THE EFFECTIVENESS OF AUGMENTED REALITY (AR) TO IMPROVE VOCABULARY FOR YOUNG LEARNERS AT SDN 1 KARANGAREN PURBALINGGA



AN UNDERGRADUATE THESIS

Submitted to Faculty of Tarbiya and Teacher Training of State Islamic University of Prof. K.H. Saifuddin Zuhri Purwokerto as a Partial Fulfilment of the Requirements for Achieving the Bachelor Degree in English Education (S. Pd.)

by

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ΜΟΤΤΟ

"For indeed, with hardship comes ease"

(Quran 94:5)



DEDICATION

I dedicate this thesis to,

My parents, especially My beloved Mom, Kartisah and My Dad, Windarto;

My dearest brother and sister, Rofiko Daniar & Bela Safitri;

My lovely nephew, Jaenahara Alesa Daniar;

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All of My friend;

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T.H. SAIFUDDIN 7

ABSTRACT

THE EFFECTIVENES OF AUGMENTED REALITY (AR) TO IMPROVE VOCABULARY FOR YOUNG LEARNERS AT SDN 1 KARANGAREN PURBALINGGA

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Abstract: The purpose of this research was to explore the significant effect of Augmented Reality (AR) to improve vocabulary for young learners. The study was conducted on 5th-grade students at SDN 1 Karangaren, Purbalingga in the 2024/2025 academic year. Moreover, the method used in this research was quantitative with a one-group pre-test post-test design. In terms of sampling, the sample selection used purposive sampling. Additionally, as for the research instrument, vocabulary tests were administered in both the pre-test and post-test phases to measure students' vocabulary achievement before and after the AR intervention. These tests were designed to assess student progress and learning outcomes throughout the treatment process. Subsequently, the data analysis was conducted using the Parametric Paired Sample T-Test, which revealed a significant difference between the pre-test and post-test scores. The average score increased from 61.47 in the pre-test to 92.00 in the post-test, thus showing clear improvement in vocabulary mastery. Furthermore, the Paired Sample T-Test confirmed this with a sig. value of 0.000, indicating strong statistical significance. In conclusion, the results confirmed that the use of Augmented Reality (AR) significantly effect in improving vocabulary acquisition among young learners at SDN 1 Karangaren Purbalingga.

Keywords: Augmented Reality; Vocabulary; Young Learners

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CHAPTER I INTRODUCTION

A. Background of the Study

In the era of globalization, mastery of English from an early age is an important key in opening up career, opportunities, and developing cross-cultural communication skills, which will be very valuable in the future. Therefore, English should be learned from an early age, as knowledge acquired during childhood tends to be retained longer in memory compared to that gained during adolescence or adulthood. In educational terms, students in the age range of 5 to 12 years are referred to as young learners (Philips, 2001). Moreover, Krashen (1982) state that learners who are exposed to a second language naturally during childhood tend to achieve higher proficiency compared to those who start as adults. This is attributed to the fact that childhood memories are sharper, making it easier for children to retain and recall what they learn. In addition, according to Gordon (2007) the optimal age for learning a second language is pre-puberty. For this reason, it is crucial to start teaching English at a young age. In Indonesia, English as a foreign language is taught to the students since they are in elementary school. Moreover, Kemendikbudristek (2024), has implemented a new policy mandating that English be taught as a core subject starting from elementary school through junior and senior high school levels. Thus, it is evident that the English subject holds significant importance for students at a young age.

In learning English as a foreign language, particularly for young learners at the elementary school level, vocabulary becomes one of the most essential components that must be emphasized in teaching (Hedge, 2000). According to Liando et al., (2022), vocabulary mastery is very important for students to achieve skills in four language skills, namely listening, speaking, reading, and writing. Without adequate vocabulary mastery, students will have difficulty understanding and developing these skills. However, the process of vocabulary mastery is not easy because each student has different abilities in understanding and remembering new words (Eksanti & Hidayanti, 2022). Moreover, students often face various challenges in the vocabulary learning process, such as difficulties in pronunciation, spelling, and understanding the context of word use (Reskiawan et al., 2020). Therefore, vocabulary mastery represents a significant challenge in learning English at the elementary school level.

Considering the challenges faced by students in vocabulary mastery, this study aims to find practical ways to improve students' vocabulary skills. One effective way to encourage students to acquire English vocabulary is through the use of engaging instructional media. According to Mones (2020), using interactive media helps students better memorize and retain the lessons learned in class. Thus, the engaging instructional media can facilitate students in learning and strengthen students' memory in mastering vocabulary. In this study, technology is incorporated as a learning tool, aligning with Damayanti & Marufah (2022), who suggest that technology effectively supports teaching and learning processes. By the use of technology, this way seeks to transform the learning experience and make vocabulary acquisition more accessible and enjoyable for students.

Recently, building on the potential of engaging instructional media, Artificial Intelligence (AI) has recently emerged as a powerful tool for enhancing vocabulary learning. AI-based platforms enhance vocabulary mastery by providing instant feedback, tracking progress, and enabling selfpaced learning, making the process more interactive and (Yugadhar, 2024). For instance, Duolingo uses AI to customize lessons based on a learner's progress, helping improve vocabulary through fun and gamified activities (Amin, 2021). Then Memrise uses spaced repetition and visual aids to enhance long-term retention of vocabulary (Taki, 2018). Additionally, AI Chatbot simulates realtime conversations, allowing learners to practice vocabulary interactively and in context (Jeon, 2022). In summary, AI-driven platforms like Duolingo, Memrise, and AI Chatbot present positive effects to modernize vocabulary learning by making it more engaging, accessible, and effective, ultimately helping students overcome common challenges.

In addition, another innovative Artificial Intelligence (AI) with great potential for language learning is Augmented Reality (AR). Although AI is frequently utilized in English language education, AR remains relatively underexplored in this field. Moreover, Azuma (1997), describes augmented reality as a technology that overlays visuals, text, or audio onto real-world environments through devices like smartphone cameras. This technology blends real-world images or videos with additional content displayed on a screen. Additionally, Martin et al., (2011), argue that augmented reality is a new technology that probably have an effect on education. The use of AR in teaching English vocabulary has the potential to transform how young learners acquire new words. Furthermore, Augmented Reality (AR) creates an immersive and interactive environment, enabling students to engage with vocabulary in a more meaningful and enjoyable manner (Nugraha, 2023). Previous studies have shown that AR significantly affects students' vocabulary mastery, as evidenced by research conducted by Huang et al., (2016), which demonstrated improved retention and understanding of vocabulary through AR applications. Additionally, a study by Solak (2021) revealed that AR-based learning environments led to higher engagement and increased vocabulary acquisition among elementary school students, proving its effectiveness in language learning.

Based on the previous studies, Augmented Reality (AR) media was proven to have a significant effect on students' vocabulary mastery. However, the use of augmented reality (AR) as instructional media at the elementary school level remains rare. Therefore, this research investigated the significant effect of Augmented Reality (AR) to improve vocabulary for young learners.

B. Operational Definition

It is important to define key terms to determine the direction of research. In this study, there are three key terms that can shape the direction of this study, those are:

1. Augmented Reality

Furth (2011) defines augmented reality (AR) as a form of interactive media that presents three-dimensional objects. The objective of displaying these 3D objects is to create a more realistic experience, allowing users to better visualize and interact with the objects. In addition, Kapp & Balkun (2011) argue that augmented reality (AR) is a primarily real-world environment enhanced by the integration of virtual elements in real time. Furthermore, Ludwig and Reimann (2005) define augmented reality is a form of human-computer interaction that incorporates virtual objects into real-world perceptions, captured in real time through a camera. According to the definitions, it can be concluded that augmented reality (AR) is a technology that integrates digital information with the real world, enriching the user's experience by overlaying virtual elements onto the physical environment.

2. Vocabulary

According to Alqahtani (2015), vocabulary refers to the total number of words needed to convey ideas and express meaning. In addition, Hatch & Brown (1995) add that vocabulary refers to a collection of words for a specific language or the set of words that an individual might use. Similarly, Hornby (2006) explains that vocabulary as all the words a person knows or uses in a particular language. Based on these definitions, vocabulary can be described vocabulary is the set of words required to express ideas and meaning, making it essential for effective communication.

3. Young Learners

Cameron (2001) defines young learners as students aged 5 to 12, typically in elementary school. In addition, Harmer (2002) classifies young learners as those aged 3 to 12, dividing them into very young learners (3-6),

young learners (7-10), and late young learners (11-12). Next, Agassy et al. (2020) also describe young learners as children aged 5 to 12, attending elementary school. In summary, young learners generally refer to children aged 5 to 12 who have received formal education.

C. Research Question

Based on the background of the study above, the research question of this study; Is there a significant effect of augmented reality (AR) to improve vocabulary for young learners at SDN 1 Karangaren Purbalingga?

D. Objective and Significances of the Study

1. Objective of the Study

Based on the research question, the objective of this study is to analyse the significant effect of Augmented Reality (AR) to improve vocabulary for young learners at SDN 1 Karangaren Purbalingga.

2. Significances of the Study

The result of this study is expected to give important information for the readers theoretically and practically. The significances are:

- a. Theoretically
 - 1) This study can help expand existing theories on vocabulary acquisition, particularly regarding the effectiveness of mobile applications in improving students' vocabulary mastery.
 - 2) This study expected to discover the advantages and benefits of augmented reality (AR) features. AR features can involve students in the learning process, help solve real problems in various educational fields, and help improve students' visualization abilities.
- b. Practically
 - 1) For Teachers

This study hoped will provide an alternative and informative way for teachers to improve students' vocabulary mastery through the use of AR.

2) For Instances

This study expected for educational institutions to be able to provide sufficient technological facilities for schools to support the learning process in the classroom, especially AR. This is an ideal technology to implement because it can provide positive feedback about the student's experience and their level of understanding.

E. Structure of the Study

To ensure a structured approach to this research, the study is organized into five chapters, outlined as follows:

Chapter I introduces the study. It covers the background of the study, definitions of key terms, the research question, objectives, significance, the research methodology, and the overall structure of the study.

Chapter II focuses on theoretical aspects, discussing theories on the effectiveness of augmented reality (AR) in teaching vocabulary to young learners. It also includes the conceptual framework, a review of related previous studies, and the research hypothesis.

Chapter III explains the research methodology, including the research design, variables, research site, population, sample, instruments for data collection, techniques for collecting and analysing data, and the validity of the data.

Chapter IV presents the research findings and discussion the effectiveness of augmented reality (AR) in improving vocabulary for young learners.

Chapter V presents the conclusion of the research, provide the limitation of the research, and offering suggestions for researchers and educators.

CHAPTER II LITERATURE REVIEW

This chapter covers the theoretical components utilized in the research, which include the theoretical framework, conceptual framework, previous studies, and the hypothesis.

A. Theoretical Framework

1. The Concept of Teaching Vocabulary

a. Definition of Vocabulary

Vocabulary is one of linguistic aspects that should be learned by all students. Vocabulary is an essential part in learning English because without vocabulary, it is impossible for all students to master English well and the students cannot communicate appropriately. Firstly, Neuman and Dwyer (2009) define vocabulary as the words we need to know in order to communicate effectively, encompassing both expressive vocabulary used in speaking and receptive vocabulary used in listening. Furthermore, Kamil & Hiebert (2005) defines vocabulary in general as the knowledge of words and word meaning. Moreover, Pikulski & Templeton (2004) define vocabulary as the sum of words that are used and understood by students. In learning foreign language, vocabulary plays important role. It is one element that links the four skills of language those are listening, speaking, reading and writing. In order to communicate well in foreign language, students should get an adequate number of words and should know how to use them accurately.

In addition, Thornbury (2002) indicates that vocabulary is not just about get to know the definitions of words. More than that, vocabulary is about getting knowledge of words that allows us to understand and use language effectively. In addition, he believes without vocabulary we cannot communicate. This emphasizes that vocabulary is not just about the whole language, but rather the specific words that are understood and used to communicate. According to the definition provided above, the researcher conluded that vocabulary is a fundamental aspect of language that must be mastered. A strong understanding of vocabulary helps students communicate their thoughts and opinions effectively and supports the development of the four essential language skills: speaking, listening, reading, and writing. The most crucial component of teaching English is vocabulary. Students cannot learn English without a strong vocabulary. After the teaching-learning process is complete, it is crucial that the students be able to apply what they have learned to a variety of real-world situations.

b. Types of Vocabulary

In defining and understanding the vocabulary, it's essential to recognize the different types of vocabulary. Types of vocabulary can be divided into several ideas according to experts. Firstly, according to Harmer (1991) there are two categories of vocabulary: active and passive. Active vocabulary refers to terms that students have been taught and acquired with the intention of using them. The second type of vocabulary is passive vocabulary, which consists of terms that students are likely to encounter but not be able to produce it.

Moreover, Heibert & Kamil (2005) distinguish two types of vocabulary, that are productive vocabulary and receptive vocabulary. Receptive vocabulary is a collection of words that we can assign meaning to when reading and listening. These are common words that we may not be familiar with. On the other hand, productive vocabulary is vocabulary that is usually used when we write or speak. In other words, we tend to use words we like when writing or speaking.

In addition, according to Good (1959) vocabulary divided into four categories, that are speaking vocabulary, writing vocabulary, listening vocabulary, and reading vocabulary. At first, speaking vocabulary comprises words that are actively and vocally used to communicate concepts. Second, writing vocabulary is the list of words that are often

used in written works. Third, listening vocabulary describes words that someone can comprehend when they hear. Last, reading vocabulary are words that can be understood in written when someone reads.

In conclusion, vocabulary development is an essential component of teaching, particularly in settings where a significant proportion of students are English learners. Differentiating vocabulary among the categories can assist teachers in determining which teaching tactics will work best for certain vocabulary words and how much time to devote to their instruction.

c. Teaching Vocabulary

Teaching is the most crucial aspect in learning process. Through the teaching, a teacher assists students to comprehend the material being presented. According to Brown (2007) teaching is "guiding, facilitating, learning, enabling the learners to learn, and setting the condition for learning." This means that teaching involves more than just delivering information; it is about creating an environment where learners can actively engage, understand, and develop their knowledge through appropriate guidance and support.

Vocabulary is the basic ability that should be mastered by the learners. By mastering vocabularies, the learners will make it simple for learners to comprehend the language. If the learners do not understand the meaning of words, they will be difficult to comprehend what they read, see, and learn. According to Napa in Moega (2022) vocabulary is very important in making up language, it is one of the basic elements and that is why no language exists without words. Therefore, teaching vocabulary is very important task in teaching English.

Moreover, Doff in Tuan (2012) identifies four stages in teaching vocabulary including, presentation, practice, production, and review. These stages are described as follows:

1) Presentation

Presentation is a critical initial stage in teaching vocabulary. Thornbury (2002) emphasizes that learners must grasp the meaning and form of new words during this stage. In addition, Gairns & Redman (1986) outline three techniques for presenting vocabulary: visual techniques (like gestures, flashcards, and realia), verbal techniques (like gestures, flashcards, and realia), verbal techniques (including illustrative situations, synonyms, definitions, and contrasts), and translation, which offers a quick way to convey word meanings. Together, these techniques aid learners in understanding vocabulary through visual cues, contextual examples, and translation.

2) Practice

In this stage, students engage in controlled activities to practice the new vocabulary. Thornbury (2002) says that "practice makes perfect", which means that teachers should provide students with vocabulary exercises to give them opportunities to practice and reinforce the new words they've learned.

3) Production

At this stage, students are encouraged to engage in higher-level tasks known as production tasks (Thornbury, 2002). They are expected to create their own products, which helps transform their understanding of words from receptive to productive use, thereby aiding in transferring vocabulary into long-term memory.

