

**AUGMENTED REALITY APPLICATION TO ENHANCE
UNDERSTANDING OF THE ENGLISH VOCABULARY VOCATIONAL
HIGH SCHOOL STUDENTS**

SKRIPSI



Presented to

IKIP PGRI Bojonegoro
in partial fulfilment of the requirements
for the degree of Sarjana in English Education Department

By:
M. SYAMSUL MUNIR
NIM 21120068

**ENGLISH EDUCATION DEPARTMENT
FACULTY OF LANGUAGES AND ARTS EDUCATION
IKIP PGRI BOJONEGORO
2025**

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2025

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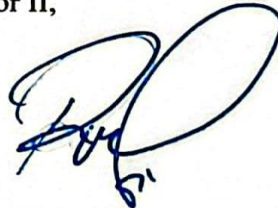
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MOTTO

“Sebesar apapun masalah yang kamu hadapi, tetaplah berusaha hidup”

(Unknown)

“Hidup itu memang tidak adil, jadi biasakanlah dirimu”

(Patrick star)

“Dengar! Semua orang memiliki gilirannya masing-masing . Bersabarlah

Dan tunggulah.itu akan datang dengan sendirinya”

(Gold D.Roger)

“Berusahalah untuk tidak menjadi manusia yang berhasil, tapi berusahalah untuk menjadi manusia yang berguna”

(Alber Einstein)

"This research stands as a testament to the belief that with unwavering determination, guidance from mentors, and support from loved ones, even the most complex paths can be walked, step by step."

"Completing this skripsi was not just an academic goal, but a personal journey of growth, perseverance, and discovering that the process often matters more than the result."

(Reborn_03)

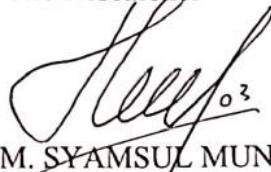
ACKNOWLEDGEMENT

With deep gratitude to Allah SWT for all His mercy and grace, without His help, all this effort would not have been possible and Prophet Muhammad SAW, the role model of all time. This skripsi the researcher dedicates to:

1. My beloved mother, Karsih who has educated and sought education for me, never tired of always praying and providing support to me both in moral, material form and always pouring out unlimited love and motivation. May Allah SWT always give her health and happiness.
2. My beloved father, Rohmad who is now gone but your prayers, encouragement, and advice always live in my every step. Thank you for your love, hard work, and sacrifice. May Allah SWT place you in the best place by His side, this work is a small part of the struggle that you once dreamed.
3. Dr. Refi Ranto Rozak, M.Pd and Mrs. Fitri Nurdianingsih, M.Pd as my skripsi advisors who with patience, sincerity, and dedication have guided the author in the process of preparing this skripsi. Thank you for all the direction, motivation, and knowledge that you have given. May Allah SWT reward all your kindness.
4. My friends Jawir Group, who have been an important part of this journey. Thank you for your laughter, enthusiasm, support, and invaluable togetherness during the lecture period and the preparation of this skripsi. May we all succeed in the paths we choose.
5. All friends in the Class of 2021, especially the English Education Departement at IKIP PGRI Bojonegoro.

6. IKIP PGRI Bojonegoro, which has provided opportunities for writer to learn, develop and shape the writer's personality. Thank you for all the experiences that have been given during the study period.
7. To myself, who has worked hard and endured all the up and down, fatigue, and doubt. Thank you for struggling so far, and not giving up to complete your studies and this thesis. May this achievement be a reminder that you are capable of going through more great things in the future.

Bojonegoro 30 Juni 2025
The Researcher



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STATEMENT OF AUTHENTICITY

I, the undersigned below:

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In order to uphold academic integrity, sincerely and without coercion from any parties, I hereby declare that the skripsi entitled:

AUGMENTED REALITY APPLICATION TO ENHANCE UNDERSTANDING OF THE ENGLISH VOCABULARY VOCATIONAL HIGH SCHOOL STUDENTS.

