

THE INFLUENCE OF VIRTUAL REALITY LEARNING MEDIA ON THE VOCABULARY AND PRONUNCIATION MASTERY OF CLASS VII STUDENTS IN THE ENGLISH SUBJECT OF AN-NISA GUMUKMAS MIDDLE SCHOOL STUDENTS IN 2023

Hatikah Bafadal¹, Endra priawasana², Darsan

¹SMP An nisa Gumuk Mas

^{2,3}universitas PGRI Argopro Jember

Hatikahbafadal@gmail.com endracq@gmail.com darsananafidar@gmail.com

Article History:

Received: Apri;, 5, 2024; Accepted: Mei , 20 2024; Published: June 30, 12 2024

Abstrak

VR learning media in the learning process of mastering students' vocabulary and pronunciation in the long term will help them communicate better in English. This research uses a quantitative cause and effect (causalistic) research method in looking at the relationship of variables to the object under study. The population in this research in class VII children/students, An-Nisa Gumukmas Middle School, Jember, a total of 33 students. In this research, data analysis techniques used inferential statistics, Android-based Virtual Reality Learning Media on Vocabulary Mastery and Pronunciation in English Subjects for Class VII, An-Nisa Middle School Gumukmas 2023 will have a real impact on improving Vocabulary Mastery and Pronunciation skills in learning English

Keyword: Virtual Reality Learning Media Vocabulary Pronunciation



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)

Introduction

One important component in the formation and development of human resources is education. In learning, Vocabulary (vocabulary) and Pronunciation (pronunciation) are very important, especially in studying foreign languages such as English. Students who have good vocabulary and pronunciation will be better at communicating. However, there are often problems in teaching and encouraging students to master Vocabulary and Pronunciation effectively.(Khilda Nistrina Sistem, 2021)

In today's digital era, conventional learning methods such as textbooks and blackboards may no longer attract students. In the midst of technological advances, Virtual Reality (VR) learning media has become an increasingly popular trend in education. Virtual Reality (VR)

combines the real world with virtual elements through the use of devices such as smartphones or tablets, VR allows students to experience different experiences and explore virtual environments. Both of these experiences help students understand and remember information better. To improve students' mastery of vocabulary and pronunciation at An-Nisa Gumukmas Middle School, the use of VR and AR learning media can be an innovative solution. (Mubaraq et al., 2018)

There is not much research that specifically looks at how the use of Virtual Reality (VR) learning media impacts students' mastery of vocabulary and pronunciation at An-Nisa Gumukmas Middle School. Consequently, this research aims to find out how the use of this media impacts students' mastery of vocabulary and pronunciation in junior high school. It is hoped that this research can make a significant contribution to developing more interesting and effective learning methods for students in schools by gaining a deeper understanding of how Virtual Reality can be used as a learning tool. (Helmie et al., 2022)

Therefore, it is hoped that the results of this research can provide practical recommendations for teachers and education employees about how to incorporate VR learning media into the learning process. Additionally, these results will also encourage additional research in this area. It is hoped that students' long-term mastery of vocabulary and pronunciation will help them communicate better in English and prepare them to face the challenges of an increasingly connected world.

Virtual Reality (VR) learning media offers a number of benefits that can have an impact on students' mastery of vocabulary and pronunciation at An-Nisa Gumukmas Middle School. Inventive and engaging technologies such as Virtual Reality have the potential to increase students' motivation to learn because the immersive and interactive experiences offered by this medium can make them more interested in actively participating in learning. Second, VR learning media has the ability to display learning content in a more realistic visual and auditory manner. (Susanto et al., 2022)

Students can improve their vocabulary and pronunciation understanding by displaying 3D objects, virtual environments, or additional information through augmented reality layers. By interacting directly with virtual objects and environments, students can improve their understanding of the meaning of new words and the context in which they are used. They can also increase their sensitivity to the phonetic aspects of pronunciation. The use of virtual learning media and augmented reality (AR) can also enable a more personalized and flexible learning experience. (Rahmawati, 2021)

This technique allows measurement and feedback of student progress in real time. By using interactive components such as quizzes or pronunciation exercises that are graded directly by the system, students can track their own progress, find areas of need, and participate in remedial activities tailored to their own needs.

