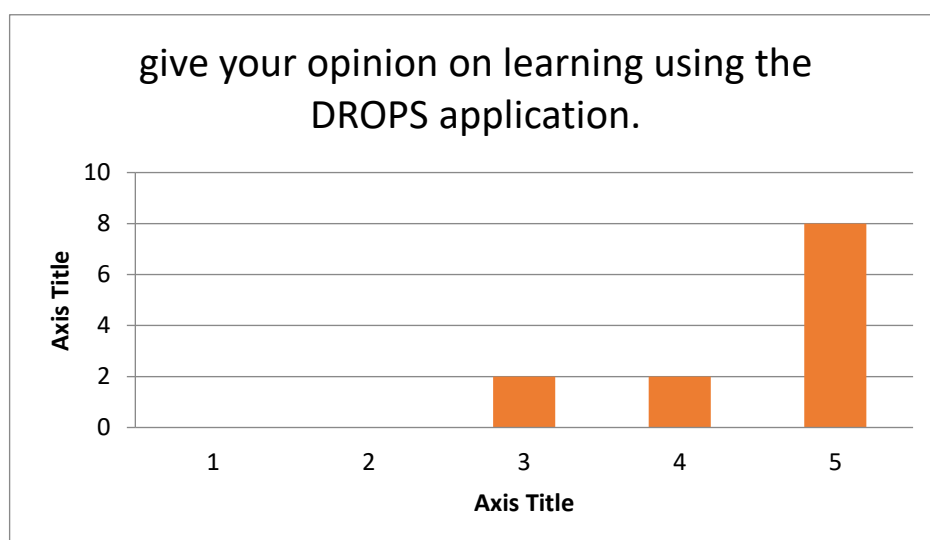


Figure 4. Bar diagram from questionnaire result

In this question, the researcher answered the question about the participant's review after they used DROPS Apps. The result of the question was the students were satisfied with the implementation of the DROPS and also gained positive reviews from the students. It means that the students enjoyed using the apps to assist their English vocabulary skills. The students stated that the use of learning mobile media in teaching and learning vocabulary was good. The apps were easy to use, the good appearance of the apps, and the content included in these apps might be the matrix of the positive review.

On the other side, several students were not satisfied enough with the utility of the DROPS Apps. They argued that the content delivered by the apps and served by the teacher in the class was monotonous. Also, the interface of the app was confusingly made several students needed time to figure out the interface. Teachers conveyed that the material also became a matter for them, the unclear in delivering material and repetitive material might be the reason why several students were unsatisfied with this.

In this study, the researcher observed the school, the teacher, the students, and the English teaching procedure throughout the study. The results showed that the school offered optimal learning environments. The modern amenities and well-kept like Wi-Fi and projectors, however in small amounts. Classrooms provided an ideal setting for enabling lessons. The curriculum at the school was excellent, and there were plenty of materials available for teaching English. The students took an active role and showed excitement for enhancing their English. Overall, the research conducted found that the school offered an ideal environment for effective English language instruction.

During an interview with an English teacher, a researcher made an interesting discovery regarding the use of media, such as TikTok apps, to support teaching and learning English language skills. The teacher explained that incorporating TikTok apps into the English language classroom has yielded positive outcomes. The interactive and visually appealing nature of TikTok videos has captivated students' attention and sparked their interest in learning English. The teacher reported observing increased engagement and participation from students when using TikTok or mobile app media as a learning tool. This finding aligns with Ajisoko, (2020) assertion that media is often employed in teaching and learning activities as aids, materials, and tools for enhancing communication, visual education, and instructional techniques. Building upon this statement, the researcher concluded that both the students and English teachers at the school in question have developed a habit of using mobile-based learning media.

Furthermore, the researcher noted from the teacher's statement that mobile media such as TikTok provides a platform for authentic language exposure. Students have the opportunity to encounter English content created by native speakers and gain exposure to different accents, expressions, and

cultural nuances. This exposure contributes to the development of listening comprehension skills and fosters a more authentic language learning experience.