Is the result of my own original work, and all sources of information used have been clearly cited in the reference list according to the scientific and academic code of ethics. I am aware that if any violations of scholarly ethics regarding to the authenticity of this work are found, **I personally** accept the consequences in accordance with the applicable regulations and am prepared to bear legal sanctions.

onegoro, 17 Juli 2025

M. SYAMSUL MUNIR
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ABSTRACT

Munir, M. Syamsul 2025. *AUGMENTED REALITY APPLICATION TO ENHANCE UNDERSTANDING OF THE ENGLISH VOCABULARY VOCATIONAL HIGH SCHOOL STUDENTS*. Undergraduate Skripsi, English Education Departement, Faculty of Language and Arts Education, IKIP PGRI Bojonegoro. Advisors: (I) Fitri Nurdianingsih S.Pd., M.Pd., (II) Dr. Refi Ranto Rozak, S.Pd., M.Pd.

Keywords: : *Augmented Reality, English vocabulary*

Learning media is one aspect that can support success in the learning process. However, to create good and enjoyable learning, teachers must use appropriate media or strategies, one of which is by using augmented reality-based media in the learning process. This study aims to describe the use of augmented reality media in the learning process in schools to improve students' understanding of English vocabulary carried out at SMK GUS DUR Soko Tuban. To explain the extent to which the use of augmented reality media in improving students' understanding of English vocabulary. Augmented reality is a learning media that utilizes technology that can be done by a group of people at a predetermined time and place, while vocabulary is a component of language that has meaning, in making good and correct sentences in a language we need to improve understanding of vocabulary. researcher use qualitative methods. Data were collected through observation, interviews, and documentation. The population of this study was grade 10 students of SMK GUS DUR Soko Tuban in the 2024/2025 academic year. The results showed that the use of augmented reality media was effective in improving students' understanding of vocabulary.

ABSTRAK

Munir, M. yamsul. 2025. APLIKASI AUGMENTED REALITY UNTUK MENINGKATKAN PEMAHAMAN KOSAKATA BAHASA INGGRIS SISWA SMK. Skripsi Sarjana, Program Studi Pendidikan Bahasa Inggris, Fakultas Pendidikan Bahasa dan Seni, IKIP PGRI Bojonegoro. Dosen Pembimbing: (I) Fitri Nurdianingsih, S.Pd., M.Pd., (II) Dr. Refi Ranto Rozak, S.Pd., M.Pd.

Kata Kunci: *Augmented Reality, kosakata bahasa Inggris.*

media pembelajaran merupakan salah satu aspek yang dapat mendukung keberhasilan dalam proses pembelajaran. Namun, untuk menciptakan pembelajaran yang baik dan menyenangkan, guru harus menggunakan suatu media atau strategi yang sesuai, salah satunya adalah dengan menggunakan media berbasis augmented reality dalam proses pembelajaran. Penelitian ini bertujuan untuk mendeskripsikan penggunaan media augmented reality dalam proses pembelajaran di sekolah guna meningkatkan pemahaman kosa kata bahasa inggris siswa yang dilakukan di SMK GUS DUR soko tuban. Untuk menjelaskan sejauh mana penggunaan media augmented reality dalam meningkatkan pemahaman kosa kata bahasa inggris siswa. Augmented reality adalah suatu media pembelajaran dengan memanfaatkan teknologi yang dapat di lakukan oleh sekelompok orang pada waktu dan tempat yang telah di tentukan, sedangkan kosa kata adalah sebuah komponen bahasa yang memiliki makna, dalam membuat kalimat yang baik dan benar pada suatu bahasa kita perlu meningkatkan pemahaman tentang kosa kata. peneliti menggunakan metode kualitatif. Data dikumpulkan melalui observasi, interview, dan dokumentasi. Populasi penelitian ini adalah siswa kelas 10 SMK GUS DUR Soko Tuban pada tahun akademik 2024/2025. Hasil penelitian menunjukkan bahwa penggunaan media augmented reality efektif untuk meningkatkan pemahaman kosa kata siswa.