4) Review

This stage focuses on reinforcing students' memories. According to Davies & Pearse (2000) reviewing involves applying new concepts to previously learned language, presenting a challenge that calls for creativity and innovation. It produces better results for teaching and learning vocabulary. In the reviewing stage, students have increased opportunities to use the language and receive feedback, which can be facilitated through communicative activities.

Additionally, Nation (1974) emphasizes that there are three key aspects that teachers should focus on when teaching vocabulary. Teachers must instruct students on the shape or form of the words, explain their meanings, and teach the form and meaning simultaneously. Moreover, to enhance students' comprehension and usage of vocabulary, it is essential to employ effective teaching techniques.

d. Technique of Teaching Vocabulary

As stated by Gnainoska in Baihaqi et al. (2019), teaching vocabulary can be truly effective when teachers blend different techniques in their instruction. This means that teachers need to be familiar with various methods to help meet the goals of the teaching and learning process. Besides focusing on the techniques, it's equally important for teachers to carefully choose the vocabulary they want to teach. Selecting the right approach and vocabulary is crucial for achieving the best outcomes in language learning.

There are several techniques for teaching vocabulary. At first, Gairns & Redman (1986) categorize these techniques into two main types: visual techniques and verbal explanations. Firstly, visual techniques rely on visual aids to convey the meaning of new words, which can include realia, pictures, mime, and gestures. On the other hand, verbal explanations involve using spoken language to clarify the meanings of new words, employing methods such as definitions, synonyms, antonyms, and contextual examples.

In addition, according to Firdaus (2018), there are four key phases for teaching vocabulary. The first phase is introducing, where the teacher presents new terms along with their correct pronunciations and definitions using pictures or real objects. The second phase is modelling, where the teacher demonstrates the usage of the words. The third phase is practice, during which students repeat and practice the new vocabulary. Finally, the fourth phase is applying, where students use the vocabulary in real situations with the teacher's assistance.

Lastly, teaching vocabulary is a procedure or a way to force students to acquire words that are supplied by the teacher based on the experts' explanations above. It implies that teaching vocabulary can enhance students' vocabulary skills and help them understand words meaning.

e. Principles of Teaching Vocabulary

There are several key principles that educators must consider when instructing students in vocabulary acquisition. Firstly, according to Graves (2006), there are several principles of teaching vocabulary. First, emphasize the importance of providing rich and varied language experiences, as teachers play a crucial role in the teaching process. Second, it is essential to teach individual words in detail, exploring them from different angles. Third, teacher should focus on imparting wordlearning strategies and methods that students can use independently to enhance their vocabulary. Finally, teacher should incorporate reading and writing exercises to help expand students' vocabularies.

Moreover, Nation (2005) presents six principles for effective vocabulary instruction, offering educators practical strategies to enhance vocabulary learning:

- Clarity and simplicity, teacher should provide clear explanations and avoid overwhelming students with complex definitions.
- Building bridges, teacher should connect new vocabulary to students' existing knowledge by using analogies, patterns, or similarities to familiar words.
- Multisensory engagement, teacher must incorporate both spoken and written presentations of new words, utilizing visuals, roleplaying, or demonstrations to reinforce understanding.
- Utilizing prior knowledge, teacher should focus on teaching words that students already partially understand, enabling them to build on their existing knowledge.

- 5) Highlighting frequency, teacher should emphasize words that learners are likely to encounter frequently, as these are essential for future communication.
- Minimizing confusion, teacher should avoid introducing additional unknown words, such as synonyms or nearsynonyms, when presenting new vocabulary to prevent confusion.

By following those principles outlined, teachers can create effective and engaging vocabulary instruction, ultimately leading to deeper understanding and confident use of language by their students.

f. Vocabulary Mastery

One of the key language skills students need to master is vocabulary, because it forms the foundation of their language learning journey. Having a strong vocabulary is essential for effective communication, as it helps students engage more fully in their studies. Mastery of vocabulary means having the necessary knowledge and skills to read, write, speak, and listen, as well as understand and interpret language in context. The goal of teaching and learning is to give students plenty of opportunities to develop these four language skills, since a solid vocabulary enables them to create meaningful sentences and interact effectively in the target language.

To support the idea above, Nation (2001) suggests that primary school students should aim to master at least the first 1,000 highfrequency words. In addition, McCarten (2007) indicates that the total number of words students need to learn ranges from 12,000 to 20,000, depending on their educational level. Besides, McCarten (2007) emphasizes that mastering vocabulary is primarily about retaining the new words learned. Therefore, it is essential for students to directly see, speak, and write the new vocabulary they have acquired multiple times.

In conclusion, mastering vocabulary involves more than just memorizing words; it also involves repeatedly committing them to longterm memory so they are never forgotten. The more vocabulary that is familiar to students, the faster they will remember it easily. So, when students are able to master vocabulary, they will be able to use written and spoken communication effectively.

2. The Concept of Young Learners

a. Definition of Young Learners

English has now become a universal language of communication. The number of English speakers has grown quickly. Taking English language classes in school is one way to get better at the language. Students in Indonesia learn English starting in elementary school and continuing through high school. This indicates that a large number of adults came to understand the value of teaching English to children at early age. Early age student is typically associated with young learner.

According Philips (2001) young learners refer to children who are in their first year of formal schooling, typically around five or six years old, up to the age of eleven or twelve. Additionally, Linse & Nunan (2005) describe young learners as those aged five to twelve. Nunan (2010) offers another perspective, defining young learners as children between the ages of five and fifteen. Moreover, Scott & Ytreberg (1990) characterize young learners as students who are between five and ten or eleven years old.

In summary, young learners are defined as children aged five to twelve. During this developmental stage, there is a notable variation in language acquisition skills, as some children learn more rapidly than others. This highlights the urgent need for English instruction at the primary school level, and it is essential for teachers to receive training before teaching young learners, given their different levels of English proficiency compared to adults. Understanding the characteristics and capabilities of young learners enables teachers to choose the most effective teaching strategies and activities for their classrooms.

b. Characteristics of Young Learners

As teacher, to optimize learning and support, it is crucial to have thorough knowledge about the learner. It is essential for teachers to be aware of the cognitive, emotional, physical, and educational characteristics of young students as well as to take into account specific issues and perspectives about the ways in which young learners learn and think. According to Harmer (2007) young learners have different features and they learn differently from teenagers, adults, and even older children. This means that each studenrs has unique characteristics that their teachers should be aware of. Therefore, teachers must understand the way their students behave and think.

Teachers should be aware of the characteristics of young learners. As Cameron (2001) points out, children are often enthusiastic and energetic in their learning. They tend to seek approval from their teachers rather than their peers and are willing to try activities, even if they do not fully grasp the reasons behind them. However, they can lose interest quickly and may struggle to stay motivated when faced with difficult tasks. Additionally, young learners often find it challenging to discuss grammar or discourse. Unlike adults, young learners usually feel less embarrassed about speaking in a new language, which can help them develop a more native-like accent.

Furthermore, characteristics of young learners are summed up by Scott &Ytreberg (1990), as follows:

- 1) They tend to understand the meaning of a situation faster than they grasp the language itself.
- 2) They often use their language skills without even realizing it.
- Their understanding is primarily based on the physical world around them.
- They have relatively short attention spans, so it is important to keep them engaged.

- 5) Young learners usually have a positive and enthusiastic attitude toward learning, and giving them recognition can help sustain their motivation and excitement.
- 6) They are often hesitant to admit when they don't know something.

Additionally, MacKey (2006) explains three things differentiate young learners from adults, such as:

- Young learners have a cognitive, social, emotional, and physical development. These developmental factors must be considered, as they can significantly impact a child's motivation and ability to concentrate on tasks.
- 2) While acquiring a second language, young learners also develop their literacy skills and knowledge. They may be learning to read and write in their native language at the same time, which can affect how well they grasp literacy in the second language. In contrast, adult learners typically have more advanced literacy skills when they begin learning a new language.
- Young learners require special attention because they are more sensitive to criticism and the fear of failure.

In summary, there are a few distinctions between the characteristics of young learners and adult learners. Young learners pick things up quickly, but their attention span is short and they grow bored soon. As a result, teacher must have a thorough understanding of the traits of young learners. It will greatly facilitate the process of teaching and learning.

c. Teaching English Vocabulary for Young Learners

Teaching English to young learners requires a deep understanding of their unique characteristics, effective classroom management, and strong language skills. Young learners are special because they are developing their second language abilities during a crucial stage of growth. To successfully teach English as a foreign language in the early age, teachers need to understand their students' needs and development. This requires a skilled teacher who can actively engage in the teachinglearning process. According to Brookfield in Welkener (2008) there are three assumptions of a skilful teacher; first, teachers should use any methods that help students learn; second, they should critically reflect on their teaching practices; and third, they need to stay aware of how students experience their learning and how they perceive the teachers' actions.

Teaching vocabulary to young learners differs from teaching vocabulary to adults. According to Brown (2001), effectively educating young learners requires specific skills and intuitions that differ from those used in adult education. This task can be more challenging because younger learners tend to become bored quickly, struggle with maintaining focus, and have a tendency to forget what they have learned. Therefore, implementing effective learning strategies is crucial for helping students master vocabulary more easily.

Cameron in Bakhsh (2016) emphasizes four key considerations for teachers when instructing young learners who may lack experience, in addition to their knowledge and skills. First, teachers should understand how their students think and learn. Second, they need to identify students' interests and incorporate them into language lessons. Third, teachers should focus on enhancing their young learners' literacy in English through comprehensive oral instruction. Lastly, it is important for teachers to recognize the challenges and difficulties may encounter while teaching the language.

In relation to Wilar (2022) English teachers must employ a variety of methods, approaches, and media to meet the diverse needs of their students in order to achieve learning objectives. Consequently, teachers should tap into their creativity to select suitable teaching methods and instructional media for the learning process. Additionally, Scott & Ytreberg (1990) highlight that young learner possess an incredible ability to absorb language through play and engaging activities, making learning enjoyable. Moreover, teaching for young learners, particularly at the elementary school level, differs from instruction at the junior or senior high school levels due to the unique characteristics of children. Therefore, teaching English vocabulary should be conducted in a fun and engaging way.

3. The Concept of Learning Media

a. Definition of Learning Media

In the field of education, the term 'media' refers to learning media. According to Newby et al. (2000) learning media is anything that can carry messages for achieving learning objectives. The primary goal of utilizing learning media is to enhance communication and improve learning outcomes. In addition, Gagne & Reiser in Kristanto (2016) describe instructional media as the physical means through which instructional messages are communicated. Furthermore, Gagne & Briggs (1979) define learning media as tools that are used to deliver the content of educational materials. These tools can include books, tape recorders, cassettes, videos, video recorders, films, slides, photographs, drawings, graphics, television, and computers. In essence, media serves as a vital component of learning resources, acting as physical vehicles that carry instructional content in the student environment, therefore stimulating students to engage in learning.

Brown, in Kristanto (2016), highlighted that the learning media employed during educational activities significantly impacts the overall effectiveness of the learning process. In addition, according to symbol systems theory as wrote by Salomon (1979) states that media have an effect in learning. Furthermore, He further asserts that the effectiveness of media is contingent upon its alignment with the students, the content, and the tasks. Consequently, teachers should develop comprehensive learning strategies prior to implementation and incorporating learning activities, methods, media, and the timing for these media activities. Based on the definitions, it can be concluded that media serves as a tool for delivering learning material. This tool can take various forms, including graphic, visual, electronic, and audio resources, all designed to facilitate the communication of information to students, making it easier and clearer for them to understand.

b. Types of Learning Media

There are several different types of media. Bretz, as mentioned in Yafrizal et al. (2018), identifies media types based on three fundamental elements: sound, visuals, and movement. Using these elements as a framework, Bretz classifies media into eight categories: such as: 1) audio media, 2) print media, 3) still visual media, 4) moving visual media, 5) semi moving audio media, 6) semi-moving media, 7) silent audio-visual media, 8) moving audio visual media.

Afterwards, Gerlach & Elly in Kristanto (2016) classify media based on their physical characteristics into eight types, such as:

- Actual objects (reality), these include real people, events, items, or specific things.
- Verbal presentation, this encompasses printed media, words displayed through slide films, transparencies, writing on blackboards, magazines, and sticky boards.
- 3) Graphic presentations, these consist of charts, graphs, maps, diagrams, paintings, posters, cartoons, and caricatures.
- 4) Still portrait (still picture), these are images captured from various objects or events, which can be presented through books, film strips, slides, or magazines/newspapers.
- 5) Film, this refers to motion pictures, such as films or videotapes recorded from actual objects or events, including animated films.
- 6) Audio recorder, these are sound recordings that include only verbal language and musical sound effects.

- 7) Program, also known as programmed instruction, this includes a structured sequence of information whether verbal, visual, or audio-designed to elicit a response from the learner. Some of these programs are prepared and programmed via computer systems.
- 8) Simulation, this type imitates a situation that is deliberately enacted to resemble real-life scenarios. For example, a driver's behaviour while driving can be demonstrated on a video or film screen.

By understanding the classification of learning media, teachers can more easily choose the appropriate tools when planning lessons to meet specific objectives. The selection of media that aligns with learning goals, content, as well as the students' abilities and characteristics, will significantly enhance the efficiency and effectiveness of both the learning process and its outcomes.

c. Principles of Learning Media

According to Gerlach & Elly in Utaminingsih, (2013) to selecting appropriate learning media requires teachers to consider students' characteristics that directly influence the learning process. These characteristics include verbal abilities, visual and auditory perception skills, prior experience, intelligence, motivation, personality, and social skills.

In addition, Brown et al., (1977), outline six principles that teachers should consider when selecting learning media, such as:

1) Content

The media should be closely related to the lesson. It's important that the chosen media aligns with the lesson or message being taught to the students. 2) Purposes

Learning media should significantly enhance the teaching and learning process. This means that the media should actively support and improve the educational experience.

3) Price

Teachers should evaluate whether the cost of a specific visual aid is justified by the learning outcomes it is expected to achieve before making a purchase.

4) Circumstance of use

When selecting visual aids, teachers should take into account the classroom environment. It's essential to consider whether the learning media will be effective in that specific setting.

5) Learners' verification

Teacher should confirm that the learning media has been tested with similar students beforehand. Additionally, it's important to ensure that the media has been evaluated at an appropriate educational level.

6) Validation

Teacher must ensure that the learning media has been proven to be effective for use in the teaching process.

In the conclusion, based on the six principles regarding learning media above, it would be good for teachers to follow these principles, so that the use of learning media can be carried out more effectively and learning objectives can be achieved appropriately.

4. The Concept of Augmented Reality

a. Definition of Augmented Reality

These days, one of the technologies with a lot of promise for education is augmented reality, particularly in terms of visualizing abstract ideas. Experts have defined augmented reality in a number of ways. Firstly, Zhou et al. (2008) state that the ability to combine virtual and real-world things is provided by this system. As a result, it looks like virtual objects and the real world coexist in the same space. It is not limited to the sense of sight; augmented reality can also include other senses such as touch, smell, hearing, and hearing. Augmented reality offers an ideal mix of virtual and real-world content.

Furthermore, Chen & Tsai (2013) state that augmented reality enables for interaction with two-dimensional or three-dimensional virtual objects that are integrated in a real-world environment. With the help of equipment such as webcams, computers, android phones, and special glasses, this technology can enter certain information into the virtual world and display it in the real world. Besides, augmented reality according to Furht (2011) is a combination of real and virtual objects that are interactive because they utilize three-dimensional aspects. Interactive media will make it easier for students to understand what the teacher is teaching and encourage their creativity.

