



**TEACHERS' PRACTICES AND
CHALLENGES WITH AUGMENTED
REALITY FLASHCARDS IN TEACHING
ENGLISH VOCABULARY
TO GENERATION ALPHA LEARNERS**



KARINA ALVA RIZQINA
SN. 20522019



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A THESIS

Submitted to Fulfill One of the Requirements for *Sarjana Pendidikan*
Degree in English Education



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Dengan ini menyatakan bahwa skripsi yang berjudul "TEACHERS' PRACTICES AND CHALLENGES WITH AUGMENTED REALITY FLASHCARDS IN TEACHING ENGLISH VOCABULARY TO GENERATION ALPHA LEARNERS" adalah benar-benar hasil karya penulis, kecuali dalam bentuk kutipan yang telah penulis sebutkan sumbernya. Demikian pernyataan ini saya buat dengan sebenar-benarnya.

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c/q. Ketua Program Studi Tadris Bahasa Inggris
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Assalamu'alaikum, Wr. Wb.

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Saya menilai bahwa naskah skripsi tersebut sudah dapat diajukan kepada Fakultas Tarbiyah dan Ilmu Keguruan UIN K.H. Abdurrahman Wahid Pekalongan untuk diujikan dalam sidang munaqasyah.

Demikian nota pembimbing ini dibuat untuk digunakan sebagaimana mestinya. Atas perhatiannya, disampaikan terimakasih.

Wassalamu'alaikum, Wr. Wb

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MOTTO

***“Jika bukan karena Allah yang mampukan,
mungkin aku sudah lama menyerah”***

(QS. Al-Insyirah 5-6)

“It’s fine to fake it until you make it, until you do, until it true”

(Taylor Swift)



ABSTRAK

Meskipun penggunaan Augmented Reality (AR) telah banyak diteliti oleh para peneliti sebelumnya, sedikit penelitian yang secara khusus berfokus pada bagaimana guru mengimplementasikan AR flashcards dalam pengajaran kosakata, terutama untuk peserta didik Generasi Alpha. Penelitian ini bertujuan untuk mengeksplorasi bagaimana guru mengimplementasikan Augmented Reality (AR) flashcards dalam pengajaran kosakata kepada peserta didik Generasi Alpha dan untuk mendeskripsikan tantangan yang dihadapi guru dalam menggunakan Augmented Reality (AR) flashcards untuk mengajar kosakata bahasa Inggris kepada peserta didik Generasi Alpha. Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus yang dilaksanakan di sebuah sekolah dasar di Pekalongan. Partisipan penelitian terdiri dari dua guru bahasa Inggris yang dipilih berdasarkan pengalaman mereka dalam mengajar kosakata dan menggunakan AR flashcards di kelas. Data dikumpulkan melalui wawancara semi-terstruktur dan observasi kelas, kemudian dianalisis menggunakan analisis tematik. Hasil penelitian menunjukkan bahwa guru mengimplementasikan AR flashcards melalui tiga tahap pembelajaran, yaitu perencanaan, pelaksanaan, dan evaluasi. Pada tahap perencanaan, guru menyiapkan materi kosakata dan aktivitas pembelajaran yang sesuai dengan karakteristik peserta didik Generasi Alpha. Pada tahap pelaksanaan, AR flashcards digunakan melalui kegiatan pemindaian terpandu, demonstrasi visual, dan tugas interaktif untuk mendukung pemahaman kosakata peserta didik. Pada tahap evaluasi, guru menilai penguasaan kosakata peserta didik melalui observasi dan kegiatan tindak lanjut. Namun demikian, beberapa tantangan juga ditemukan, seperti kendala teknis, kesulitan pengelolaan kelas, keterbatasan waktu, serta kecenderungan peserta didik terlalu terfokus pada animasi AR. Temuan ini mengimplikasikan bahwa penggunaan AR flashcards memerlukan persiapan yang matang dan pengelolaan kelas yang baik agar pembelajaran kosakata dapat berjalan secara bermakna bagi peserta didik Generasi Alpha.