PREFACE

First, I would like to express my gratitude to the presence of Allah SWT for all His grace, and guidance. Secondly, salutations to our Prophet Muhammad SAW, so that the author can complete the thesis entitled "AUGMENTED REALITY APPLICATION TO ENHANCE UNDERSTANDING OF THE ENGLISH VOCABULARY VOCATIONAL HIGH SCHOOL STUDENTS" as one of the requirements to obtain a Bachelor's degree in the English Education Study Program, Faculty of Language and Arts Education. For that, the author would like to express her sincere gratitude to:

1. Dr. Junarti, M.Pd., as a Rector of IKIP PGRI Bojonegoro
2. Dr. Cahyo Hasanudin, M.Pd., as the Dean of the Faculty of Language and Arts Education IKIP PGRI Bojonegoro
3. Ayu Fitrianiingsih, M.Pd., as the Head of the English Language Study Program
4. Fitri Nurdianingsih, M.Pd., as the Advisor I who help given patient and completion of this thesis
5. Dr. Refi Ranto Rozak, M.Pd., as the Advisor II who help given patient guidance and completion of this thesis
6. All lecturers of the English Education Study Program and academic staff at IKIP PGRI Bojonegoro who have provided knowledge and assistance during the lecture period.

May Allah SWT grants blessings and ease. This thesis is the result of a long process full of challenges, learning, and reflection. In the process, the author has received a lot of help, support, and encouragement from various parties which is very meaningful and the author realizes that this thesis is far from perfect. Therefore, the author really hopes for constructive criticism and suggestions for the sake of perfecting this thesis. Hopefully this work can provide benefits for readers and interested parties.

Bojonegoro,
The Researcher



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TABLE OF CONTENTS

APPROVAL SHEETS.....	i
LEGITIMATION	ii
MOTTO.....	iii
ACKNOWLEDGEMENT	iv
STATEMENT OF AUTHENTICITY	vi
ABSTRACT	vii
ABSTRAK	viii
PREFACE	ix
TABLE OF CONTENTS.....	x
LIST OF FIGURES	xiv
LIST OF APPENDICES	xv
CHAPTER I INTRODUCTION	1
A. Background of Study.....	1
B. Formulation of the Problems	6
C. Objectives of the Study	7
D. Significances of the Study	7
1. Theoretical Benefits:	7
2. Practical Benefits:	9
E. Definition of Terminologies	10
1. Augmented Reality (AR).....	10
2. Vocabulary Acquisition.....	10

3. High School Students	11
4. Traditional Instructional Methods.....	11
5. Engagement	11
CHAPTER II REVIEW OF RELATED LITERATURE	12
A. Review of Previous Studies	12
B. Theoretical Review	15
1. Augmented Reality.....	15
2. English Vocabulary	20
C. Theoretical Framework	25
CHAPTER III RESEARCH METHODOLOGY	28
A. Research Approach	28
B. Source of Data	28
C. Data Collection Technique	29
1. Observation.....	29
2. Interview.....	31
3. Documentation.....	32
D. Data Analysis Technique.....	32
1. Data Reduction.....	33
2. Data Presentation (data display)	34
3. Conclusion	34
E. Data Validation Technique	35
1. Source Triangulation	35
2. Engineering Triangulation.....	36

3. Time Triangulation.....	36
CHAPTER IV RESEARCH FINDINGS AND DISCUSSION	38
A. Research Findings	38
1. The integration of Augmented Reality applications affect high school students' vocabulary acquisition	38
2. Students' perceptions on the use of Augmented Reality technology in improving their understanding of English vocabulary	44
3. The challenges faced by teachers in implementing Augmented Reality technology in vocabulary teaching, and how these challenges can be overcome	49
B. Discussion.....	54
1. The integration of Augmented Reality applications affect high school students' vocabulary acquisition	54
2. Students' perceptions on the use of Augmented Reality technology in improving their understanding of English vocabulary	56
3. The challenges faced by teachers in implementing Augmented Reality technology in vocabulary teaching, and how these challenges can be overcome	57
CHAPTER V CONCLUSION AND SUGGESTION	60
A. Conclusion	60
B. Suggestion	62
1. For Teachers:	62
2. For Students:	62
3. For Schools:	63

4. For Future Researcher:	63
REFERENCES	64
Appendix 1 Observation sheets	69
Appendix 2 Studens InterviewTranscript Results	71
Appendix 3 Teacher interview transcript Result	74
Appendix 4 Documentation.....	76

LIST OF FIGURES

Figure 2. 1 The Diagram of Thinking Framework	25
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LIST OF APPENDICES

Appendix 1 Observation sheets	69
Appendix 2 Studens InterviewTranscript Results	71
Appendix 3 Teacher interview transcript Result	74
Appendix 4 Documentation.....	76

CHAPTER I INTRODUCTION

A. Background of Study

In the contemporary educational landscape, the mastery of English vocabulary has emerged as a critical component for academic success, particularly within the context of SMK GUSDUR in Tuban, East Java, Indonesia. Students at this institution face significant challenges in acquiring a robust English lexicon, which is essential for their overall language proficiency and academic performance.