It is hoped that this research will provide useful insights for parties involved in education, including teachers, school employees, and curriculum developers, by understanding the actual influence of using VR and AR learning media on vocabulary and pronunciation mastery. This research can be used as a basis for implementing virtual reality (VR) learning media effectively in teaching and learning at An-Nisa Gumukmas Middle School. The results of this research can also offer guidelines for building learning methods that are more inventive and appropriate to student needs. Therefore, it is hoped that this research can make a real contribution to the

development of better education and be relevant to technological advances in the modern era.

The condition of An-Nisa Gumukmas Middle School shows that students face special problems in mastering vocabulary and pronunciation. Of the 33 students in class VII, 17 had difficulty learning and mastering vocabulary, and 20 had difficulty improving their pronunciation. One example of difficulty with vocabulary can be difficulty understanding the meaning of new words, remembering and using the correct vocabulary in certain situations, and expanding vocabulary as a whole. This may be because they did not learn much English outside of school or because they did not use interesting and effective learning approaches in building their Vocabulary. However, pronunciation problems include the problem of how to pronounce English sounds that may not exist in the student's native language. These include differences in phonetic systems, intonation, or emphasis on certain words. This can have an impact on students' ability to communicate well and understand the speech of people who speak English.

It is hoped that the use of virtual reality (VR) learning media can help An-Nisa Gumukmas Middle School students overcome difficulties in mastering vocabulary and pronunciation. By utilizing the interactive, visual and auditive features offered by this media, it is hoped that students can be more involved in the learning process, have a more interesting learning experience, and ultimately improve their vocabulary mastery. It is hoped that this research will inform teachers and education employees about how to create VR learning strategies by testing and assessing the influence of VR and AR learning media on students' mastery of vocabulary and pronunciation. Apart from that, the situation of students at An-Nisa Gumukmas Middle School who experience difficulties in vocabulary and pronunciation can have an impact on their motivation and self-confidence in learning English. Students who experience difficulties and lag behind in mastering vocabulary and pronunciation can become less confident and not interested in actively participating in learning.

The inability to master vocabulary well can limit their understanding of English texts, including learning materials and literature used at school. In addition, pronunciation difficulties can impact students' ability to communicate well in English, both orally and in writing. This can be a problem in social interactions, classroom presentations, or everyday communication situations. (Pahlevi et al., 2024)

The use of VR learning media can provide interesting and effective solutions. Students can improve their vocabulary through direct interaction with virtual objects and real-life simulations through immersive and interactive learning experiences. For example, they have the ability to explore virtual environments full of related items and actively take part in exercises that involve using appropriate vocabulary in specific situations. Additionally, students can improve their pronunciation by listening to and repeating the correct sounds, using audio guides, and receiving immediate feedback on pronunciation errors through VR learning media. This technology can increase students' confidence in speaking and understanding English phonetics in a more interactive and fun way (Joshua Lorenzo Andre et al., n.d.)

Virtual Reality (VR) Learning Media is a technology that creates immersive and interactive simulation experiences using devices such as Virtual Boxes or VR Headsets. In VR, users can "enter" and interact with virtual environments that feel real and similar to the real world. Virtual Reality (VR) is a technology that has the potential to change the way we live, work and

interact. VR is a technology that offers immersive and immersive experiences within a digitally created virtual environment.

Using VR devices such as headsets or VR glasses, users can enter a virtual world that is completely separate from the real world. In this VR environment, users can interact with virtual objects, people and environments that look and feel real. (Shraffenberger, 2018) revealed that Virtual Reality (VR) provides an immersive experience and changes the way we interact with the digital world. VR creates a realistic virtual environment and allows users to actively engage in interactions with that digital world. In a VR environment, users can see, hear, and interact with objects and situations that may not be accessible in real life

Vocabulary Siswa

Vocabulary is a collection of words or phrases that are usually arranged alphabetically. (Jones & Chen, 2018) states that Vocabulary is a collection of words that we have heard and read throughout our lives. This means that our vocabulary will never stop developing depending on what we hear or read, the more vocabulary we have, the more we understand what we hear and read, thus increasing our language skills. According to (Lawson & Hogben, 1996) *Vocabulary is a core component of language proficiency and is the basis for determining how well learners can speak, listen, read and write. The more vocabulary we master, the more it will help language learners to use the language in the four language skills, namely speaking, listening, reading and writing. Vocabulary is very important in learning English because learning vocabulary is the main capital for learning sentence construction and other skills in the language.* (Laila Ulsi Qodriani¹, 2017). Without sufficient vocabulary, a person cannot communicate effectively or express all his ideas either orally or in writing. When we cannot improve our vocabulary, we slowly lose interest in learning