Kata Kunci: Augmented Reality Flashcards, Pengajaran Kosakata, Peserta Didik Generasi Alpha

ABSTRACT

Although the use of Augmented Reality (AR) has been widely investigated by previous researchers, only a few studies specifically focus on how teachers implement AR flashcards in teaching vocabulary, particularly for Generation Alpha learners. This study aims to explore how teachers implement Augmented Reality (AR) flashcards in teaching vocabulary to Generation Alpha learners and to describe the teachers' challenges in using Augmented Reality (AR) flashcards for teaching English vocabulary to Generation Alpha learners. This study employed a qualitative approach with a case study design conducted in a primary school in Pekalongan. The participants consisted of two English teachers who were selected based on their experience in teaching vocabulary and using AR flashcards in the classroom. Data were collected through semi-structured interviews and classroom observations and were analyzed using thematic analysis. The findings revealed that teachers implemented AR flashcards through three instructional stages: planning, implementation, and evaluation. In the planning stage, teachers prepared vocabulary materials and learning activities suited to Generation Alpha learners. During the implementation stage, AR flashcards were used through guided scanning activities, visual demonstrations, and interactive tasks to support learners' vocabulary understanding. In the evaluation stage, teachers assessed learners' vocabulary mastery through observation and follow-up activities. However, several challenges were identified, including technical issues, classroom management difficulties, time constraints, and learners' tendency to become overly focused on AR animations. These findings imply that the use of AR flashcards requires adequate preparation and classroom management to ensure meaningful vocabulary learning for Generation Alpha learners.

Keywords: Augmented Reality Flashcards, Vocabulary Teaching, Generation Alpha Learners

PREFACE

Praises and gratefulness are sent to Allah SWT who has poured His grace and His love and bestowed me guidance, health, wealth and patience so that the writing process of my research proposal research entitled **“Teachers’ Practices And Challenges With Augmented Reality Flashcards In Teaching English Vocabulary To Generation Alpha Learners”** can be completed. It is submitted to English Education Department, UIN K.H. Abdurrahman Wahid Pekalongan to fulfil one of the requirements of Research Seminar Proposal Course. This proposed study can be accomplished because of many supports from several people. Therefore, in this occasion I would like to express my sincere gratitude to:

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Pekalongan, February 10th 2026