The issues surrounding vocabulary learning at GUSDUR can be attributed to several factors. Firstly, many students struggle with the retention and application of new vocabulary due to traditional instructional methods that often rely heavily on rote memorization and passive learning techniques. This approach limits students' opportunities for active engagement with the language, making it difficult for them to internalize and use new words effectively.

To identify these vocabulary learning challenges, preliminary data collection techniques were employed, including surveys and informal interviews with both students and teachers. The surveys aimed to assess students' self-reported difficulties in vocabulary acquisition, while the interviews provided qualitative insights into the instructional practices currently in place. The results indicated that a significant number of students felt overwhelmed by the volume of new vocabulary they were expected to learn and expressed a desire for more interactive and engaging learning methods.

Additionally, classroom observations revealed that students often appeared disengaged during vocabulary lessons, further highlighting the need for innovative approaches to vocabulary instruction. These findings underscore the importance of addressing the vocabulary learning challenges at GUSDUR and exploring effective strategies, such as the integration of Augmented Reality technology, to enhance students' vocabulary acquisition. Vocabulary acquisition strategies are essential in English language learning, as they significantly enhance students' ability to understand and use new words effectively. Research highlights several key points:

1. **Strategy Usage and Vocabulary Size:** A study found that the use of vocabulary learning strategies correlates with an increase in vocabulary size, which is crucial for comprehension. Specifically, a vocabulary of approximately 6,000 to 7,000 words is necessary for understanding over 90% of spoken and written English (Hadrian, 2023). This statistic emphasizes the importance of effective vocabulary acquisition strategies in educational settings, particularly for students who may struggle with language learning.
2. **Impact on Academic Success:** The ability to comprehend and utilize a broad vocabulary directly influences academic performance. Students with a limited vocabulary may find it challenging to engage with complex texts or participate in discussions, leading to lower academic achievement.
3. **Identifying Vocabulary Learning Issues:** In the context of GUSDUR, preliminary data collection methods, such as surveys and interviews,

revealed that many students face difficulties in vocabulary acquisition. These challenges are often exacerbated by traditional teaching methods that do not adequately support active engagement with new vocabulary.

4. Need for Innovative Strategies: The findings from the initial research indicate a pressing need for innovative vocabulary instruction strategies that cater to the diverse needs of students. Implementing effective vocabulary acquisition strategies can help bridge the gap in students' language proficiency and enhance their overall learning experience.

By addressing these issues and incorporating effective vocabulary acquisition strategies, educators can significantly improve students' language skills and academic outcomes. According to the research conducted by Arslan and Tanis (2018), traditional vocabulary instruction methods that rely on rote memorization and passive learning techniques have proven to be not only ineffective in engaging students but also inadequate in supporting long-term retention of the vocabulary learned. This indicates that conventional approaches fail to meet the diverse learning needs of students, particularly in the context of learning English as a second language.

Furthermore, Leacock and Jackson (2012) emphasize the importance of understanding students' linguistic backgrounds when designing effective teaching strategies. Given the linguistic diversity among students, there is a pressing need for innovative and adaptive approaches that can bridge the gap between their native languages and the English vocabulary they aim to acquire. Therefore, this study seeks to explore more interactive and contextual teaching

methods that not only enhance student engagement but also strengthen their understanding and usage of vocabulary in broader contexts

Recent advancements in technology, particularly in the realm of Augmented Reality (AR), present promising avenues for enhancing vocabulary instruction by creating immersive and interactive learning environments that can significantly increase student engagement and motivation (Alkhatabi, 2017). The integration of AR into vocabulary learning not only aligns with the contemporary educational paradigm that emphasizes student-centered learning but also leverages the innate curiosity of students, thereby transforming the learning experience into one that is both enjoyable and effective (Zafeiropoulou et al., 2021). In light of the findings presented by Yuen et al. (2011), it is evident that the integration of Augmented Reality (AR) applications in vocabulary instruction can significantly enhance learning outcomes among middle school students. The contextualized learning experiences offered by AR not only engage students more effectively but also promote a deeper understanding and retention of vocabulary. This is particularly relevant in the middle school context, where students are often transitioning from concrete to more abstract forms of learning.