Student Pronunciation

Pronunciation in English is a linguistic component that is related to the sounds of language and how to produce these sounds accurately, so that listeners understand the message conveyed. Language sounds are classified into two, namely segmental and supra segmental (Cross, 1991:79). Segmental sounds are language units that are arranged sequentially and supra segmental are sounds that refer to features such as stress, intonation, pitch that accompany the production of segmental sounds. Pronunciation is one component of language which also plays an important role, especially in the use of spoken language. Whether someone speaks English orally can be determined by their ability to pronounce or pronounce words or sentences well and correctly. Pronunciation/intonation/pronunciation is also a challenge for many students. Foreign languages often have sounds that are not present in their native language, and students must train their mouth, tongue, and lips to produce these sounds correctly. Intonation is also important for conveying proper meaning in a foreign language, and students may have difficulty imitating correct intonation

Metodologi

This research uses a quantitative causal relationship research method (causalistic) in looking at the relationship of variables to the object under study, so that in this research there are independent/free (X) and dependent/bound (Y) variables. The population in this research

is children/students class VII, SMP An-Nisa Gumukmas, Jember totaling 33 students for the total population, and all of them became the research sample. In this research the data analysis technique used is inferential statistics, namely, data analysis techniques are more emphasized on the process of broader generalization in the population area, Data analysis in this research used the SPSS for Windows program(Sarmanu, 2017)

Results and Discussion

The level of homogeneity of a research variable can be seen from the results of statistical tests. A variable is said to be homogeneous if the Homogeneity value is > 0.05 . The closer the Homogeneity test value is to one, the better the data value (well distributed). The results of the Homogeneity test can be seen below:

Table 1. Results of Homogeneity Test of Research Data

No.	Variabel	Nilai <i>Signifikansi</i>	Keterangan
1.	<i>Media Virtual Reality</i>	0,085	(aman)
2.	<i>Vocabulary Mastery</i>	0,098	(aman)
3	<i>Pronunciation</i>	0,099	(aman)

The results show homogeneity of the data with a gain of $0.100 > 0.05$, so it can be said that the data has a high level of homogeneity value.

shows the following table.

Table 13. F / F test results Virtual Reality Learning Media Data on Students' Vocabulary and Pronunciation

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	229.302	2	114.651	5.715	.074 ^b
	Residual	1140.164	27	42.228		
	Total	1369.467	29			

a. Independent Variable: Media VR

b. Predictors: (Constant), Vocabulary, Pronunciation

By obtaining the conditional results of $0.074 < 0.08$ (satisfying significance), $F_{count} > F_{table} = 5.715 > 4.18$ (indicating that there is an influence of related variables), it is concluded that H_0 is rejected and H_1 is accepted with a percentage value of successful application of the variables of 81.7%

Discussion

In the discussion of this research, we want to find out the "Influence of Android-based Virtual Reality Learning Media on Class VII Students' Mastery of Vocabulary and Pronunciation in English Subjects for An-Nisa Gumukmas Middle School Students in 2023". With the learning process using Virtual Reality Learning Media, English subjects will certainly have a positive

impact on schools and students.(Hasanah et al., 2022) Positive impacts such as increased enthusiasm for student learning and reduced student inactivity in the learning process have been proven in this research. Under these conditions, schools must continue to pay attention to increasing critical thinking as well as creativity and learning outcomes, especially in understanding students' Vocabulary Mastery and Foreign Language Pronunciation because if students' intelligence and learning outcomes are high, then the school's vision, mission and goals will be achieved to form intelligent people. and have noble character. The results of this research with discussion

According to (Azuma, 1997) Augmented reality as a learning medium can provide an increased learning experience which is based on two theoretical frameworks that work together, first, namely situated learning theory, all learning occurs in a certain context and the quality of learning is the result of interactions between people, places, objects, processes, and culture.(Hariyanto et al., 2023) Second, namely constructivist learning theory, individuals build new knowledge and understanding based on what they already know and believe, which is shaped by their level of development, their previous experiences and socio-cultural background and context. (Arena et al., 2022). So it can be concluded that augmented reality as a learning medium is a structured series of activities where interaction occurs between students, teachers and teaching materials by utilizing augmented reality technology in a conducive learning environment so that it can achieve the expected goals. Augmented reality is considered feasible if it is implemented in learning media, such as research regarding the use of augmented reality applications for electronics subjects, where the highest total score is 100, so it can be classified as adequate and can be implemented as a learning media. (Ahmad Burhanudin, 2017)