In summary, from the definitions above augmented reality can be described as a tool system that enables a user to observe one or more virtual items in real-world settings.

b. Types of Augmented Reality

Augmented Reality (AR) provides an immersive and interactive learning experience by combining digital elements into the real world. In the world of education, augmented reality offers various types of learning media that can increase student engagement and understanding. According to Wojciechowski & Cellary (2013) there are three types of augmented reality including, marker-based, marker-less, and locationbased.

1) Marker-based

Marker-based AR is one type of augmented reality that overlays virtual things on the real world by identifying and following unique marks or patterns in it. These markers are usually visual images or codes such as QR codes or custom images, which can be recognized by an AR device. When the device detects the marker, it processes and adds digital elements to the live view of the real world, such as 3D models.

2) Marker-less

As the name implies, marker-less (AR) does not use markers, such as pictures or QR codes. Rather, by analysing the information gathered by the sensors, it positions the digital objects. Marker-less (AR) allows for the integration of virtual objects, whether in two or three dimensions, into a real-world environment without the need for a specific marker to function.

3) Location-based

Location-based augmented reality (AR) is a technology that uses geographic information to add digital content to the real world based on the user's location. Location-based AR extends digital information into the physical environment based on the user's location. It does this by using technologies such as GPS, Wi-Fi, or cellular data to determine the user's position and orientation.

Lastly, by understanding these types of augmented reality, teacher able to choose the type that best suits for students' needs and learning goals. Furthermore, choosing the right type of AR learning media depends on the learning objectives, device availability, and the skill level of the teacher and students. By understanding the types of AR learning media, teachers can choose and use AR effectively to improve the quality of learning in the classroom

c. Procedures of Using Augmented Reality (AR) Media

In this study, researcher use the Animal 4D+ application and Arloopa application as learning media to increase students' vocabulary mastery. In addition, both applications are based on Augmented Reality (AR), which allows students to interact with virtual objects. With the help of this technology, students can learn new vocabulary through visual and interactive experiences, which aim to increase students understanding and memory of English words.

1) Animal 4D+ Application

Animal 4D+ is an application based on Augmented Reality (AR) technology that presents an interesting and interactive learning experience for students. With the help of AR technology, animal images come to life on the device screen, allowing students to explore the animal world directly through their smart devices. In addition, Saidah (2020) stated that Animal 4D+ is an animal recognition application that utilizes AR technology. This application uses markers in the form of animal cards as an intermediary to display 4D animations to users according to the animal cards highlighted by the user's camera. The steps to operate the Animal 4D+ application are as follows:

- a) Download and Install the Application
 - Animal 4D+ application can be downloaded from the Google Play Store or App Store. After downloading, install it on the device.
- b) Open the App and Grant Permissions

Once installed, open the application. Then grant the necessary permissions for camera and storage, as the AR feature requires these.



Figure 2.1 Front View of Animal 4D+ Application

c) Access Animal Cards

The Animal 4D+ provide animal cards with images. In addition, these cards can be printed or scanned directly from a screen.

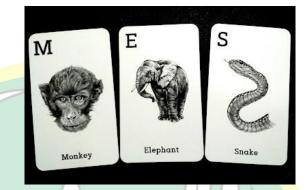


Figure 2.2 4D+ Animals Application Cards d) Scan the Card with the Camera

Next, open the AR feature in the app, and point the camera at the animal card. Then 3D model of the animal will appear on the screen in augmented reality.

e) Interact with the Animal Model

In addition, users can rotate or zoom the 3D model by swiping the screen or moving the device. This application also allows the animals to perform animations or make sounds. Furthermore, 4D+ animals' application also provides change into another language. Lastly this application conducted a feature to take photos or videos of the AR animals.

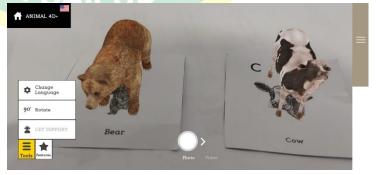


Figure 2.3 Animal 4D+ Application's Interface

f) Access Educational Information

Lastly, Animal 4D+ is accompanied by additional information, such as species descriptions, habitats, and interesting facts.



Figure 2.4 Additional Detail Information Features in the Animal 4D+ Application

2) Arloopa Application

The Arloopa application is an AR visualization tool that combines the physical and digital worlds. It places virtual content in a real environment, creating fantastic, interactive, and valuable experiences. Furthermore, Rohman et al. (2024) said that Arloopa application can be utilized in learning media to enhance the delivery of educational materials through augmented reality experiences, potentially improving student engagement and understanding.

The procedures for using the Arloopa application are as follows:

a) Download and Install the App

Firstly, go to the Google Play Store (for Android) or App Store (for iOS). In addition, search for Arloopa and download the app. Then install it on user device.

b) Open the App and Grant Permissions
 Then launch the app after installation. Grant permissions
 for camera and storage access when prompted. These are
 needed for the AR experience.

c) Choose AR Mode

After opening the app, select the AR mode that want to use. Options usually include AR camera: Allows user to place 3D objects in user environment using user device's camera. Image Recognition: Enables user to scan images or markers to trigger AR content.

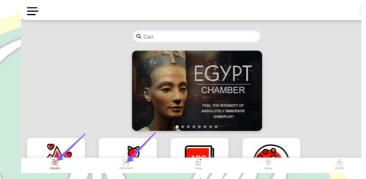


Figure 2.5 AR Mode in Arloopa Application

d) Select 3D Objects or Characters

Furthermore, browse through the app's library of 3D models, animations, and characters. Select the object or animation user want to place in user's environment.

e) Position the AR Object

Next, point the camera at a flat surface or the target area where want to place the AR object. The object will appear on users' screen, and user can adjust its position by dragging it.



Figure 2.6 Arloopa Application's Interface

f) Capture Photos or Videos

Subsequently, use the in-app camera function to take photos or record videos of the AR objects interacting with the real world. These can be saved to user's device or shared on social media.



Figure 2.6 Arloopa Application's Photo/Video Feature Access Additional Features

Finally, the app may offer extra features such as, virtual tours and educational content depending on the selected objects or experiences.



Figure 2.7 Arloopa Application's Additional Features

d. Advantages of Augmented Reality

g)

These days, augmented reality (AR) is a technology that has a lot of potential for use in education, particularly for visualizing complex topics. Martin et al. (2011) claim that Augmented Reality (AR) is a new technology that will probably have an effect on education. Rather of using the conventional approach, which involves teachers using usual items, AR offers a novel way to enhance the understanding of threedimensional shapes. According to (Cerqueira & Kirner (2012) augmented reality (AR) offers several advantages for educational purposes, including:

- AR provide comprehensive visualizations and animate objects, which helps reduce misconceptions that arise from students' difficulties with conceptual visualization.
- AR has the capability to visualize thoughts and objects at both macro and micro scales, revealing details that are typically invisible to the naked eye.
- AR allows for the display of objects and concepts from various perspectives, which improves students' understanding of the subject matter.

Furthermore, Saidin (2015) also states that using augmented reality (AR) in education provides a number of advantages. These include the following:

- 1) AR allows for smooth interaction between real and virtual environments, providing a hands-on way for students to manipulate objects.
- Provide teachers a valuable tool to enhance students' comprehension by adding virtual notes and illustrations to physical props.
- AR creates a learning experience that connects with the formal classroom, enabling students to continue learning outside of school hours and beyond the classroom.
- 4) Enables for the visualization of ideas using both 2D and 3D images, including animated dynamic visuals.

In conclusion, the use of augmented reality in education offers significant advantages for both students and teachers. As highlighted, AR enhances student engagement by providing interactive content that boosts their motivation and helps them retain information more effectively. For teachers, AR simplifies the delivery of complex material by offering realistic and detailed visual representations, making it easier to explain and clarify concepts. This blend of improved learning and teaching experiences underscores the value of AR in modern education.

e. Disadvantages of Augmented Reality

While there are numerous benefits that augmented reality offers in educational settings, researchers have also discovered certain disadvantages. In the first, according to Chang et al. (2014) point out that one of the major disadvantages is the difficulty some students face in using the technology. This suggests that some students lack the necessary skills to engage effectively with augmented reality, especially in learning environments. Their limited technical abilities make it challenging for them to navigate and develop AR-based media, leading to frustration and a steep learning curve. Moreover, Talan et al. (2022) argue one of the key disadvantages of augmented reality is its high cost. Many AR-based applications require payment to access their full range of features. As a result, teachers may need to invest their own money to incorporate augmented reality into their classrooms

In summary, Augmented Reality (AR) is an innovative learning media that offers interactive and interesting experiences for students. However, like other learning media, AR has several weaknesses that need to be considered. In addition, the weaknesses of AR can be avoided if teachers selectively choose the media to be used. Apart from that, teachers must also master AR media before applying it in learning. Teachers need to understand how AR works, how to create AR content, and how to use AR in learning effectively. With careful consideration and preparation, the weaknesses of AR can be minimized and AR can be an effective learning tool for increasing student engagement and understanding.

B. Previous Studies

- 1. The first study stated by Nursabra (2021) titled "Enriching Students' Vocabulary by Using Augmented Reality Media at RA Perwira 1 Lipu," aimed to determine whether Augmented Reality (AR) media could enhance young learners' vocabulary. The results clearly indicated that the use of AR media effectively enriched students' vocabulary, as evidenced by a significant increase in the mean post-test scores compared to the pre-test scores. The similarity between Nursabra's research and the present study lies in the shared focus on using augmented reality media to teach English vocabulary. However, the key difference is in the research subjects: Nursabra's study involved kindergarten students, while the current study focuses on elementary school students.
- 2. The other study entitled "The Use of Augmented Reality Media to Enhance Students' Vocabulary Mastery of 7th Grade Students at SMPN 7 Tarakan" by Natalia (2022). focused on determining the impact of augmented reality (AR) on students' vocabulary acquisition, particularly in describing animals. The findings indicated that AR was effective in significantly improving students' vocabulary mastery. The similarity of this current study with Natalia's study is about the same theme in developing learning media to help teaching of English vocabulary by implementing augmented reality application. However, the key difference is the target population; Natalia's study focused on junior high school students, while this current research involves elementary school learners, highlighting the varied age groups and educational contexts in both studies.
- 3. The third study entitled "Developing BING Augmented Reality as Learning Media for Teaching Descriptive writing Text" by Aryani (2022). The goal of Aryani's study was to see the feasible of BING Augmented Reality as learning media in teaching and learning descriptive text. Moreover, the result of Aryani's study showed the BING Augmented Reality application for teaching descriptive text writing skills is considered very suitable for use, the product feasibility score percentage is 88.6%. The similarity of this

current study with Aryani's study is about the same theme in using augmented reality as learning media to in teaching of English. The difference is existed in term of subject, the research subject of Aryani's study was junior high school, while the research subject this current study is elementary school students. In addition, the research method also different, Aryani's study was used R&D research method, meanwhile this current study will be use quantitative method with experimental design. Last, in Ayani's study the augmented reality media was used to teaching writing abilities, while in this study the augmented reality media uses in teaching English vocabulary.

- 4. Fourth study entitled "Keefektifan Media Pembelajaran Augmented Reality Ditinjau dari Minat dan Hasil Belajar Matematika Siswa Kelas V SDN 1 Toyareka Kabupaten Purbalingga " by Khasanah (2020). The purpose of this study was to test the effectiveness of Augmented Reality learning media reviewed from the interests and mathematics learning outcomes of the material on spatial nets of class V students. Furthermore, this study proven that there were differences in the mathematics learning outcomes of class V students between those who use Augmented Reality media and those who use conventional learning. The similarity of this current study with Khasanah's study is about the same theme in using augmented reality as learning media in teaching process at elementary schools. While the difference lies in the subjects taught, Khasanah's study is mathematics, on the other hand this current study is about English subject.
- 5. Fifth study entitled "Pengaruh Pemanfaatan Media Augmented Reality Terhadap Minat Belajar Siswa Pada Mata Pelajaran Tematik Siswa Kelas IV Tema Peduli Terhadap Makhluk Hidup di SDN 07 Kota Bengkulu" which written by Jannah (2020). This study aims to examine the effect of using Augmented Reality (AR) as a learning media on students' interest in science subjects in Grade IV students. The results demonstrated that AR had a positive effect on increasing students' interest in learning science. The similarity between this study and Jannah's research lies in the shared focus

on using AR as a learning medium in elementary school teaching. However, the key difference is in the subject matter; while Jannah's study focused on science, the current study explores the use of AR in teaching English.

C. Conceptual Framework

To clarify the core of the research, a conceptual framework was developed, outlining the key stages of the study. This framework describes the brief stages involved in conducting the research. The framework and its explanation are presented as follows:



Figure 2.8 The Research Framework

Figure 2.1 illustrates three key interconnected elements within a systematic learning framework: input, process, and output. First, the input refers to the initial step of assessing students' vocabulary knowledge before any treatment is applied. This stage is crucial for obtaining a baseline understanding of students' vocabulary proficiency, which serves as a foundation for evaluating the impact of the treatment that follows. Next, the process involves the implementation of teaching and learning activities using augmented reality (AR) as an instructional medium. During this phase, students actively engage in an interactive learning experience that integrates digital and visual elements to facilitate a deeper understanding of vocabulary. The use of AR aims to enhance student engagement and enrich their learning experience, offering a more effective approach to teaching vocabulary. Finally, the output refers to the measurable outcomes observed after the treatment, specifically the positively in students' vocabulary skills. By evaluating post-treatment learning outcomes, data can be gathered to assess the significant effect of AR in vocabulary instruction, reflecting both positive impacts on student comprehension and overall language proficiency. In this way, these three elements provide a comprehensive view of the structured teaching process and its impact on students' vocabulary development.

D. Hypothesis of the Study

The research hypothesis used in this study is concerned with the effectiveness of augmented reality (AR) in teaching English vocabulary. These are the hypothesises of the study:

- H₀: Null hypothesis, there is no significant effect of augmented reality (AR) in improving vocabulary for young learners at SDN 1 Karangaren, Purbalingga.
- H_a: Alternative hypothesis, there is any significant effect of augmented reality (AR) in improving vocabulary for young learners at SDN 1 Karangaren, Purbalingga.

7. H. SAIFUDDIN ZU

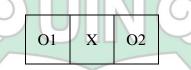
CHAPTER III RESEARCH METHODOLOGY

A. Type of the Research

The type of research used in this study was quantitative research using experimental methods. According to Riduwan (2015), research with an experimental approach explores the influence of certain variables on other variables under strictly controlled conditions. Experimental research is a research model that provides a stimulus, then observes the influence or consequences of changes in the stimulation of the object being stimulated.

In this study, the researcher employed a pre-experimental design utilizing a one-group pre-test and post-test design. As explained by Gay et al., (2012), one group pre-test and post-test design involves a single group that undergoes an initial assessment (O1), receives a specific treatment (X), and is then evaluated again (O2). Pre-test and post-test results are compared to assess the effectiveness of the treatment. According to Sugiyono (2013) the pre-experimental design is formulated as follows:

Table 3. 1 One Group Pre-test Post-Test Design



- O1 : Pre-test (before treatments)
- X : Treatment
- O2 : Post-test (after treatments)

Based on Table 3.1, it can be seen that there was only one group of students involved in the experiment aimed at improving vocabulary for young learners at SDN 1 Karangaren, Purbalingga. There was only one group in a pre-experimental design that received the pre-test, treatment, and post-test; there was no control group. The choice of the one-group pre-test and post-test design was made because the research focused on studying a single class that had the lowest average score in the 2nd semester final

exam, which was below the standard of minimum completeness (KKM). Additionally, the school only had one study group at each grade level.