The Researcher

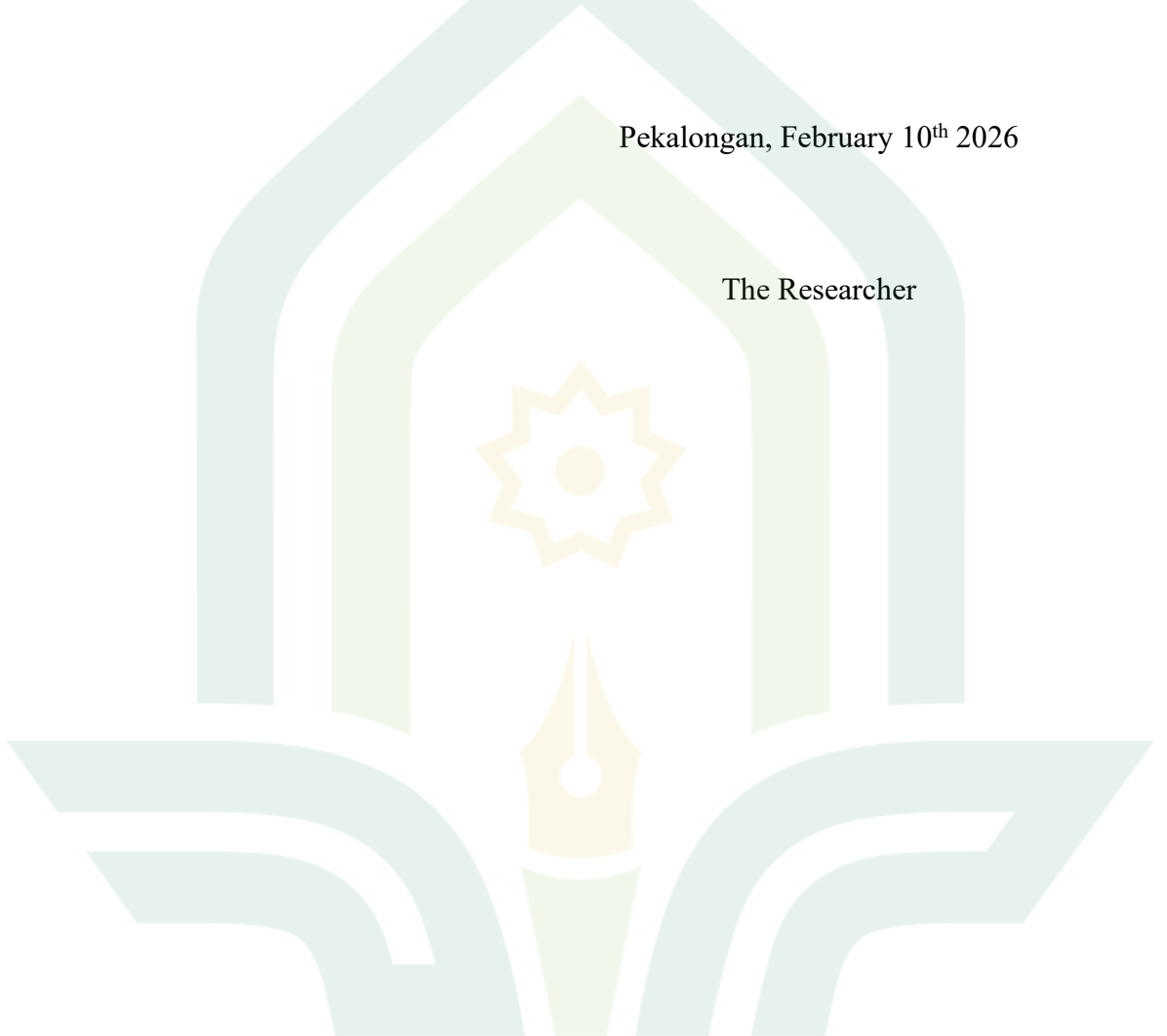


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