By utilizing AR technology, educators can create immersive environments that allow students to interact with vocabulary in meaningful ways, thereby bridging the gap between theoretical knowledge and practical application. This innovative approach aligns with the need for more engaging and effective instructional strategies that cater to the diverse learning styles of students. Consequently, this study aims to investigate the specific impacts of

AR applications on vocabulary acquisition among middle school learners, contributing to the growing body of evidence supporting the use of technology in language education.

The implementation of Augmented Reality (AR) in vocabulary instruction holds significant relevance in the Indonesian educational context, where traditional pedagogical methods often prevail. Research has shown that conventional approaches, which frequently rely on rote memorization, fail to engage students effectively and do not cater to their diverse learning needs (Arslan & Tanis, 2018). In contrast, AR technology offers immersive and interactive learning experiences that can enhance student engagement and motivation, which are critical factors in language acquisition (Wang et al., 2021). By integrating AR into vocabulary instruction, educators at GUSDUR can create a more dynamic learning environment that not only captures students' interest but also facilitates deeper understanding and retention of English vocabulary.

Moreover, the urgency of this research is underscored by the increasing demand for effective instructional strategies in English language education, particularly in a globalized world where English proficiency is essential for academic and professional success. As highlighted by Leacox and Jackson (2012), understanding the linguistic backgrounds of students is crucial for developing effective teaching methods. AR applications can bridge the gap between students' native languages and English vocabulary, providing contextualized learning experiences that resonate with their everyday lives. This approach not only addresses the challenges posed by traditional methods

but also aligns with contemporary educational practices that prioritize student-centered learning.

In conclusion, this research aims to explore the potential of AR applications in enhancing vocabulary acquisition among middle school students, thereby addressing the pressing need for innovative instructional strategies in English language education. By investigating the effectiveness of AR technology in this context, the study seeks to contribute valuable insights that can inform teaching practices and ultimately improve student outcomes in vocabulary learning.

B. Formulation of the Problems

The primary problem this research seeks to address is the insufficient understanding of English vocabulary among high school students at GUSDUR, which can be attributed to traditional teaching methods that fail to engage students effectively. Specifically, the research will investigate the following questions:

1. How does the integration of Augmented Reality applications influence the vocabulary acquisition of high school students?
2. What are the perceptions of students regarding the use of AR technology in enhancing their understanding of English vocabulary?
3. What challenges do teachers face in implementing AR technology in vocabulary instruction, and how can these challenges be mitigated?

By addressing these questions, the research aims to provide insights into the effectiveness of AR as a pedagogical tool for vocabulary instruction and to identify best practices for its implementation in the classroom.

C. Objectives of the Study

The primary objective of this research is to evaluate the effectiveness of Augmented Reality applications in enhancing the understanding of English vocabulary among high school students at GUSDUR. To achieve this overarching goal, the research will focus on the following specific objectives:

1. To assess the impact of AR applications on students' vocabulary acquisition and retention compared to traditional instructional methods.
2. To explore students' perceptions and attitudes towards the use of AR technology in vocabulary learning.
3. To identify the barriers faced by teachers in integrating AR into their vocabulary instruction and propose solutions to overcome these challenges.

By fulfilling these objectives, the research aims to contribute to the body of knowledge regarding innovative instructional strategies in language education and to provide practical recommendations for educators seeking to enhance vocabulary learning through technology.

D. Significances of the Study

1. Theoretical Benefits:

This research will contribute to the existing literature on vocabulary acquisition and the use of technology in education by providing empirical evidence on the effectiveness of Augmented Reality (AR) applications in enhancing vocabulary understanding.

- a. **Benefits for Educational Technology:** The findings of this study will enrich the theoretical framework surrounding educational technology by demonstrating how AR can be effectively integrated into language learning environments. It will provide insights into the design and implementation of AR applications, highlighting best practices and potential challenges. This contribution was valuable for educators and researcher seeking to leverage technology to improve teaching and learning outcomes.
- b. **Vocabulary Mastery:** The research will also advance our understanding of vocabulary acquisition processes by illustrating how AR can facilitate deeper engagement with vocabulary. By providing immersive and interactive experiences, AR applications can help students not only recognize and understand new words but also use them in context. This enhanced engagement is expected to lead to improved retention and mastery of vocabulary, which is crucial for language proficiency.
- c. **Learning Motivation:** Furthermore, this study will explore the impact of AR on student motivation in the learning process. By incorporating interactive and visually stimulating elements, AR has the potential to make vocabulary learning more enjoyable and engaging. This increased motivation can lead to a more positive attitude towards language

learning, encouraging students to take an active role in their education and pursue independent learning opportunities.