According to Ary et al (2010) the one-group pre-test – post-test design consists of three steps, such as:

- a. Pre-test, administered to assess the students' initial vocabulary mastery before introducing the treatment, which was the use of augmented reality in teaching. This step was represented as (O1).
- b. Treatment, the experimental treatment was applied, where the students being taught vocabulary using augmented reality (AR) media. This treatment phase was represented as (X).
- c. Post-test, aimed to evaluate any differences in the students' vocabulary mastery, after being taught by using augmented reality (AR). The post-test was formulated as (O2).

B. Research Site

The research was carried out from August to September 2024, specifically at SDN 1 Karangaren Purbalingga, located on Jl. Raya Karangaren-Kutasari, Purbalingga. Moreover, SDN 1 Karangaren has 'A' accreditation; therefore, it was chosen as the research location. In addition, several in-depth issues were identified at SDN 1 Karangaren that contributed to its selection for this research. Firstly, one significant issue arises from the students themselves, as many students had difficulty in vocabulary mastery. Specifically, the main problem was lack of vocabularies, as well as difficulty in pronunciation, spelling, and writing, and making correct sentences. In addition, many students also had difficulty in understanding of words in the various contexts. Secondly, the teaching methods also pose a challenge; the English teachers tend to rely on traditional approaches, delivering the material passively from start to finish. As a result, this teaching style causes students to become disinterested and unmotivated during the learning process. Furthermore, the English teacher at SDN 1 Karangaren Purbalingga did not graduate from the English education department, which results in limited mastery of the material being taught. Lastly, the learning materials were also limited, primarily consisting of textbooks and blackboard instruction. Consequently, all these issues have negatively impacted to the results of the final exam in the 2nd semester, as most students received English final exam scores below the Minimum Completeness Criteria (KKM) across all grade levels, specifically scoring under 70.

C. Population and Sample of the Research

a. Population

According to Creswell (2012), a population refers to refers to a collection of individuals who share similar characteristics. The population of this study were all the students' of 2024/2025 academic year in SDN 1 Karangaren. The population chosen due to classified as young learners, namely in the age range 5 - 12 years. The totals populations of this study were 109 students.

Total	109
6 th grade	24
5 th grade	19
4 th grade	17
3 rd grade	12
2 nd grade	15
1 st grade	22

Table 3. 2 Population of the Research

b. Sample

According to Creswell (2012) sample is a sub-group of the target population that a researcher selects to study in order to make generalizations about the larger target population. This sub-group was chosen to represent the population in the research process. The sample of this study were all students at 5th grade level of SDN 1 Karangaren. In this research, the sampling technique used is nonprobability sampling with purposive sampling technique. Sugiyono (2017) explains nonprobability sampling is a technique that does not provide an equal opportunity for each element or member of the population to be selected as a sample. Sampling of data sources was taken with certain considerations where grade 5th of SDN 1 Karangaren had the lowest score and failed to reach the criteria of success (KKM) in the previous academic year, the average of final test of 2nd semester was under 70 scores. The totals of sample in this study were 19 students.

D. Variable of the Research

This research involved two variables: independent and dependent variables. The independent variable (X) was the augmented reality (AR), while the dependent variable (Y) was the vocabulary.

E. Technique of Data Collection

To address the research question, data collection in this study was conducted using a test. This test was designed to assess the English vocabulary learning outcomes of the experimental group after the treatment. The tests used in this study were divided into pre- test and post-test. The test design had a score classification to show the level of student mastery of vocabularies before and after treatment. According to, Dikdasmen (2018) the test results were classified into several grade categories, such as A, B, C, and D.

Classification	Score	Criteria
Excellent	89 - 100	A
Good	79 - 88	В
Enough	70 – 78	С
Poor	< 70	D

Table 3. 3 The classification of students' scores

Moreover, the data collection technique will involve in this study were in the following steps:

1) Pre test

Before implementing the treatment using augmented reality (AR) media, the pre-test was conducted to evaluate the students' vocabulary knowledge. This pre-test was a multiple-choice format containing 25 questions, which were adapted from the students' book and aligned with the material specified in the syllabus. Multiple choice questions were chosen because of their advantages in that they can be scored easily, quickly and objectively and can cover a wide scope of material. The time allocation was twenty-five minutes.

2) Treatment

After giving the pre-test, the experimental group was received instruction using augmented reality (AR) applications to enhance their vocabularies mastery for view meetings. Vocabulary materials in the treatment process were connected to adjectives, comparative adjectives, and superlative adjectives material.

Treatment 1	The Adjectives of Animals	September 4 th , 2024
Treatment 2	The Adjectives of Commonly daily objects	September 11 th , 2 <mark>02</mark> 4
Treatment 3	Comparative Adjectives	September 14 th , 2024
Treatment 4	Superlative Adjectives	September 18 th , 2024

Table 3. 4The material of the treatments

3) Post test

After treatment, the post-test conducted to measure the results of treatment by teaching vocabulary through augmented reality (AR) media. With the same allocation time and number of questions as in the pre-test, the time allocated was twenty-five minutes.

F. Technique of Data Validity

The tests employed in this research consisted of a pre-test and a posttest. The pre-test was administered before the treatment, while the post-test was given afterward. Initially, the researcher created a total of 35 questions, which were then validated. The content of these questions was aligned with the material on adjectives that the fifth-grade students were studying during the research period.

In this research, specific criteria were used to evaluate vocabulary mastery, focusing on three key aspects: meaning, form, and use. The table below outlines the details of these criteria for both the pre-test and post-test:

No.	Indicator	Topic of Material	Number of Items
1.	Students are able to use adjectives to describe people, animals, and common everyday objects.	The Adjectives of Animal	1 – 10
2.	Students are able to use adjectives to describe people, animals, and common everyday objects.	The Adjectives of Commonly Everyday Object	11 – 20
3.	Students are able to use comparative adjectives to talk about people, animals, and things.	Comparative Adjectives	21 – 28
4.	Students are able to use superlative adjectives to talk about people, animals, and things.	Superlative Adjectives	29 – 35
	Totals		35

 Table 3. 5 Indicators of the Instruments

To determine whether the tests was valid and reliable, the researcher used reliability and validity tests for the instrument testing. The explanations are as follows:

a. Validity Test

According to Arikunto (2010) validity is a measure that shows the level of validity or validity, a valid instrument has high validity, on the other hand, an instrument that less valid means it has low validity. In addition, Setiyadi (2006) state that "validity relates to the use of measurement in research and relates to reliability of measurement". The researcher utilized SPSS version 26.0 to analyse the instrument, which comprised 35 questions. These questions were tested on a group of students in the 6th grade, which is one level above the experimental class. The criteria for the content validation test are as follows:

Table 3. 6 Criteria of Validity

Sig. Value Interpretation	
Sig. Value < 0.05	Valid
Sig Value >0.05	Invalid

Table 3.5 outlines the criteria for determining validity. If the significance (sig) value is less than 0.05, the question is deemed valid. Conversely, if the sig value more than 0.05, the question is classified as invalid.

Question	5	fest Result		Conclusion
Question	Pearson Cor.	Sig. Value	R Table	Conclusion
1.	0.466*	.022	0.325	Valid
2.	0.411*	.046	0.325	Valid
3.	0.609**	.002	0.325	Valid
4.	0.449*	.028	0.325	Val <mark>id</mark>
5.	0.531**	.008	0.325	<mark>Vali</mark> d
6.	0.551**	.005	0.325	V alid
7.	0.377	.069	0.325	Invalid
8.	0.680**	.000	0.325	Valid
9.	0.018	934	0.325	Invalid
10.	0.411*	.046	0.325	Valid
11.	0.484*	.017	0.325	Valid
12.	0.484^{*}	.017	0.325	Valid
13.	0.541**	.006	0.325	Valid
14.	0.656**	.001	0.325	Valid
15.	0.675**	.000	0.325	Valid
16.	0.583^{**}	.003	0.325	Valid
17.	0.484^{*}	.017	0.325	Valid
18.	0.499^{*}	.013	0.325	Valid
19.	с	С	0.325	Invalid

Table 3. 7 The Results of Pre-Test Validity

20.	0.428^{*}	.037	0.325	Valid
21.	0.524^{**}	.009	0.325	Valid
22.	0.438^{*}	.032	0.325	Valid
23.	0.485^{*}	.016	0.325	Valid
24.	0.485^{*}	.016	0.325	Valid
25.	0.501^{*}	.013	0.325	Valid
26.	0.545^{**}	.006	0.325	Valid
27.	0.524^{**}	009	0.325	Valid
28.	0.477^{*}	.018	0.325	Valid
29.	0.487*	.016	0.325	Valid
30.	0.410^{*}	.047	0.325	Valid
31.	0.504*	.012	0.325	Valid
32.	0.635**	.001	0.325	Valid
33.	0.412*	.045	0.325	Valid
34.	0.464^{*}	.025	0.325	V alid
35.	0.426*	.038	0.325	Valid

According to table 3.6, pre-test validity results it showed that from 35 questions, there were 32 questions considered as valid. Those questions are number 1, 2, 3, 4, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35. After that, from the 33 questions that were valid, the researcher selected 25 questions that were used for the pre-test to the experimental class.

Question	Test Result		Conclusion	
Question	Pearson Cor.	Sig. Value	R Table	Conclusion
1.	a	a	0.325	Invalid
2.	0.493*	.014	0.325	Valid
3.	0.574**	.003	0.325	Valid
4.	0.573**	.003	0.325	Valid
5.	0.467*	.021	0.325	Valid
6.	0.493*	.0.14	0.325	Valid
7.	0.191	.371	0.325	Invalid
8.	0.438*	.032	0.325	Valid
9.	0.570*	.021	0.325	Valid
10.	0.574**	.003	0.325	Valid
11.	a	a	0.325	Invalid
12.	0.555**	.005	0.325	Valid
13.	0.581**	.003	0.325	Valid
14.	0.358	.086	0.325	Invalid
15.	0.508*	.011	0.325	Valid

Table 3. 8 The Results of Post Test Validity

16.	0.472*	.020	0.325	Valid
17.	0.465*	.022	0.325	Valid
18.	0.542**	.006	0.325	Valid
19.	0.474^{*}	.019	0.325	Valid
20.	0.470^{*}	.020	0.325	Valid
21.	0.419*	.049	0.325	Valid
22.	0.483^{*}	.017	0.325	Valid
23.	0.432^{*}	.035	0.325	Valid
24.	0.425^{*}	.039	0.325	Valid
25.	0.640**	.001	0.325	Valid
26.	0.227	.285	0.325	Invalid
10 m				
27.	0.563**	.004	0.325	Valid
27. 28.	0.563** 0.432*	.004 .035	0.325 0.325	Valid Valid
	1 1			
28.	0.432* 0.410* 0.563**	.035	0.325	Valid
28. 29.	0.432* 0.410*	.035 .046	0.325 0.325	Valid Valid
28. 29. 30.	0.432* 0.410* 0.563**	.035 .046 .004	0.325 0.325 0.325	Valid Valid <mark>Va</mark> lid
28. 29. 30. 31.	0.432* 0.410* 0.563** 0.414*	.035 .046 .004 .050	0.325 0.325 0.325 0.325	Valid Valid Valid Valid
28. 29. 30. 31. 32.	0.432* 0.410* 0.563** 0.414* 0.639**	.035 .046 .004 .050 .001	0.325 0.325 0.325 0.325 0.325 0.325	Valid Valid Valid Valid Valid
28. 29. 30. 31. 32. 33.	0.432* 0.410* 0.563** 0.414* 0.639** 0.429*	.035 .046 .004 .050 .001 .037	0.325 0.325 0.325 0.325 0.325 0.325 0.325	Valid Valid Valid Valid Valid Valid

Based on table 3.6, the results of post-test validity it was found that there were 30 questions considered as valid from 35 question have been tested. Those are questions number 2, 3, 4, 5, 6, 8, 9, 10, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, and 35. From the total number of questions that have been valid, the researcher filtered into 25 questions that were used as post-test for the experimental class.

b. Reliability Test

In every study, measuring test consistency (reliability) is also important. Setiyadi (2006) defines reliability as the consistency of measurement. This shows that the instrument has the ability to measure the same subject at different times but produces identical results. Researchers use the alpha formula to calculate the reliability of the instrument. Based on Nunnally & Bernstein (1994) requires an instrument to be reliable if it has a Cronbach Alpha coefficient is > 0.60. While, if the Cronbach Alpha value is < 0.60, the data is considered unreliable.

Table 3. 9 The Results of Pre-Test Reliability

Reliability Statistics		
Cronbach's		
Alpha	N of Items	
.775	35	

According to Table 3.8, the reliability analysis of the pre-test indicated that the Cronbach's Alpha value was 0.775, which is considered reliable. Therefore, these questions can be used as instruments in the research.

Table 3. 10 The Results of Post-Test Reliability

Reliability Statistics		
Cronbach's		
Alpha	N of Items	
.756	35	

Ultimately, the results of the reliability test for the post-test showed a value of 0.765, indicating that the instrument was deemed reliable. Consequently, the researcher utilized these instruments to evaluate the students' vocabulary mastery due to their reliability.

c. Scoring Procedures

This research used the systematic way to examine the work of the students. Furthermore, the highest score attainable is 100. The following formula used to adjust the scores for both the pre-test and post-test according to the number of questions in both the pre-test and post-test:

$$ST = R x 4 = 100$$

ST = Score total of the test

R = The total of correct answers

The formula above is used to calculate the total score from pre-test and post-test results, consisting of 25 questions. In this formula, ST represents the total score achieved by the students based on the number of correct answers. In addition, R stands for the total number of correct answers given by the students during the test. Each correct answer is worth 4 points, so to calculate the total score, the number of correct answers is multiplied by 4. The maximum score a participant can achieve is 100 points, which is obtained when all questions are answered correctly. This formula provides a clear and measurable way to assess the students' test results, with each correct answer contributing proportionally to the total score.

G. Technique of Data Analysis

In this study, the data analysis technique employed was normality test, homogeneity test, and hypothesis test.

a. Normality Test

A normality test was conducted to determine whether the data follows a normal distribution. According to Perry (2005), the normality data is an important thing because the first thing to do in analysing the data is to investigate whether the data is normal or not. In this study, the Shapiro-Wilk test was applied to assess normality, as it is suitable for small sample sizes, specifically those with fewer than 50 participants. Based on the Garth (2008), the criteria for interpreting the results were as follows:

- The data are considered normally distributed if the sig. value is > than 0.05.
- The data are regarded as not normally distributed if the sig value < than 0.05.
- b. Homogeneity Test

Following the normality test, the next step was to assess the homogeneity of variance for the variables. Moreover, test of homogeneity was used to investigate whether the two variables are homogeneous or not (Das, 2010). In this study, Levene's test was applied to determine the data homogeneity. Additionally, if the significance value is greater than 0.05, it indicates that the variance between the variables is homogeneous.

c. Hypothesis Test

For the one-group pre-test post-test research design, this research utilized a Paired Sample T-Test to compare the differences between pretest and post-test scores. According to Widiyanto (2013), the paired sample t-test is a method used to evaluate the effectiveness of a treatment by examining the difference in means before and after the treatment is applied. By applying this test, the result aimed to determine whether there was a significant difference between the pre-test and posttest scores, thereby concluding whether the treatment had a meaningful impact on students' learning outcomes. As stated by Santoso (2014) the criteria for the Paired Sample T-Test are categorized into two:

- a) If the value of Sig. $< \alpha$ (0.05), then H₀ is rejected and Ha is accepted.
- b) If the value of Sig. > α (0.05), then H₀ is accepted and Ha is rejected.