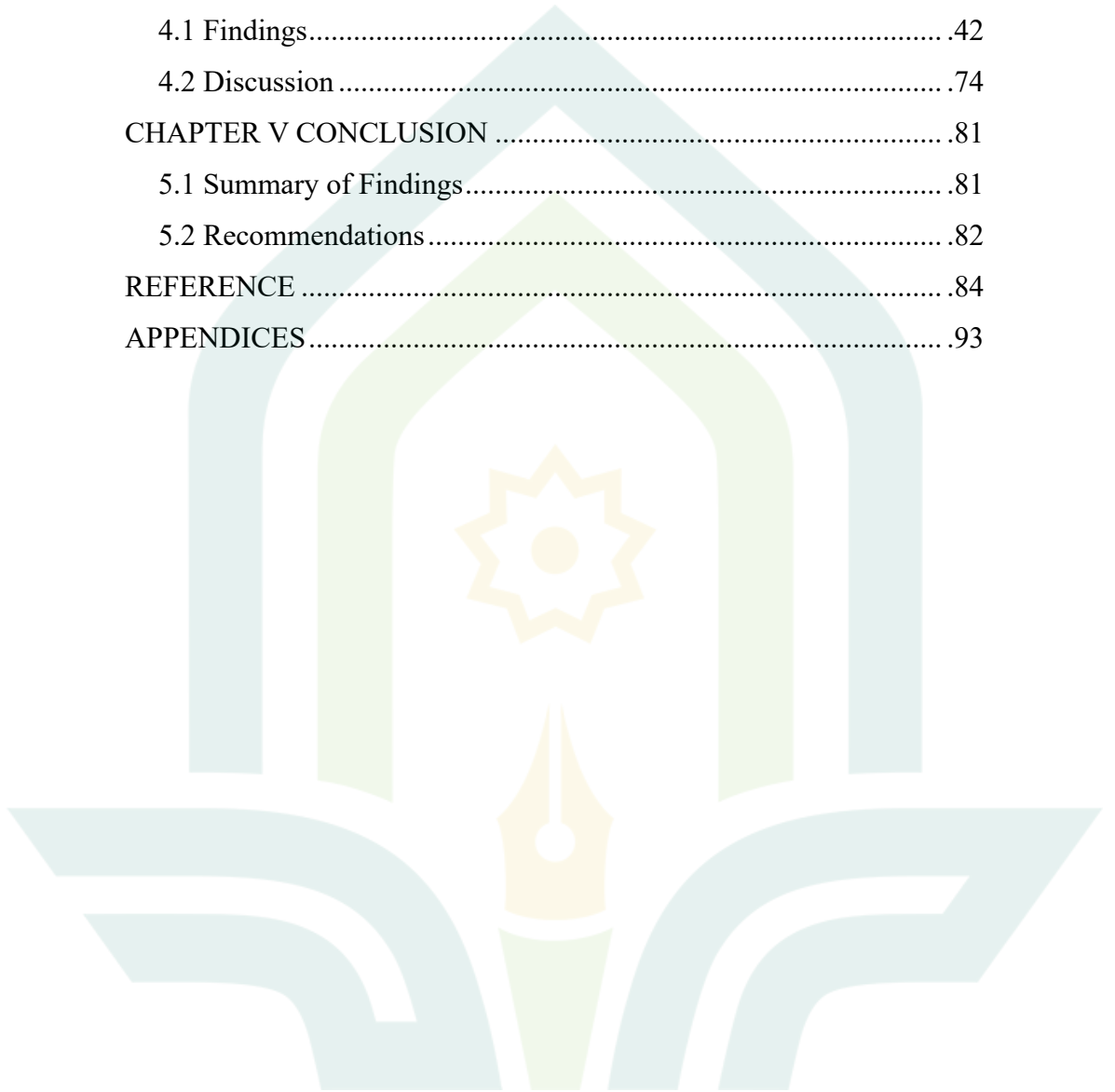
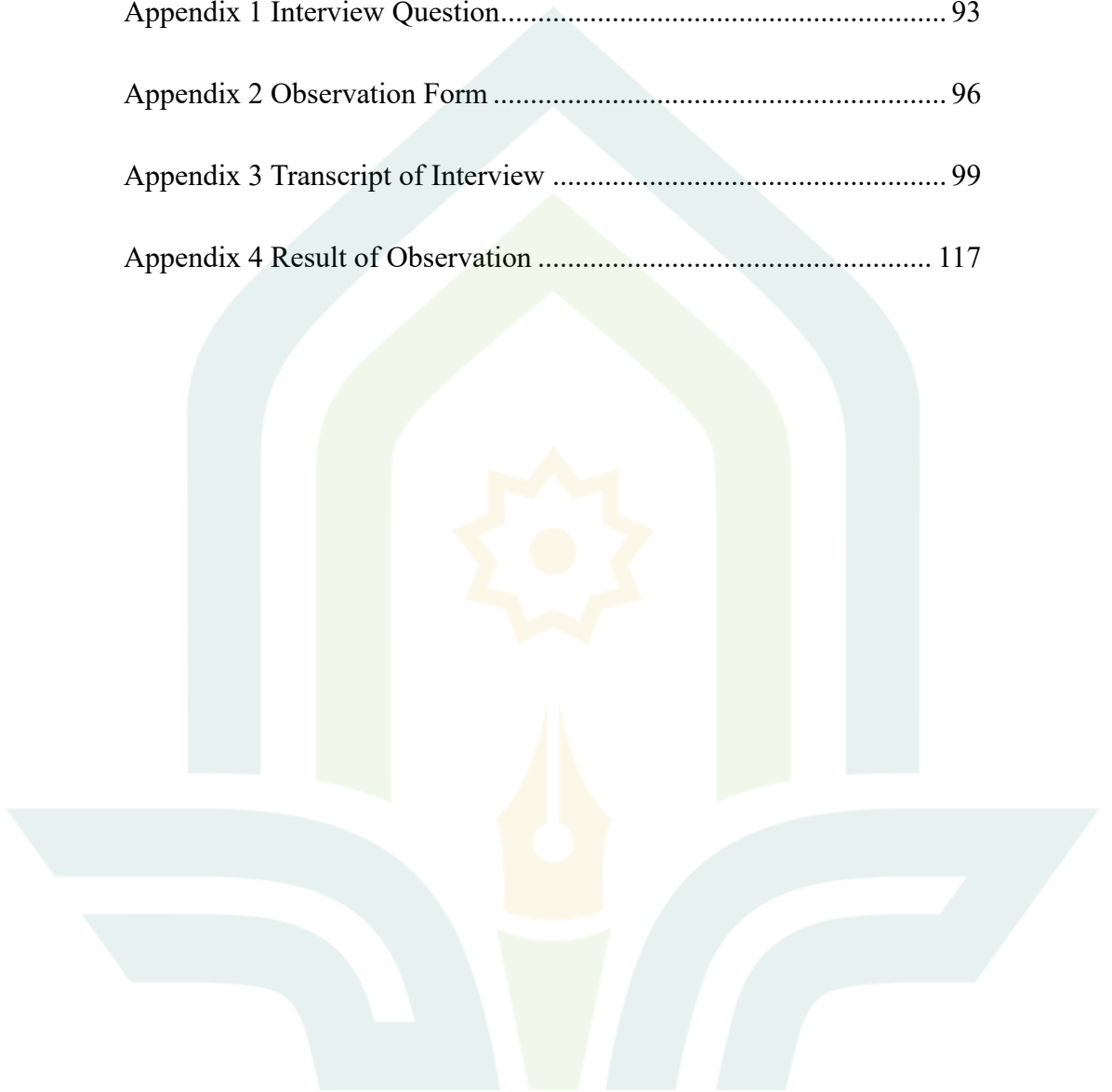