Conclusion

Based on research conducted by researchers, the results of research on "The Effect of Using Android-Based Virtual Reality Learning Media on Vocabulary Mastery and Pronunciation in Class VII English Subjects at An-Nisa Gumukmas Middle School in 2023 have a real influence on increasing Vocabulary Mastery and Pronunciation abilities in learning English

References

- Ahmad Burhanudin. (2017). PENGEMBANGAN MEDIA AUGMENTED REALITY PADA MATA PELAJARAN DASAR ELEKTRONIKA DI. *PROGRAM STUDI PENDIDIKAN TEKNIK MEKATRONIKA*, 7(3), 266–274.
- Arena, F., Collotta, M., Pau, G., & Termine, F. (2022). An Overview of Augmented Reality. *Computers*, 11(28).
- Azuma, R. T. (1997). *A Survey of Augmented Reality*. 4(August), 355–385.
- Hariyanto, H., Hikamah, S. R., Maghfiroh, N. H., & Priawasana, E. (2023). The potential of the discovery learning model integrated the reading, questioning, and answering model on cross-cultural high school students' problem-solving skills. *Journal of Education and Learning (EduLearn)*, 17(1), 58–66. <https://doi.org/10.11591/edulearn.v17i1.20599>
- Hasanah, H. N., Wahyuningsih, S., & Palupi, W. (2022). Penerapan Media Pembelajaran Pop-Up Storybook Untuk Meningkatkan Kemampuan Menyimak Anak Usia 4-5 Tahun. *Kumara Cendekia*, 10(2), 144. <https://doi.org/10.20961/kc.v10i2.58664>

- Helmie, J., Nurviyani, V., Ristian, I., Taufik, M. S., & Mulyana, A. (2022). *PELATIHAN IMPLEMENTASI VIRTUAL REALITY (VR) SEBAGAI MEDIA PEMBELAJARAN BERBASIS DIGITAL UNTUK MENGEMBANGKAN KOMPETENSI PEDAGOGIK GURU-GURU SD DI KEC. CIPANAS*. 4(1), 34–40. <https://doi.org/10.29303/jwd.v4i1.170>
- Jones, A., & Chen, L. M. (2018). Journal of Language Teaching and Research. *Journal of Language Teaching and Research*, 9(4).
- Joshua Lorenzo Andre, Handriyantini, E., & Oktavia, C. A. (n.d.). Pengembangan Game Virtual Reality Berbasis Android Menggunakan Unity Sebagai Media Penunjang Pengenalan Bahasa Inggris. *J-INTECH*.
- Khilda Nistrina Sistem. (2021). PENERAPAN AUGMENTED REALITY DALAM MEDIA. *Jurnal Sistem Informasi*, 03(1).
- Laila Ulsi Qodriani¹, M. Y. K. (2017). *GLOKALISASI PEMBELAJARAN_BAHASA_INGGRIS.pdf*. kantor bahasa ropinsi lampung.
- Lawson, M. J., & Hogben, D. (1996). The Vocabulary-Learning Strategies of Foreign-Language Students. *Language Learning* 46, 1(March), 101–135.
- Mubaraq, M. R., Kurniawan, H., & Saleh, A. (2018). Implementasi Augmented Reality Pada Media Pembelajaran Buah-buahan Berbasis Android. *IT Journal*, 6(1), 89–98.
- Pahlevi, N. R., Degeng, M. D. K., & Ulfa, S. (2024). Storybook berbasis augmented reality (AR) meningkatkan hasil belajar bahasa Inggris siswa. *Diglosia: Jurnal Kajian Bahasa, Sastra, Dan Pengajarannya*, 7(1), 1–8.
- Rahmawati, F. (2021). Penggunaan Augmented Reality sebagai Media Pembelajaran Kosakata Bahasa Inggris Siswa Sekolah Dasar. *WEBINAR ABDIMAS*, 4, 645–665. <https://doi.org/10.18196/ppm.42.882>
- Sarmanu. (2017). *Dasar Metodologi Penelitian Kuantitatif, Kualitatif dan Statistika*. Airlangga University Press.
- Susanto, Sasmita, Fahri, H., Nuryansah, Fikri, & Oper, N. (2022). PENGEMBANGAN APLIKASI SMART-BOOK SEBAGAI MEDIA PEMBELAJARAN. *Jurnal MNEMONIC*, 5(1), 64–71.