In conclusion, the Paired Sample T-Test was employed to examine the significance of the difference between pre-test and post-test scores, and the results of the test will be interpreted based on the criteria outlined above to determine whether the treatment had a significant impact on students' learning outcomes.

9. H.H. SAIFUDDIN ZU

CHAPTER IV FINDINGS AND DISCUSSIONS

In this chapter, presents the findings and discussions aimed at addressing the research questions derived from the testing process. The primary focus of this chapter is to evaluate the effectiveness of augmented reality (AR) to improve vocabulary for young learners at SDN 1 Karangaren, Purbalingga.

A. Findings

Data from the experimental group was collected and analysed before and after the implementation of augmented reality (AR) learning media to enhance vocabulary acquisition. The analysis involved comparing pre-test and post-test results, which were presented in tables along with detailed explanations to illustrate any changes in vocabulary mastery. Moreover, the final processed data aimed to highlight any significant distinctions between the students' performance before and after the treatments. Consequently, this analysis was intended to assess the significant effect of using augmented reality (AR) in improving the students' vocabulary skills within the experimental group.

1. Description of Data

Data collection for this study involved analysing the pre-test and post-test scores of students in the experimental group. Pre-test and post-test data were presented in distinct tables, with explanations providing more details. Following are further explanations given:

a. The Scores of Pre-Test and Post-Test of Experimental Group

The experimental group's pre-test scores were presented in the following table:

Students Code	Pre-Test	Post-Test
1 st Student	44	88
2 nd Student	60	100
3 rd Student	60	100
4 th Student	84	96

Table 4. 1 The Results of Pre-Test and Post Testof Experimental Group

MAXIMUN SCORE MINIMUM SCORE	84 36	100 76
MEAN	61,47	92,00
SUM	1168	1748
19 th Student	80	84
18 th Student	80	96
17 th Student	80	96
16 th Student	44	84
15 th Student	60	92
14 th Student	52	92
13 th Student	40	80
12 th Student	48	92
11 th Student	52	92
10 th Student	64	88
9 th Student	84	100
8 th Student	64	100
7 th Student	36	76
6 th Student	80	100
5 th Student	56	92

Based on the results presented in Table 4.1 for the experimental group, it was found that nineteen students had an average pre-test score of 61.47, while their average post-test score improved to 92.00. The pre-test recorded a maximum score of 84 and a minimum score of 36, whereas the post-test had a maximum score of 100 and a minimum score of 76. The different scores indicates that the implementation of augmented reality (AR) learning media positively impacted the students' vocabulary acquisition. The findings clearly show a significant difference in the students' performance before and after the intervention.

b. The Descriptive Statistics of Pre-Test and Post-Test

At this part also provided a detailed summary of the descriptive statistics generated from SPSS, which include data collected from both the pre-test and post-test stages of the experimental group. This data offers valuable insight into the students' performance before and after the treatments, allowing for

a comprehensive comparison of changes or improvements, as follows:

Descriptive Statistics									
						Std.			
	Ν	Range	Minimum	Maximum	Mean	Deviation			
Pre Test	19	48.00	36.00	84.00	61.4737	15.84427			
Post Test	19	24.00	76.00	100.00	92.0000	7.18022			
Valid N	19								
(listwise)									

Table 4. 2 Descriptive Statistics of Pre-Test and Post-Test

According to Table 4.2, the average score of student learning outcomes for the pre-test was 61.47, while the post-test average rise to 92.00. This indicates a substantial difference in the average learning outcomes, highlighting the significant improvement in student performance from the pre-test to the post-test.

2. Description Treatments

This research was carried out over six meetings. It began with the pre-test for the experimental group on August 30th, 2024. Following this, due to the school's policy, the researcher had a three-week window to conduct the treatments, as the research coincided with a closure period for school accreditation activities. Then the treatments were conducted on 4th, 11th, 14th, and 18th of September 2024. Furthermore, after administering the treatments, the post-test was carried out on the experimental class to determine whether the use of learning media with augmented reality (AR) was effective. It took place on September 23rd, 2024. The following further explanations of the treatment are provided:

a. First Treatment

The first treatment was held in September 4th, 2024 at 09.30 WIB until 11.10 WIB. To initiate the meeting, by implemented several of procedures derived from the lesson plan. These procedures included commencing the session with a group prayer, verifying student attendance, and facilitating a brainstorming activity to engage students with the material to be covered during that meeting. After that, to encourage students to understand the learning objectives at this meeting, the students administered trigger questions to mention the names of animals in English along with their characteristics in turn. Then the students informed about the learning objectives of this meeting.



Figure 4.1 Learning the Meaning of Animals and The Adjectives Using AR Media

Based on the figure 4.1, the material taught in this meeting was about the animals and the adjectives commonly used to describing the characteristics of animals by using AR based application, that was Animal 4D+. In addition, according to their understanding, the students were required to mention several of the adjectives in advance. Only 1-2 students, out of a possible 1, were aware of the adjectives used to describe animals. It was indicated that students did not understand how to describe animals. Therefore, the students were given the explanation related to the adjectives and how to it used.



Figure 4.2 Describing Animals Using Animal 4D+ Application

Based on figure 4.2, the exercise in this meeting was students asked to describe the characteristics of animals. To begin with explained to the students the procedures using Animal 4D+ application. After that, the students asked to pay attention to the 4D image and also listened to the explanation in the application. Subsequently, students were directed to wrote 5 adjectives that describe animals, followed by making simple sentences. Lastly, the class ended by presenting the students works that were related to the meaning, use, and form of animals' adjectives.

b. Second Treatment

The second treatment was conducted on September 11th, 2024, from 09.30 WIB until 11.10 WIB. The class began with a prayer and an attendance check. After that, the students were asked to review the previous lesson on nouns and adjectives related to animals. During this session, it was clear that most students were able to recall the concepts covered in the previous meeting. To motivate them and help them grasp the learning objectives for the day, a riddle game was introduced to help students find words related to common daily objects. Following this activity, the learning objectives for the meeting were explained.



Figure 4.3 Learning the Meaning of Commonly Everyday Objects and The Adjectives Using AR Media

In this meeting, as shown in Figure 4.3, students learned about common daily objects and the adjectives frequently used to describe their features using the Arloopa application. During the brainstorming activity with the riddle game, most students understood the vocabulary for common daily objects, but they were often confused and hesitant when asked about the characteristics of these objects. To address this, a discussion was held to review the definition, types, and examples of adjectives. Next, the students were instructed to open the Arloopa application to help them better understand the characteristics of the objects. They analysed the objects with guidance. Afterward, students were divided into groups and tasked with finding nouns and adjectives related to common daily objects from the pictures provided. They were also asked to create simple sentences using each noun and adjective. The class concluded with each group presenting their work.

c. Third Treatment

The third meeting was held on September 14th, 2024, from 09.30 WIB to 11.10 WIB. As usual, the class began with a prayer and an attendance check. Afterward, the students were instructed to review the material from the previous meeting. To everyone's surprise, all the students were able to distinguish between nouns and adjectives and could mention various adjectives as well. In this session, the lesson focused on comparative adjectives. Before introducing the new material, students were asked how to compare two different things, but none of them knew how to do so in English. As a result, an explanation of comparative adjectives was provided, covering the definition, types of comparative adjectives, and the formula for constructing sentences using comparative adjectives.



Figure 4.4 Learning the Meaning of Comparative Adjectives Using AR Media

After the explanation of the comparative adjectives' material, as presented in Figure 4.4 using the Animal 4D+ application, students were directed to work in groups to compare several animals using the app. Each group was then asked to identify which comparative adjectives were suitable based on their analysis. Following this, students were instructed to create sentences using comparative adjectives derived from their analysis with the Animal 4D+ application. After completing their work, each group presented their findings to the class. To further enhance students' understanding, the session concluded with a quiz game on the Wordwall platform.

d. Fourth Treatment

The last treatment was conducted on September 18th, 2024, from 09:30 WIB to 11:10 WIB. As in the previous meetings, the class began with a prayer and checking the students' attendance. Afterward, the students were asked to review the material taught in the previous meeting, which focused on comparative adjectives. During the review activity, students were asked to explain the definition and function of comparative adjectives, and some students were able to recall the information. Additionally, students took turns mentioning examples of comparative adjectives to demonstrate their understanding. Before introducing the new material for this session, a picture was shown, and the students were asked, "How do you indicate that one thing is the most in a category?" Since none of the students could answer, an explanation was provided regarding the definition, types, and examples of superlative adjectives



Figure 4.5 Learning the Meaning of Superlative Adjectives Using AR Media

As presented in figure 4.5, after the explanation of the material, students were directed to learn about superlative adjectives using the Animal 4D+ and Arloopa applications. The class was divided into several groups and tasked with analysing and comparing animals and common daily objects using the augmented reality-based applications, based on the exercise sheets provided. Additionally, students were instructed to create superlative adjective sentences based on their analysis using the applications. The session continued with each group presenting their work in turn. Finally, before the class concluded, students participated in a quiz game on the Wordwall website to further enhance their understanding of the superlative degree material.

3. Analysis of Data

Data from the experimental group's pre-test and post-test was analysed using IBM SPSS version 26 with a Paired Sample T-Test to assess significant differences in students' vocabulary proficiency before and after the treatment. Additionally, to ensure the reliability of the analysis, a normality test was conducted to verify whether the data distribution met normality assumptions, while a homogeneity test was used to confirm the equality of variances between the pre-test and post-test results. Thus, the results of the Paired Sample T-Test, along with the normality and homogeneity tests, are explained below.

a. Normality Test

Before conducting the hypothesis test, a normality test was first performed. This test was essential to determine whether the data followed a normal distribution. The Shapiro-Wilk test was utilized for this purpose.

Table 4. 3 The Result of Normality Test								
Tests of Normality								
Kolmog	Shapiro-Wilk							
Statistic	df	Sig.	Statistic	df	Sig.			
.195	19	.056	.916	19	.097			
a. Lilliefors Significance Correction								
	Kolmog Statistic .195	Tests cKolmogorov-SmiriStatisticdf.19519	Tests of NormaKolmogorov-SmirnovaStatisticdfSig19519.056	Tests of NormalityKolmogorov-SmirnovaShapStatisticdfSig.Statistic19.056.916	Tests of NormalityKolmogorov-SmirnovaShapiro-WilkStatisticdfSig.StatisticdfSig19519.056.916			

Based on the results shown in Table 4.3, the normality test indicated a significance value of 0.097 for the pre-test. Since the values greater than 0.05, this suggests that the data of the pre-test was normally distributed.

b. Homogeneity Test

The homogeneity test was conducted after the normality test to determine if the pre-test and post-test data were homogeneous. Moreover, Levene's Statistic was used for this purpose, calculated through IBM SPSS version 26.

	Test of Homogeneity of Variances							
		Levene Statistic	df1	df2	Sig.			
nilai	Based on Mean	3.155	1	36	.084			
	Based on Median	2.805	1	36	.103			
	Based on Median and with adjusted df	2.805	1	34.653	.103			
	Based on trimmed mean	3.182	1	36	.083			

Table 4. 4 The Result of Homogeneity Test

Based on the results in Table 4.4, the significance value based on the mean was 0.084, which was higher than the significance level of 0.05, indicating that the data was homogeneous.

c. Hypothesis Test

According to the results of the normality test and homogeneity test, the data were normally distributed and also considered as homogeneous. Therefore, the parametric Paired Sample T-Test one-tailed employed as the formula for conducting the hypothesis test.

Paired Samples Test									
	Paired Differences								
					95% Confide	nce Interval			
			Std.	Std. Error	of the Difference				
	Mean Deviation Mean Low		Lower	Upper	t	df	Sig. (2-tailed)		
Pair 1	Pre-Test -	-30.52632	12.66390	2.90530	-36.63012	-24.42251	-10.507	18	.000
	Post Test								

Table 4. 5 The Result of Paired Sample T-Test

Table 4.5 presented the data statistics of Paired Sample T-Test. The value of Sig. (2-tailed) was 0.000. In addition, to answer the research hypothesis the two-tailed p-value of 0.000 is divided by two, so the one-tailed p-value remains 0.000. Moreover, with the one-tailed p-value that was much smaller than the alpha significance level of 0.05. As a result, the Null Hypothesis (H0) was rejected and the Alternative Hypothesis (Ha) was accepted. Consequently, this indicated that augmented reality (AR) had significant effect in improving students' vocabulary. Therefore, it can be concluded that AR has successfully enhanced the learning experience and contributed positively in improving vocabulary.

B. Discussions

The aim of this research was to determine the significant effect of augmented reality (AR) to improve vocabulary for young learners at SDN 1 Karangaren Purbalingga, especially at 5th grade students. Furthermore, the researcher conducted the study to determine whether the applications of Augmented Reality (AR) had a significant effect and to evaluate the effectiveness of the augmented reality (AR). Since this was a pre-experimental study utilizing a one-group pre-test post-test design, the research needed to carry out the treatment in a single class.

According to Sukirno & As Sabiq (2020) vocabulary is a fundamental component that must be mastered by individuals seeking to learn English. However, most of the students struggle to master vocabulary because they lack regular opportunities to use it in daily life. A key contributing factor is the limited use of learning support tools, particularly the lack of innovative media in vocabulary instruction, which hinders their ability to practice and apply new words effectively (Purwati et al., 2023). In addition, Teaching English to young learners present certain challenges due to the they are very energetic, get bored quickly, and easily distracted (Pujiani et al., 2022). In addition, To enhance students' interest in learning English, the implementation of effective instructional media is necessary (Sallamah & As Sabiq, 2020). Therefore, it is essential to use more effective and engaging media in learning vocabulary, especially given the significant advancements in educational technology today. The use of technology is able to enhance the learning experience and provide students with more interactive ways to practice and retain new vocabulary.

Students often encounter difficulties in learning vocabulary due to the lack of visualisation of the material. In addition, by incorporating these visualization techniques into vocabulary instruction, students can enhance their understanding and retention of new words, making the learning process more engaging and effective. In addition, Using the right media can grab students' attention during lessons, making learning more engaging than relying solely on dictionaries or textbooks (Wardinah & Dwinalida, 2023). Furthermore, visual aids help students retain their memory while also accommodating a range of learning styles, making vocabulary learning accessible to a wider range of students (Patesan et al., 2018). Thus, employing applications that offer excellent visualization is crucial, particularly for enhancing vocabulary mastery. The collected data indicates that teaching English vocabulary through mobileassisted language learning, specifically using an augmented reality (AR)-based application, has notably increased students' interest and increased their vocabulary skills. This finding is further supported by the frequency and percentage of students' pre-test and post-test scores. After the implementation of the AR-based application, students showed significant progress compared to their initial results.

Based on the findings, before the introduction of the augmented reality (AR) application, 5th-grade students at SDN 1 Karangaren showed poor performance in their assessments of vocabulary comprehension and application in context. The pre-test results indicated that the experimental group had low scores, with an average of 61.47. These outcomes suggest that the students had limited mastery of vocabulary at that time. As a result, these students struggle to comprehend and use English vocabulary, particularly in specific contexts. Having a good vocabulary is important for learning English because a limited vocabulary makes it difficult to improve other language skills. Additionally, not having enough vocabulary creates problems in reading, writing, listening, and speaking (Reskiawan et al., 2020). Lastly, through vocabulary acquisition, students can identify sentences and texts while reading, construct sentences for writing tasks, comprehend information, avoid misunderstandings during exercises, and express their ideas clearly in oral communication.