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CHAPTER I

INTRODUCTION

1.1 Background of Study

English vocabulary is an important part of English language learning, particularly for Generation Alpha learners who are growing up in a digital and multilingual environment (Setyoningsih, 2016). Vocabulary enables Generation Alpha learners to express and understand ideas in both oral and written forms as part of their early English exposure (Linse, 2016). It also supports the development of the four main language skills, namely listening, speaking, reading, and writing, which are essential for young learners' language development (Alnatour & Hijazi, 2018). In the context of English as a foreign language, English is taught in more than 100 countries, including Indonesia, making vocabulary learning an important focus from the primary education level (Crystal, 2003). Thus, for Generation Alpha learners who are introduced to English at an early stage, vocabulary mastery becomes the fundamental foundation for learning English across all language skills.

Vocabulary mastery is recognized as a core language element alongside grammar and pronunciation, especially in foreign language learning contexts (Linse, 2016; Susanto et al., 2017). For Generation Alpha learners, sufficient vocabulary knowledge supports their participation in basic classroom interactions, reading activities, and speaking tasks (Hidayati, 2017). As learners who grow up surrounded by digital technology, Generation Alpha learners are accustomed to multimodal input and interactive learning environments, which influence how they process and acquire vocabulary (Gunawan et al., 2024). Early vocabulary development is shaped by environmental exposure and adult input, with concrete nouns commonly acquired more easily than other word types (Bakhsh, 2016). Parents and teachers often introduce familiar vocabulary themes such as animals, fruits, and body parts to support early vocabulary learning. As Hotimah (2010) explains, learners' vocabulary reflects their ability to understand and express ideas in

daily communication. So, vocabulary mastery plays a crucial role in supporting Generation Alpha learners' language development in both academic and everyday contexts.

However, English vocabulary learning among Generation Alpha learners at the elementary school level still faces various challenges. Rahmawati and Dahlina (2024) report that vocabulary instruction for young learners often relies on conventional teaching practices that are less engaging. In the context of Generation Alpha learners, such approaches are less suitable because these learners tend to lose focus when learning activities lack interaction and visual support. Based on initial research involving elementary English teachers, Generation Alpha learners often experience difficulties in remembering and using English vocabulary during classroom activities (Nida, 2025). This condition is influenced by limited vocabulary-learning media, which causes learning activities to rely heavily on memorization and results in low vocabulary acquisition (Nida, 2025). Teachers also report limited access to digital tools and a lack of innovative instructional strategies that align with the characteristics of Generation Alpha learners (Ana, 2025). These conditions indicate the need for more meaningful learning practices. In response, some teachers are interested in initiating innovative teaching practices, such as incorporating more interactive media to support vocabulary development (Dewi et al., 2024). One of the growing innovations today is the use of Augmented Reality (AR) flashcards, which provide an interesting solution to existing vocabulary learning challenges.

To respond to these challenges, teachers are encouraged to adopt instructional media that align with the learning characteristics of Generation Alpha learners. Dewi et al. (2024) explain that interactive media can support vocabulary development by increasing learner engagement. One instructional innovation that has gained attention is the use of Augmented Reality (AR) flashcards. AR flashcards combine physical cards with digital elements such as three-dimensional images, audio, and animations (Valino, 1998). For Generation Alpha learners, AR technology allows vocabulary items

to be presented visually and interactively, helping learners connect words with their meanings (Phakamach et al., 2022). AR-based media also support multisensory learning experiences, which are suitable for learners who are familiar with digital interaction (Sun et al., 2022). Although the use of AR in Indonesian classrooms is still limited due to technological constraints, teacher incomprehension, and curriculum integration challenges (Al-Ansi et al., 2023; Alalwan et al., 2020), So, AR flashcards are considered a promising medium to support vocabulary learning for Generation Alpha learners.