In addition, the English teacher stated that TikTok can be utilized to enhance various language skills. For example, students can create short videos showcasing their speaking abilities by delivering monologues, dialogues, or even role-playing. They can also engage in collaborative activities, such as creating group projects or challenges, where they communicate and interact in English. This approach promotes speaking and communication skills while encouraging creativity and teamwork

The English teacher's comment makes it clear that teaching English in this school presents several difficulties, particularly in the vocabulary section. The students' poor experience with learning English, which suggests a lack of past knowledge and expertise with the language, is one significant barrier. This may make it more difficult for them to successfully learn and learn new vocabulary words. The issue is further exacerbated by the infrequent nature of English instruction, which takes place only once a week in this school. The constrained instructional time limits opportunities for thorough language instruction and lots of practice, potentially impeding students' advancement in their English language skills, including their vocabulary advancement.

The interview with 10th-grade students from IPA 1 Class also supported by the teacher's statement about English learning noted the difficulties in vocabulary teaching and learning. This is supported by Ardiyanti S et al., (2021) Students with limited vocabulary face difficulties in comprehending the learning content since they lack the necessary words and language skills. As a result, they may struggle to grasp the concepts being taught.

Additionally, they acknowledged having trouble applying and comprehending grammatical concepts, which had an impact on their language usage accuracy. The learners also cited the durational restrictions on English learning in the class as a difficulty. They believed that there wasn't enough time allotted to studying and practicing vocabulary in-depth due to time restrictions.

2. How teaching English Vocabulary by using DROPS Apps Carried out?

To carry the integration of ICT in teaching vocabulary, it was revealed that first, it took two phases to carry out DROPS in the vocabulary teaching in the classroom i.e.

1. preparation phases

The preparation covers identifying the required Competence Base (KD), selecting the Indicators of Achievement of Competence (IPK), and developing the Lesson Plan. In developing a lesson plan, the teacher should adjust the lesson material based on Competence Base, and Indicators of Achievement to emphasize the learning goal. Also, teachers need to synchronize the lesson plan with the DROPS Apps content to maximize the utilization of ICT in teaching vocabulary in the class.

2. The execution phase

This phase is the key to the utilization of integrating ICT into vocabulary teaching. This phase includes the pre-teaching phase, whilst teaching, and post-teaching. In the pre-teaching phase, the teacher needs to prepare everything to engage the teaching in class including

- a. teaching material and Lesson Plan
- b. Teaching media (DROPS APPS)
- c. additional item (internet connection, etc.)

besides that, the teacher needs to prepare the students to install the DROPS Apps on their phones first and make sure that the internet connection is ready to go. To make it simpler and quick, the teacher needs to socialize with the students to install DROPS Apps the day before the lesson is carried on.

In the whilst teaching section, the teacher carried out the DROPS Apps in the classroom and followed the protocol that was already displayed in the lesson plan. Also, the teacher encourages the students to use the apps during the vocabulary lesson.

Teachers in the Post-teaching section need to review the lesson before closing the meeting, giving a preview for the next meeting, and closing the lesson.

- b. How does the student respond to the utilization of DROPS Apps?

To recognize the result of the DROPS Apps utilization in this research, the researcher included the questionnaire as a benchmark in vocabulary learning goals. Based on the questionnaire result, the DROPS Apps was well received by the student as a learning media and also helped them in learning vocabulary. This result is also in line with the previous studies by Najmi & Naserbakht, (2021), and Ajisoko, (2020) that the use of mobile applications like DROPS apps might help students to enhance their English vocabulary skills. Besides that, based on Puspitasari et al., (2022) there are three benefits to using multimedia content like DROPS Apps; 1) Studying through multimedia facilitates the easy acquisition of vocabulary for students. 2) Multimedia learning aids in improving students' vocabulary knowledge. 3) Integrating multimedia with an application actively involves students in the learning process and eliminates boredom.

CONCLUSION

Based on this research that was done by the researcher, to carry on DROPS Apps in teaching vocabulary, it took two phases two to carry out DROPS in vocabulary teaching in the classroom i.e. preparation and execution phases. The preparation covers identifying the required Competence Base (KD), selecting the Indicators of Achievement of Competence (IPK), and developing the Lesson Plan. The execution phase includes the pre-teaching phase, whilst teaching, and post-teaching.

The combination of these results suggests that using mobile applications, like DROPS, helps learners develop their vocabulary. Overall, this study underlines the necessity of creating an appropriate learning environment, properly integrating technology, and resolving language training issues.

Educators can improve English language instruction and support students in their language learning journey by taking these variables into account.

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