Mobile devices have become common in many areas of life, including education. Previous studies indicate that using smartphone applications in learning environments is on the rise, as they help improve memory retention and increase student engagement (Klimova. & Polakova, 2020). One of them is augmented reality (AR) based application. In addition, several AR-based applications commonly used in educational sector are Animal 4D+ and Arloopa. Those AR-based application assists students in comprehending vocabularies about animal and commonly daily objects, offers students the flexibility to access vocabulary lessons anytime and anywhere from primary schools into universities, and also students could access the subjects they had learned in class or at home through these applications, which enhanced their learning experience (Yildiz, 2022) In this study, an AR-based application was used to teach students English vocabulary comprehension as a learning media. Moreover, the research found that after using the application, students showed a significant difference in their vocabulary ability. The choice to implement this application was based on the idea that it would help students enhance their vocabulary by allowing them to understand words in context, enjoy the learning experience, and work together with their classmates. As a result, students achieved a better grasp of vocabulary without facing major difficulties.

Rahmawati (2024) revealed that the using of the Animal 4D+ application to master English vocabulary is an effective way for elementary school students. Furthermore, the Arloopa application can be used as a learning tool to enhance educational materials through augmented reality experiences, potentially increase student engagement and understanding (Rohman et al., 2024). In this study, the researcher chose the Animal 4D+ and Arloopa applications to teach English vocabulary related to animals and commonly daily objects. The posttest scores indicated improvement, with the experimental group achieving an average score of 92.00. Using AR-based applications for contextual word learning creates an engaging and enjoyable learning environment. Additionally, these applications meet the needs of both teachers and students.

According to Sadikin & Martyani (2020), augmented reality (AR) had a positive impact on improving students' vocabulary mastery, particularly among young learners. In line with previous studies, the data analysis from this research showed a marked improvement in English vocabulary mastery among the experimental group. On average, students scored 92.00 on the post-test, with

the lowest score being 76 and the highest score reaching 100. Comparing the results from the pre-test and post-test in Table 4.1 clearly indicates that the experimental group saw a significant increase in their learning outcomes.

In the other study, Nursabra (2021) showed that the use of Augmented Reality (AR) media enriches students' vocabulary. It was proven by the mean score of post-test activity after treatments which increased compared to the mean score of pre-test activity before treatments. In line with prior studies, the researcher used a hypothesis test, specifically a Paired Samples T-Test, to compare the pre-test and post-test scores. The results showed sig. value of 0.000, thus supporting the alternative hypothesis. The research concluded that the Augmented Reality (AR) learning media has a significant effect on teaching English vocabulary.

Based on Natalia (2022), augmented reality (AR) media was proven to be significant effect in improving students' vocabulary mastery. In line with previous studies, the results of this research demonstrated a significant improvement in students' vocabulary after using AR as a learning tool. This substantial improvement highlights the effectiveness of AR in enhancing students' ability to learn and retain new vocabulary. Therefore, it can be concluded that the implementation of AR as an educational media has a powerful impact on improving English vocabulary acquisition for young learners.

Additionally, according to Khasanah (2020), augmented reality (AR) learning media positively effect students' interest and improved learning outcomes in mathematics, specifically on the topic of spatial nets. Similarly, Jannah (2020) found that AR had a positive effect on increasing students' interest in learning science. Therefore, Therefore, this evidence underscores that augmented reality (AR) learning media not only proves to be highly effective in English language instruction, particularly in enhancing vocabulary mastery, but also shows its efficacy in other subject areas. This adaptability across subjects suggests that AR is a versatile educational tool capable of addressing a wide range of learning needs.

Therefore, building upon the findings of this study, along with substantial support from previous academic research, it is evident that the integration of Augmented Reality (AR) as a learning media serves as a highly effective strategy for improving students' English vocabulary proficiency. AR's interactive and immersive nature allows students to engage with vocabulary in a more meaningful and dynamic way, fostering better understanding and retention of new words. By providing visual and contextual cues, AR enhances the learning experience, making it easier for students to grasp complex vocabulary concepts. This innovative learning media not only increases student engagement and interest in the learning process but also facilitates more active participation, leading to a deeper mastery of the language. As a result, AR proves to be a potent tool for elevating vocabulary learning outcomes in educational settings, particularly in language acquisition.



CHAPTER V CONCLUSION AND SUGGESTION

This chapter is organized into three sections: conclusion, limitations of study, and suggestions. First, it presents the researcher's conclusions based on the findings and discussion. Next, it discusses the limitations faced throughout the research process. Lastly, it offers recommendations for educators and suggestions for future research directions to further explore and enhance the use of augmented reality (AR) media in education.

A. Conclusion

Nowadays, English has become an essential tool for global communication. It serves as the primary language in many countries and plays a crucial role in various sectors, including education, social interactions, and politics. Given its importance, learning English from a young age is crucial, as knowledge acquired in childhood tends to be retained longer than that gained in teenager or adult. One of the key components of language learning is vocabulary, which plays a central role in enabling effective communication. However, in fact there are many students struggle with vocabulary mastery due to limited opportunities for practice and insufficient learning resources. Therefore, teachers need to adopt engaging and effective learning media that promote vocabulary acquisition and make learning more accessible and understandable for students. Augmented reality has emerged as a promising solution, offering interactive and immersive learning experiences. This research shows that AR-based applications have significant effect in the vocabulary learning outcomes. This is evidenced by the comparison of pre-test and post-test scores in the experimental group in this research, which highlight the highly effect of AR in improving students' vocabulary mastery.

Based on the research results, the experimental group had an average pretest score of 61.47, which showed significant improvement in the post-test with an average score of 92.00. In addition, the score of Paired Sample T-Test shows the value of Sig. was 0.000, which was lower than value Sig. 0.05. As a result, the Null Hypothesis (H₀) was rejected and the Alternative Hypothesis (Ha) was accepted. This confirms that augmented reality has a significant effect to improve vocabulary. The improvement in vocabulary mastery can be attributed to the interactive and engaging nature of AR learning media. This learning media allows students to collaborate with their peers, learn at their own pace, and build confidence in pronouncing and memorizing English words. Moreover, the ability to work with friends during learning process and share knowledge fosters a supportive learning environment. As a result, students find the learning process more enjoyable and stimulating, making vocabulary acquisition more effective and less monotonous.

B. Limitation of the Study

According to the researcher's study, several limitations were encountered, such as:

- 1. First, there was a limitation related to the limited time available for the research. This limitation likely limited the ability to observe long-term effects of the use of AR learning media on vocabulary retention and overall language development.
- 2. Second, the small sample size meant that the study did not fully explore the broader effectiveness of AR learning media. These constraints highlight the need for future studies with extended time frames and larger population or sample to more comprehensively evaluate the full potential of AR technology in education.

C. Suggestion

In line with the earlier research findings, the following suggestions can be made based on the researcher's conclusions, which may prove useful for future applications and studies. The suggestions offered in this research include:

- 1. Teacher
 - a. Teachers are encouraged to incorporate engaging instructional media into their teaching practices, particularly for subjects like English vocabulary, as this can significantly improve student engagement and improve learning outcomes. Utilizing innovative and interactive tools can make the learning process more dynamic and effective.
 - b. Additionally, teacher should consider providing students with authentic materials, allowing them to gain a clearer understanding of how to use new vocabulary in real-life contexts. This way helps students comprehend the relevance of words in everyday situations, enhancing their ability to apply them more effectively within relevant contexts.
 - c. Since the teacher not graduated of English education programs, it is crucial to put in extra effort to master English content and teaching methods. This can involve attending professional development, seeking additional resources, and using effective tools. Therefore, the teacher able to confidently teach vocabulary and provide quality instruction.
- 2. Researcher

As a result, the researcher expected that this research can serve as a valuable reference for conducting similar research in the future. Additionally, the researcher encourages others to explore similar studies focused on different language skills, including reading, listening, writing, and speaking, to further expand the understanding of how engaging instructional media can impact various aspects of language learning.

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APPENDICES

Appendix 1. Certificate of the Research



PEMERINTAH KABUPATEN PURBALINGGA DINAS PENDIDIKAN DAN KEBUDAYAAN SD NEGERI 1 KARANGAREN Alamat: Jln. Raya Karangaren RT 04 RW 02 Kee. Kutasari Kab. Purbalingga Kode POS 53361

SURAT KETERANGAN

Nomor: 421.2/055/IX/2024

Yang bertanda tangan di bawah ini :

Nama	: Muchgiarti, S.Pd.
NIP	: 196412241987022004
Jabatan	: Kepala Sekolah
Unit Kerja	: SDN 1 Karangaren
Alamat	: Jl. Raya Karangaren RT 05 RW 02 Kec. Kutasari Purbalingga

Dengan ini menyatakan bahwa :

Nama	: Herdino Yanuari
NIM	: 2017404017
Semester	: 9 (Sembilan)
Jurusan/Prodi	: Tadris Bahasa Inggris
Tahun Ajaran	: 2024/2025

Benar – benar telah melakukan Riset Individu, dilaksanakan pada tanggal 29 Agustus 2024 sampai dengan 23 September 2024 di SDN 1 Karangaren dengan judul "The Effectiveness of Augmented Reality (AR) Learning Media in Teaching English Vocabulary for Young Learners at SDN 1 Karangaren". Selarna melakukan Riset Individu di SDN 1 Karangaren bersikap baik.

Demikian surat keterangan ini dibuat untuk dipergunakan sebaik-baiknya.



Appendix 2. Validation Sheet

SURAT KETERANGAN VALIDASI

Yang bertanda tangan dibawah ini:

Nama : Khairunnisa Dwinalida, M.Pd. Instansi : Universitas Islam Negeri Prof. K.H. Saifuddin Zuhri Purwokerto Jabatan : Dosen

Telah membaca instrumen penelitian berupa soal pre-test dan post-test yang akan digunakan dalam penelitian dengan judul " The Effectiveness of Augmented Reality Learning Media in Teaching English Vocabulary for Young Learners at SDN 1 Karangaren " oleh peneliti:

Nama : Herdino Yanuari NIM : 2017404017 Prodi : Tadris Bahasa Inggris

Dengan ini menyatakan instrument tersebut,

Layak digunakan

Layak digunakan dengan revisi

Tidak layak digunakan

Setelah memperhatikan instrument yang telah dibuat, maka masukan untuk instrument tersebut adalah:

Demikian surat keterangan ini dibuat agar digunakan dalam pengumpulan data.

Purwokerto, 22 Agustus 2024 Validator,

11 C

Khairunnisa Dwinalida, M.Pd. NIP. 19921115 2019 03 2034

Appendix 3. Instrument of Pre-test before Pilot Test

Nama :	
No. Absen :	

PRE - TEST

Choose the correct answer by crossing (x) a,b,c,or d.

- Which animal is small, furry, and often kept as a pet that likes to chase mice?
 a. Horse
 - b. Cat
 - c. Cow
 - d. Pig
- 2. The ______ is a black and white striped animal that looks like a horse.
 - a. Tiger
 - b. Panda
 - c. Zebra
 - d. Elephant
- 3. The giraffe is a very _____ animal because it has a long neck.
 - a. Tall
 - b. Short
 - c. Fast
 - d. Loud
- 4. Which animal is tiny, hard-working, and lives in colonies underground?
 - a. Butterfly
 - b. Ant
 - c. Bee
 - d. Grasshopper
- 5. All of these animals are "nocturnal" expect?
 - a. Owl
 - b. Bat
 - c. Deer
 - d. Raccoon
- 6. Which animal that not "furry"?
 - a. Cat
 - b. Rabbit
 - c. Lizard
 - d. Swan

- 7. Horses are ______ animals often used for riding and farm work.
 - a. Weak
 - b. Strong
 - c. Small
 - d. Slow
- 8. The elephant is the _____ animal, known for its size and strength.
 - a. Small
 - b. Light
 - c. Large
 - d. Noisy
- 9. What is the English of "sapi"?
 - a. cow
 - b. goat
 - c. buffalo
 - d. pig

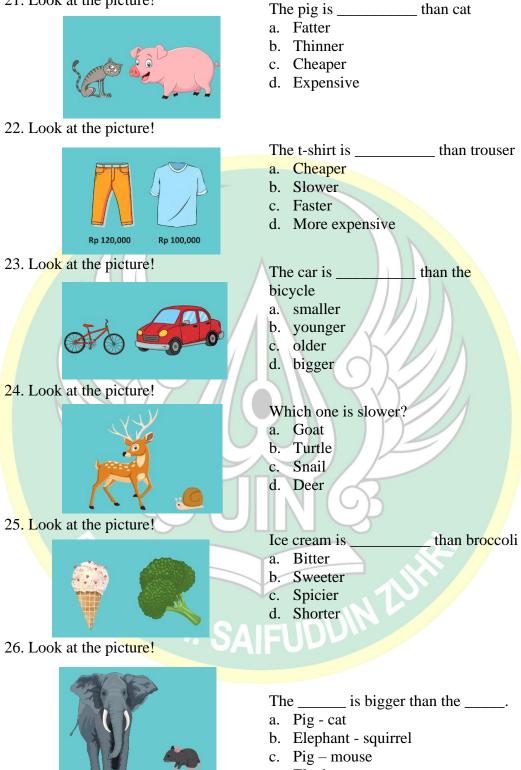


- 11 The _____ is a comfortable object where students sit during class.
 - a. Whiteboard
 - b. Desk
 - c. Chair
 - d. Clock
- 12. What is the "long" object and have the function to draw straight lines?
 - a. Pencil
 - b. Ruler
 - c. Eraser
 - d. Book

- 13. The ______ is a large object where you lay down to sleep at night.
 - a. Chair
 - b. Bed
 - c. Sofa
 - d. Mirror
- 14. Which of these fruits is sweet and yellow when ripe?
 - a. Apple
 - b. Banana
 - c. Orange
 - d. Grape
- 15. Airplanes are usually _____ because they need to fly long distances.
 - a. Fast
 - b. Slow
 - c. Heavy
 - d. Small
- 1<mark>6.</mark> What is "lantang"?
 - a. Hot
 - b. Cold
 - c. Small d. Loud
- 17. Which word is a synonym for "big"?
 - a. Heavy
 - b. Loud
 - c. Large
 - d. Short
- 18. Which object is not "circle"?
 - a. Plate
 - b. Clock
 - c. Book
 - d. Ring
- 19. I don't like chilli, because it is very _____. It makes me stomachache.

SA

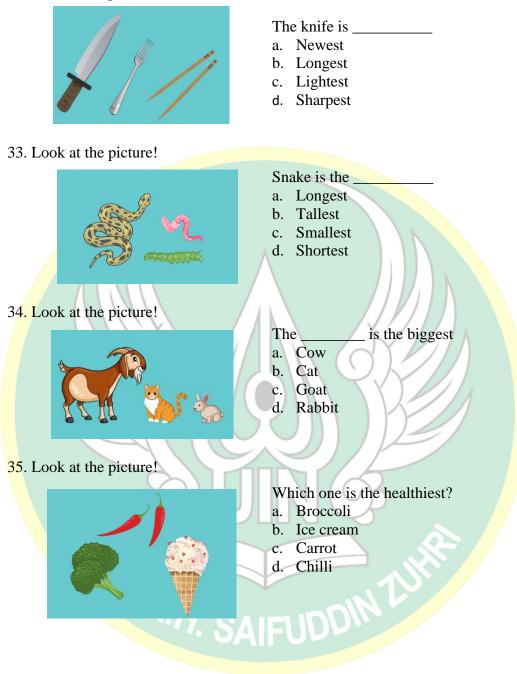
- a. Sweet
- b. Sour
- c. Salty
- d. Spicy
- 20. What is the antonym of "tall"?
 - a. Small
 - b. Long
 - c. Short
 - d. Wide



d. Elephant - mouse



- The rock is ______ than the stick.
- a. Softer
- b. Heavier
- c. Lighter
- d. Smaller
- 28. Look at the picture! The rabbit is _____ than the turtle. a. Slower b. Quicker c. Younger d. Fatter 29. Look at the picture! The giraffe is_ than the horse Shorter a. b. Taller Younger c. d. Smaller 30. Look at the picture! The tie is a. Oldest b. Shortest c. Most expensive d. Cheapest Rp120.000,00 Rp135.000,00 Rp100.000,00 31. Look at the picture! Which one is the shortest? a. Pencil b. Ruler c. Eraser d. Pen



Appendix 4. Instrument of Post-test before Pilot Test

Nama :	
No. Absen :	

POST - TEST

Choose the correct answer by crossing (x) a,b,c,or d.