The use of AR flashcards is closely related to the characteristics of Generation Alpha learners. Generation Alpha refers to individuals born between 2010 and 2024 who grow up surrounded by digital devices such as smartphones and tablets (Hidayat, 2022). These learners tend to be curious, confident in using technology, and interested in interactive learning experiences (Lubis & Umardin, 2021). When learning activities do not provide sufficient visual or interactive elements, Generation Alpha learners may lose focus and become easily bored (Suryani et al., 2020). Therefore, integrating digital-based tools such as AR flashcards aligns vocabulary instruction with the characteristics and learning preferences of Generation Alpha learners.

Previous studies indicate that AR flashcards and similar digital tools support vocabulary learning by combining visual and auditory input. Yaacob et al. (2019) explain that flashcards help learners associate vocabulary with images and sounds. AR-based learning tools have been shown to increase engagement and participation among young learners (Mustaqim, 2017; Rusnandi et al., 2016). Studies also report that Generation Alpha learners show higher interest and improved vocabulary retention when AR flashcards are used in classroom activities (Mahendra et al., 2021; Idul & Syaiful, 2024). Aryani et al. (2019) and Dhiyatmika et al. (2015) further highlight that AR technology increases learners' interest during learning. However, teachers often face challenges in implementing AR flashcards, including limited training and classroom management issues (Solak & Cakır, 2015). Alsowat (2016) also

warns that AR-based learning may distract Generation Alpha learners if it is not carefully guided. So, teachers need appropriate preparation to implement AR flashcards in vocabulary learning.

Although many studies have focused on vocabulary learning outcomes using AR, limited attention has been given to teachers' practices and challenges in using AR flashcards specifically for Generation Alpha learners. Teachers play a central role in planning instruction, selecting learning media, and managing classroom interaction (Yaacob et al., 2019). Pedagogical decisions made by teachers strongly influence the success of AR integration in classrooms (Mustaqim, 2017; Solak & Cakır, 2015). Based on reasercher found that the implementation of AR flashcards in classroom practice did not always run smoothly. Although teachers acknowledged the potential of AR to improve vocabulary learning, they also reported many challenges, such as technical issues, internet connection problems, and the need for more teacher training. These findings confirm that the use of AR flashcards requires more than just access to technology it also demands proper support, guidance, and classroom readiness (Nida, 2025; Ana, 2025). Therefore, a deeper investigation of this study is crucial to explore their practices and challenges in using AR flashcards to teach English vocabulary, especially for Generation Alpha learners. The findings of this study are expected to provide practical implications on how teachers deal with their practices and challenges in using AR for Generation Alpha learners.

1.2 Formulation of the Problem

This study seeks to answer the following research questions:

1. How do teachers practice the use of Augmented Reality (AR) flashcards in teaching English vocabulary to Generation Alpha learners?
2. What are the challenges teachers faced in using Augmented Reality (AR) flashcards for teaching English vocabulary to Generation Alpha learners?

1.3 Aim(s) of the Study

This study aims to:

1. To explore how teachers implement Augmented Reality (AR) flashcards in teaching vocabulary to Generation Alpha learners.
2. To describe the teachers' challenges in using Augmented Reality (AR) flashcards for teaching English vocabulary to Generation Alpha learners.

1.4 Operational Definitions

To ensure clarity in this study, the researcher provides the following definitions for key terms related to the topic of augmented reality (AR) flashcards in teaching English vocabulary to Generation Alpha learners:

1. Augmented Reality Flashcards

Physical flashcards enhanced with digital elements, such as images or sounds, that can be viewed using a mobile device to support interactive vocabulary learning (Valino, 1998).

2. English Vocabulary:

The set of English words and expressions that learners acquire to enhance their language skills, specifically in a second language context (Nation, 2001).

3. Generation Alpha:

Children born around 2010-2024, who are familiar with digital technology from a young age and tend to respond well to interactive, tech-driven learning methods (McCrindle, 2021).