2. Practical Benefits:

The findings of this research will have significant practical implications for educators at GUSDUR and beyond, as they will provide evidence-based strategies for integrating Augmented Reality (AR) technology into vocabulary instruction.

- a. **Benefits for the School:** The implementation of AR in vocabulary instruction is expected to enhance the overall quality of learning within the school. By adopting innovative teaching methods, GUSDUR can foster an environment that prioritizes student engagement and active learning. This shift not only aligns with contemporary educational practices but also positions the school as a leader in adopting technology-enhanced learning, potentially attracting more students and resources.
- b. **Benefits for Teachers:** For educators, the integration of AR technology offers the opportunity to utilize interactive learning media that can enrich their teaching practices. By incorporating AR into their lessons, teachers can create more engaging and dynamic learning experiences that cater to diverse learning styles. This not only enhances their professional development but also empowers them to become more effective facilitators of learning. Furthermore, the research will provide

teachers with insights into effective practices and potential challenges, serving as a valuable resource for improving their instructional methods.

- c. **Benefits for Students:** For students, the use of AR in vocabulary instruction promises to make learning more engaging and enjoyable. AR applications can provide immersive experiences that enhance students' understanding of vocabulary in context, making the learning process more relatable and meaningful. Additionally, the interactive nature of AR can promote independent learning, allowing students to explore vocabulary at their own pace and in a manner that suits their individual learning preferences. This approach not only improves vocabulary retention but also fosters a positive attitude towards language learning.

E. Definition of Terminologies

In For the purposes of this research, several key terms was defined operationally to ensure clarity and consistency throughout the study:

1. Augmented Reality (AR)

A technology that overlays digital information onto the real world, enhancing the user's perception of their environment. According to Billingham and Duenser (2012), "Augmented Reality is a technology that allows users to see the real world with virtual objects superimposed upon it, providing an interactive experience." In this study, AR will refer specifically to applications designed to support vocabulary learning in English.

2. Vocabulary Acquisition

The process through which learners gain knowledge of words and their meanings, including the ability to understand and use these words in appropriate contexts. According to Schmitt (2010), "Vocabulary acquisition is a complex process that involves both the learning of new words and the development of strategies for using them effectively." This study will focus on both receptive vocabulary (recognition and understanding) and productive vocabulary (usage in speaking and writing).

3. High School Students

Refers to students enrolled in, specifically those in grades 7 to 9 at GUSDUR, Tuban, East Java, Indonesia. According to the Indonesian Ministry of Education (2020), "SMK GUSDUR students are typically aged 12 to 15 years and are in a critical stage of cognitive and social development, requiring tailored educational approaches."

4. Traditional Instructional Methods

Teaching approaches that primarily rely on direct instruction, rote memorization, and passive learning techniques. According to Hattie and Donoghue (2016), "Traditional instructional methods often limit student engagement and do not promote critical thinking or problem-solving skills."

5. Engagement

The level of interest, motivation, and involvement that students exhibit during the learning process. According to Reeve (2013), "Student

engagement is a multifaceted construct that includes behavioral, emotional, and cognitive dimensions, all of which are essential for effective learning outcomes." By establishing these operational definitions with expert insights from the last decade, the research aims to provide a clear framework for understanding the concepts and variables involved in the study. This will facilitate a more focused and coherent investigation into the role of Augmented Reality in enhancing vocabulary acquisition among high school students. The definitions highlight the importance of AR technology, the complexity of vocabulary acquisition, the specific demographic of high school students, the limitations of traditional instructional methods, and the multifaceted nature of student engagement.

CHAPTER II

REVIEW OF RELATED LITERATURE

A. Review of Previous Studies

The results of other relevant research are used as the starting point for this research. The following are some previous studies that the author uses as relevant research. Research conducted by Hassan (2023) which is relevant to