- 1. Which animal is fierce and is often called the king of the jungle?
 - a. Lion
 - b. Cow
 - c. Rabbit
 - d. Sheep
- 2. The ______ is a small, clever animal that often lives in trees.
 - a. Elephant
 - b. Tiger
 - c. Monkey
 - d. Shark

3. Which animal is friendly and known as people best friend?

- a. Dog
- b. Tiger
- c. Chicken
- d. Snake
- 4. The cheetah is known as the fastest land animal. It is very
 - a. slow
 - b. quick
 - c. heavy
 - d. weak
- 5. All of these animals are known for being "herbivores" expect ?
 - a. Deer
 - b. Cow
 - c. Rabbit
 - d. Wolf
- 6. Which animal that not "dangerous"?
 - a. Shark
 - b. Lion
 - c. Goat
 - d. Crocodile

7. The peacock is a _____ bird with colorful feathers.

- a. Boring
- b. Beautiful
- c. Dull
- d. Ugly
- 8. Pigs are ______ animals, and they like to roll in the mud to stay cool.
 - a. Clean
 - b. Dirty
 - c. Slow
 - d. Loud

9. What is the English of "kerbau"?

- a. cow
- b. goat
- c. buffalo
- d. pig

a.

b.

10. What is the "Squirell"?

11. The ______ is a soft object that is usually use to sit on in living room.

DAIF

c.

d.

- a. Lamp
- b. Sofa
- c. TV
- d. Pillow
- 12. A knife should be _____ to cut food effectively.
 - a. Dull
 - b. Sharp
 - c. Soft
 - d. Heavy
- 13. A door should be ______ to keep your home secure.
 - a. Weak
 - b. Strong
 - c. Soft
 - d. Cold

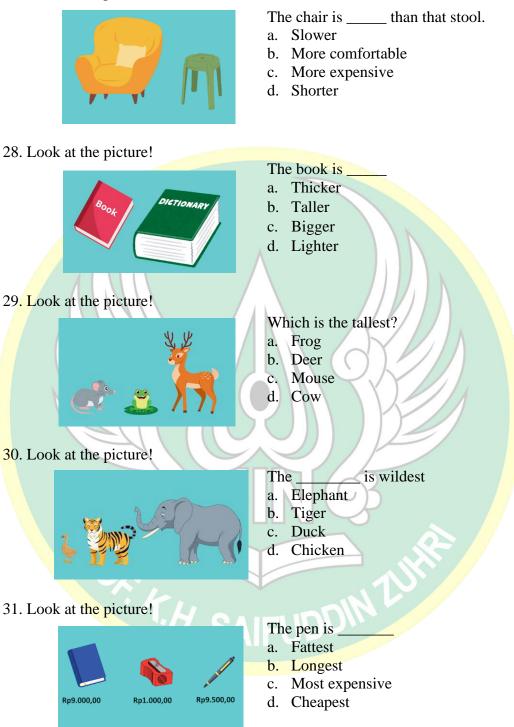
- 14. The ______ is a cold object that is used to keep food fresh.
 - a. Refrigerator
 - b. Stove
 - c. Sink
 - d. Table
- 15. The ______ is a crunchy and orange vegetable that is good for your eyesight.
 - a. Carrot
 - b. Apple
 - c. Broccoli
 - d. Banana
- 16. What is "weak" in Indonesia?
 - a. Kasar
 - b. Kuat
 - c. Lemah
 - d. Jahat
- 17. Which word is a synonym for "small"?
 - a. Heavy
 - b. Big
 - c. Soft
 - d. Tiny
- 18. Which object that not "elecetric"?
 - a. Blender
 - b. Microwave
 - c. Fork
 - d. Television
- 19. The lemon is very _____. It makes my mouth pucker when I eat it.
 - a. Sweet
 - b. Sour
 - c. Salty
 - d. Spicy
- 20. What is the antonym of "big"?
 - a. Slow
 - b. Comfortable
 - c. Clean
 - d. Small
- 21. Look at the picture!



The stick is _____ than the pen

- a. Fatter
- b. Longer
- c. Shorter
- d. Younger







- Which is the newest?
- a. Bag
- Trouser b.
- Hat c.
- d. T-shirt

The bear is? a. Thickest b. Lightest c. Sharpest d. Fattest

33. Look at the picture!



34. Look at the picture!



35. Look at the picture!



Which is the smartest animal?

- Cat a.
- Orang utan b.
- Parrot c.
- d. Monkey

Which one is the biggest?

- a. Shark
- b. Whale
- c. Jellyfish
- d. Dolphin

Appendix 5. Instrument of Pre-Test after Pilot Test

Nama :	
No. Absen :	

PRE - TEST

Choose the correct answer by crossing (x) a,b,c,or d.

- 1. Which animal is small, furry, and often kept as a pet that likes to chase mice?
 - a. Horse
 - b. Cat
 - c. Cow
- d. Pig2. The _____ is a black and white striped animal that looks like a horse.
 - a. Tiger
 - b. Panda
 - c. Zebra
 - d. Elephant
 - 3. All of these animals are "nocturnal" expect?
 - a. Owl
 - b. Bat
 - c. Deer
 - d. Raccoon
 - 4. What is the English of "sapi"?
 - a. cow
 - b. goat
 - c. buffalo
 - d. pig
 - 5. What is the "turtle"?
 - a.





c.

d.

b.





- 6. The _____ is a comfortable object where students sit during class.
 - a. Whiteboard
 - b. Desk
 - c. Chair
 - d. Clock

7. What is the "long" object and have the function to draw straight lines?

- a. Pencil
- b. Ruler
- c. Eraser
- d. Book

8. Which of these fruits is sweet and yellow when ripe?

- a. Apple
- b. Banana
- c. Orange
- d. Grape

9. Which word is a synonym for "big"?

- a. Heavy
- b. Loud
- c. Large
- d. Short

10. Which object is not "circle"?

- a. Plate
- b. Clock
- c. Book
- d. Ring

11. Look at the picture!



The pig is _____ a. Fatter b. Thinner c. Cheaper d. Expensive

12. Look at the picture!

Rp 120,000

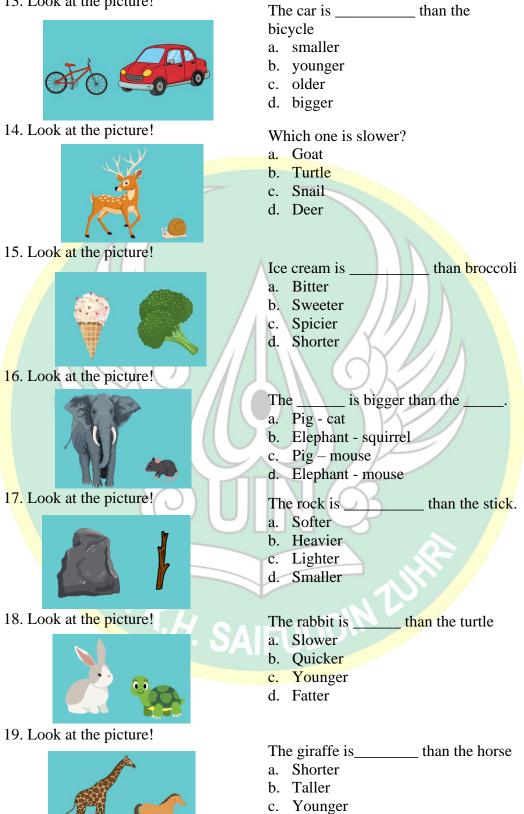
The t-shirt is _____

_____ than trouser

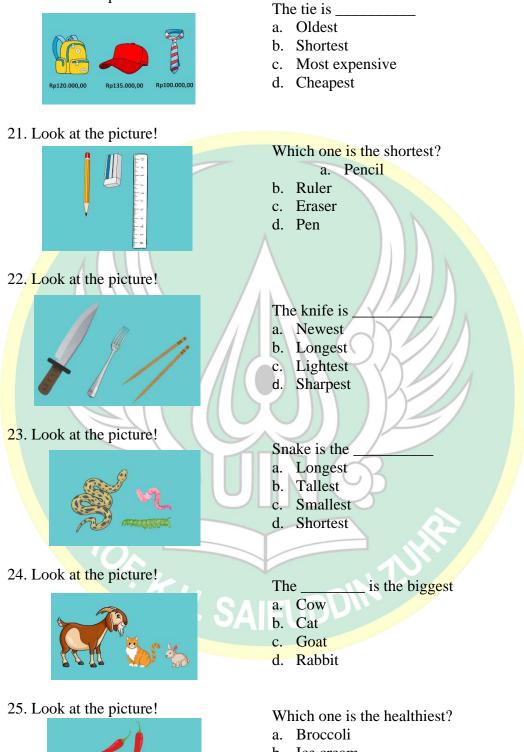
than cat

- a. Cheaper b. Slower
- c. Faster
- d. More expensive

XVI



d. Smaller



- b. Ice cream
- c. Carrot
- d. Chilli

Appendix 6. Instrument of Post-test after Pilot Test

Nama :	
No. Absen :	

POST TEST

Choose the correct answer by crossing (x) a,b,c,or d.

- 1. The ______ is a small and clever animal that often lives in trees.
 - a. Elephant
 - b. Tiger
 - c. Monkey
 - d. Shark
- 2. Which animal is friendly and known as people best friend?
 - a. Dog
 - b. Tiger
 - c. Chicken
 - d. Snake

3. All of these animals are known for being "herbivores" expect?

- a. Deer
- b. Cow
- c. Rabbit
- d. Wolf
- 4. Which animal that not "dangerous"?
 - a. Shark
 - b. Lion
 - c. Goat
 - d. Crocodile
- 5. What is the "Squirell"?
 - a.





d.

c.

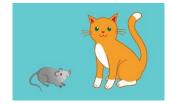


- 6. The ______ is a cold object that is used to keep food fresh.
 - a. Refrigerator
 - b. Stove
 - c. Sink
 - d. Table
- 7. The ______ is a crunchy and orange vegetable that is good for your eyesight.
 - a. Carrot
 - b. Apple
 - c. Broccoli
 - d. Banana
- 8. What is "weak" in Indonesia?
 - a. Kasar
 - b. Kuat
 - c. Lemah
 - d. <mark>Ja</mark>hat
- 9. Which word is a synonym for "small"?
 - a. Heavy
 - b. Big
 - c. Soft
 - d. Tiny
- 10. Which object that not "electric"?
 - a. Blender
 - b. Microwave
 - c. Fork
 - d. Television
- 11. What is the antonym of "big"?
 - a. Slow
 - b. Comfortable
 - c. Clean
 - d. Small
- 12. Look at the picture!

The stick is _____ than the pen a. Fatter

- b. Longer
- c. Shorter
- d. Younger

13. Look at the picture!



The _____is smaller than the _____

- a. Cat dog
- b. Mouse deer
- c. Mouse cat
- d. Cat mouse





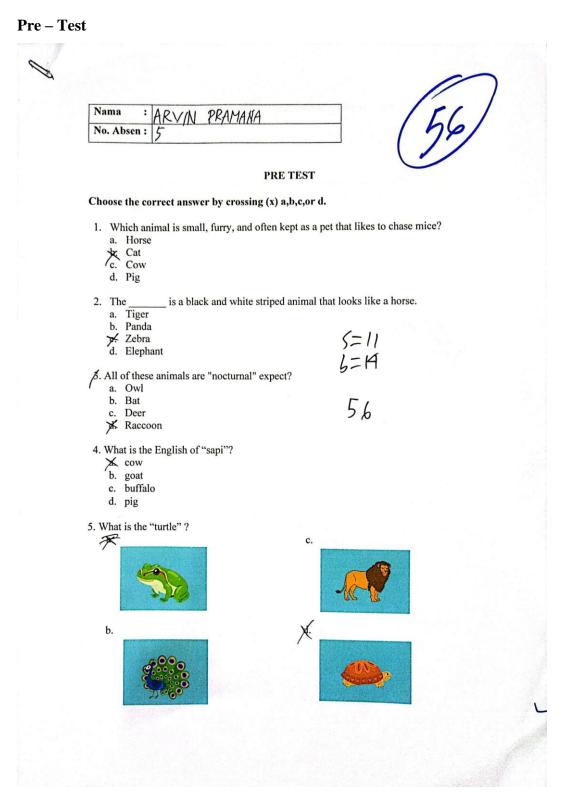
25. Look at the picture!



Which one is the biggest?

- a. Shark
- b. Whale
- c. Jellyfish
- d. Dolphin

Appendix 7. Students' Worksheet



is a comfortable object where students sit during class. 6. The a. Whiteboard

- C. Chair
- d. Clock

7. What is the "long" object and have the function to draw straight lines?

- b. Pencil B. Ruler
- c. Eraser d. Book

8. Which of these fruits is sweet and yellow when ripe?

- a. Apple
- K. Banana c. Orange
- d. Grape

9. Which word is a synonym for "big"?

- a. Heavy
- a. Heavy
 b. Loud
 X Large
 d. Short

10. Which object is not "circle"?



N. Look at the picture!

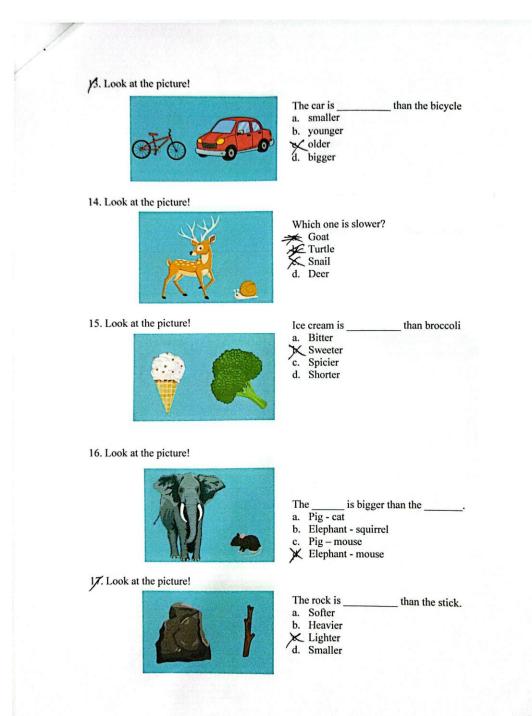
JZ. Look at the picture!