1.5 Significance of the Study

The significance of this study can be summarized as follows:

1. Theoretical Significance:

This study contributes to Multimedia Learning Theory proposed by Richard E. Mayer (2001) by showing how learners can understand vocabulary better when visual and verbal information are presented together. The use of AR flashcards, which combine 3D images and words, supports the

idea that multimedia materials help learners build meaning in a clearer and more organized way. The findings add to the existing discussion on how multimedia tools work for vocabulary learning, especially for Generation Alpha learners.

2. Empirical Significance:

This study provides real classroom evidence about how teachers use AR flashcards when teaching English vocabulary. It describes the teaching practices, the steps teachers follow, and the challenges they face during the integration of AR in their lessons. Since only a few studies have explored teachers' actual practices with AR flashcards, this research helps fill that gap and offers useful data for future studies on technology in language learning.

3. Practical Significance:

This study gives practical guidance for teachers and schools who aim to improve vocabulary instruction for Generation Alpha learners. The findings show the benefits and limits of using AR flashcards and give examples of how they can be used meaningfully in the classroom. The study also encourages teachers to try interactive and visually rich materials that match Generation Alpha's learning style. Overall, this research supports more engaging and meaningful vocabulary teaching practices.

CHAPTER V CONCLUSION

5.1 Summary of Findings

This study examined teachers' practices and challenges in using Augmented Reality (AR) flashcards to teach English vocabulary to Generation Alpha learners. The findings showed that teachers carried out the use of AR flashcards through three main teaching stages: preparation, classroom instruction, and evaluation. During the preparation stage, teachers set lesson objectives, selected vocabulary based on the learning topic, and checked the readiness of devices and AR applications. This preparation helped teachers reduce possible technical problems and adjust learning activities to the characteristics of Generation Alpha learners, who are familiar with digital and visual learning environments. The implication of this finding is that careful preparation supports smoother classroom activities and helps teachers respond to both technical and learner-related needs.

During classroom implementation and evaluation, teachers used AR flashcards to introduce vocabulary, model pronunciation, and support learners' practice through visual and audio features. These activities encouraged Generation Alpha learners to participate more actively in vocabulary learning because they matched learners' preference for interactive and multimedia-based instruction. However, teachers found that learners' attention sometimes decreased when learning activities moved from AR interaction to more conventional evaluation tasks, such as worksheets. The implication of this finding is that evaluation activities need to be designed in ways that remain connected to multimedia learning so that learners stay engaged while showing their vocabulary understanding.

In addition to teaching practices, this study identified several challenges faced by teachers, including technical problems, limited devices and infrastructure, classroom management difficulties, time constraints, and challenges in maintaining Generation Alpha

learners' engagement during evaluation. These challenges appeared at different stages of teaching and were closely related to technological conditions, classroom situations, and learner characteristics. The implication of these challenges is that the use of AR flashcards requires not only teachers' instructional efforts but also support from schools, such as adequate facilities, technical support, and opportunities for teachers to improve their skills in using AR-based learning media.

5.2 Recommendations

Based on the findings of this study, several recommendations are proposed for teachers and future researchers.

5.2.1 Recommendations for Teachers

Teachers are encouraged to prepare the use of Augmented Reality (AR) flashcards carefully before classroom practices. This preparation includes selecting appropriate vocabulary, ensuring technical readiness of devices and applications, and planning clear instructional stages that align with learners' characteristics and lesson objectives.

Teachers should also integrate AR flashcards with structured evaluation, such as worksheets, oral reviews, and collaborative guessing games, to reinforce vocabulary learning and check learners' understanding. Providing immediate feedback and clear guidance is essential to support Generation Alpha learners' confidence and focus. In addition, teachers are advised to manage AR use with clear time limits and learning rules to prevent distraction and maintain instructional control.

5.2.2 Recommendations for Further Research

Future research is recommended to explore the use of AR flashcards over a longer period of time to examine learners' vocabulary development more deeply through sustained AR-based instruction. Longitudinal studies may provide insights into how consistent AR use influences learners' retention and language growth.

Further studies may also involve a wider range of educational settings, grade levels, or subjects to broaden understanding of AR practices in different contexts. In addition, future research could focus on teacher training and professional development related to AR integration, as well as explore learners' cognitive processes during AR-based vocabulary learning in relation to Multimedia Learning Theory.