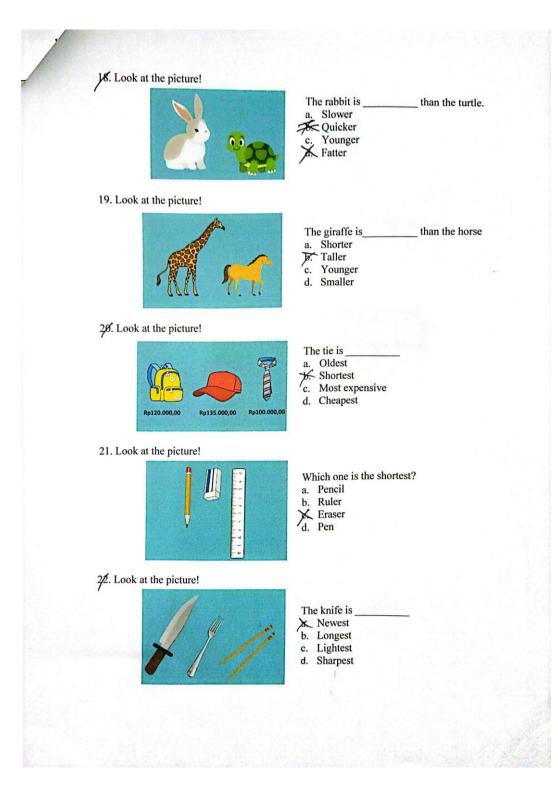


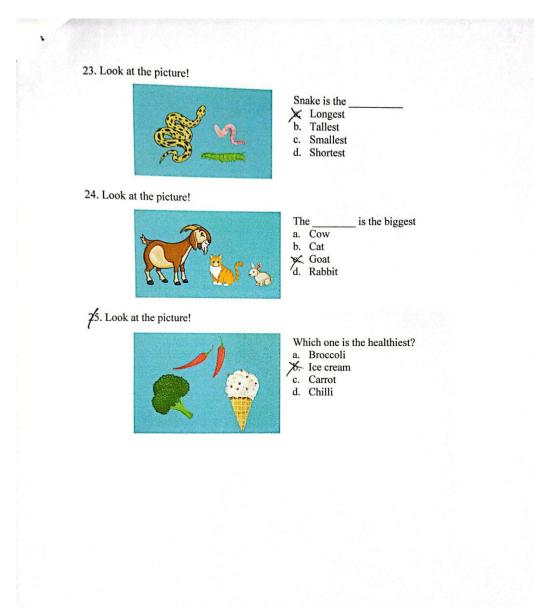
The pig is a. Fatter than cat C. Cheaper d. Expensive

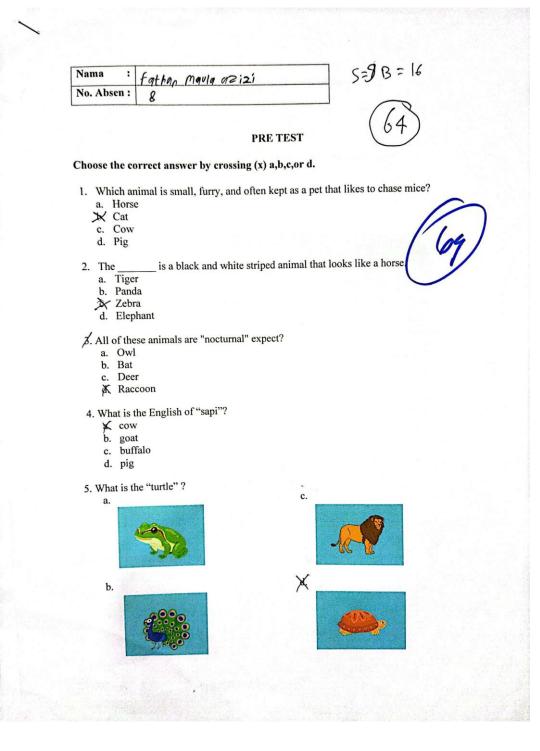
Rp 120,000 Rp 100,000

The t-shirt is	than trouser
a. Cheaper	
Slower	
c. Faster	
More expensive	









Ø. The is a comfortable object where students sit during class. White b. Desk Whiteboard

- c. Chair
- d. Clock

. What is the "long" object and have the function to draw straight lines?

- b. Ruler
- Ruler
- c. Eraser d. Book

8. Which of these fruits is sweet and yellow when ripe?

- a. Apple Banana c. Orange
- d. Grape

9. Which word is a synonym for "big"?

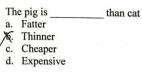
- K Heavy b. Loud
- c. Large d. Short

10. Which object is not "circle"?
Plate
b. Clock

- Book
- d. Ring

1. Look at the picture!





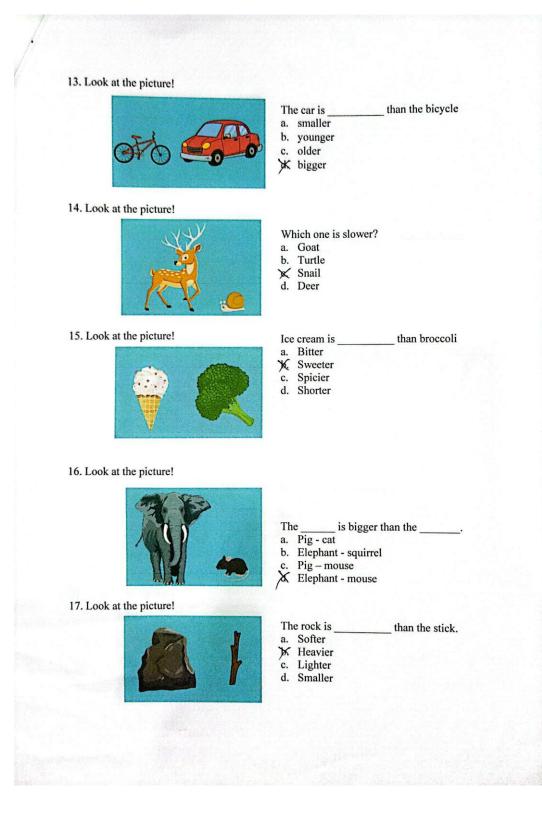
12. Look at the picture!

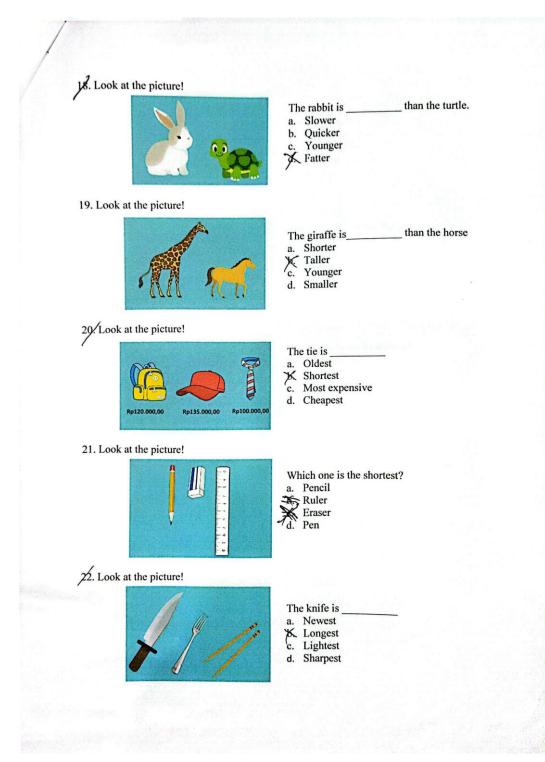


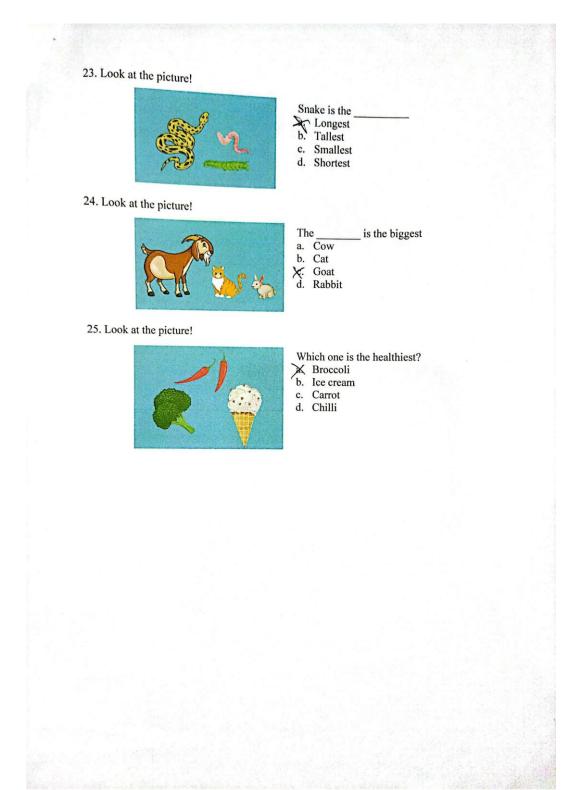
Th	e t-shirt is	than trouser
a.	Cheaper	
b.	Slower	

Faster c.

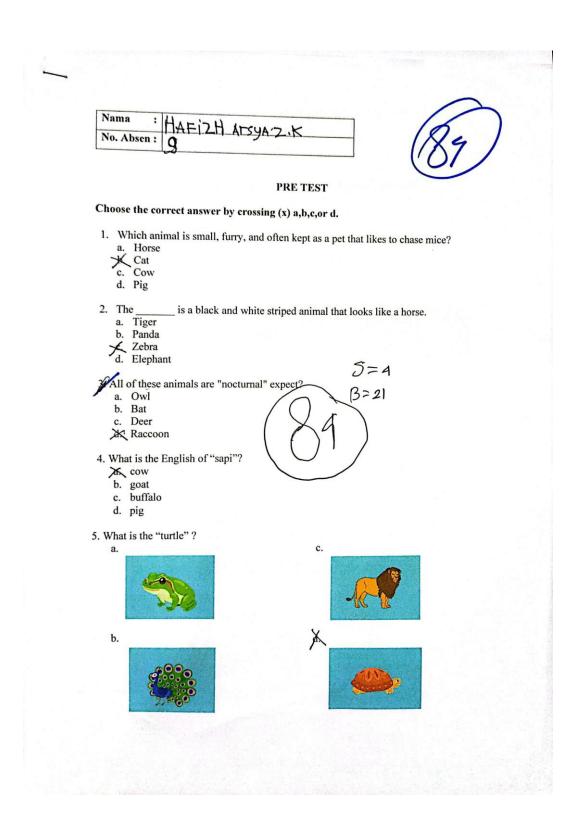
X More expensive

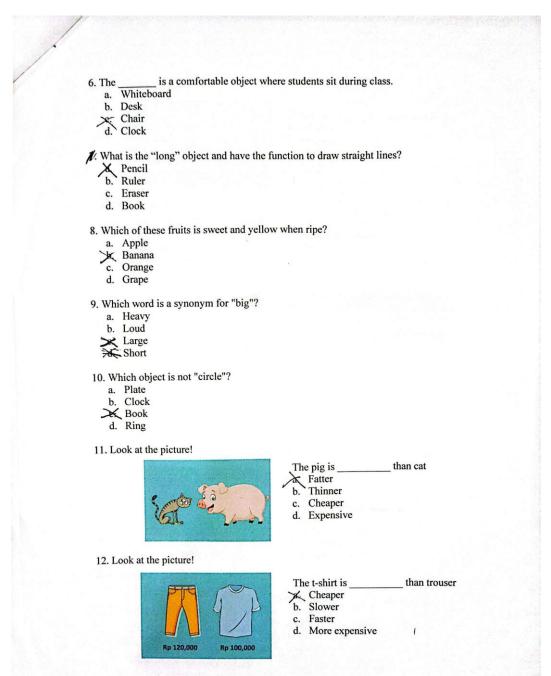


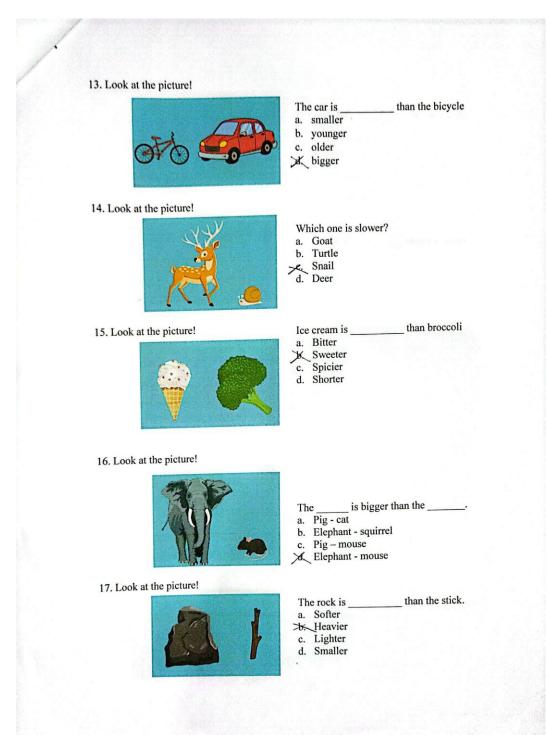


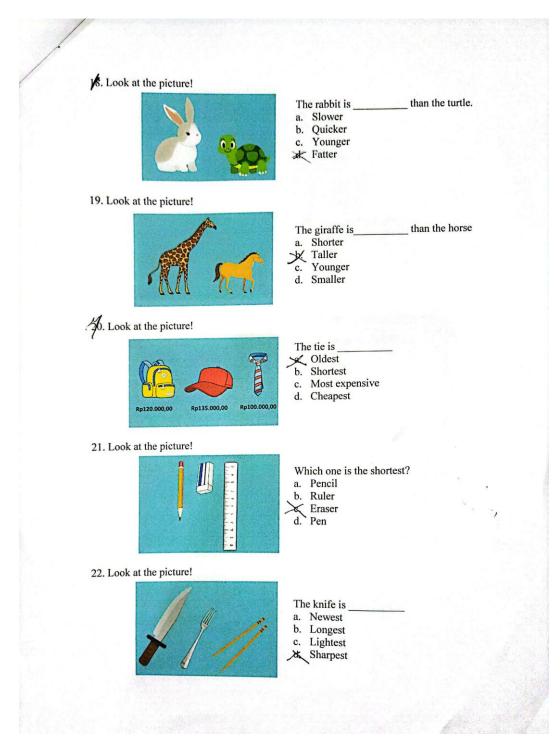


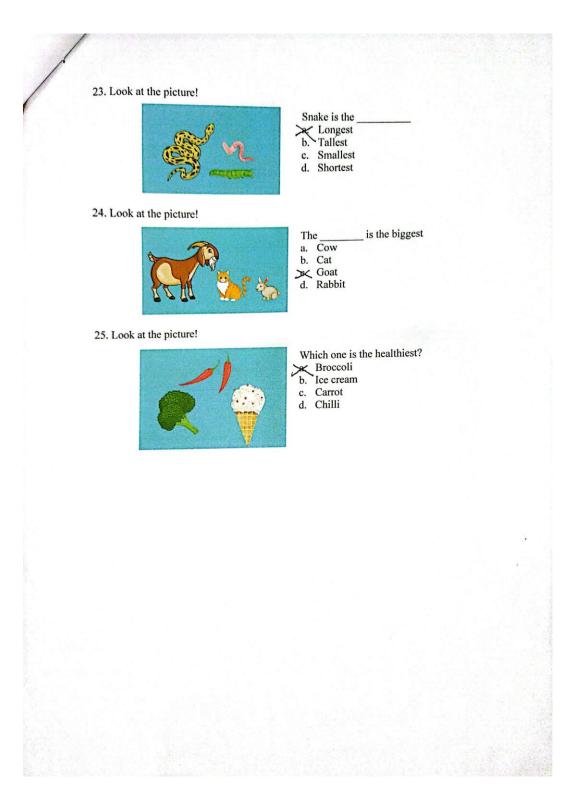
XXXII



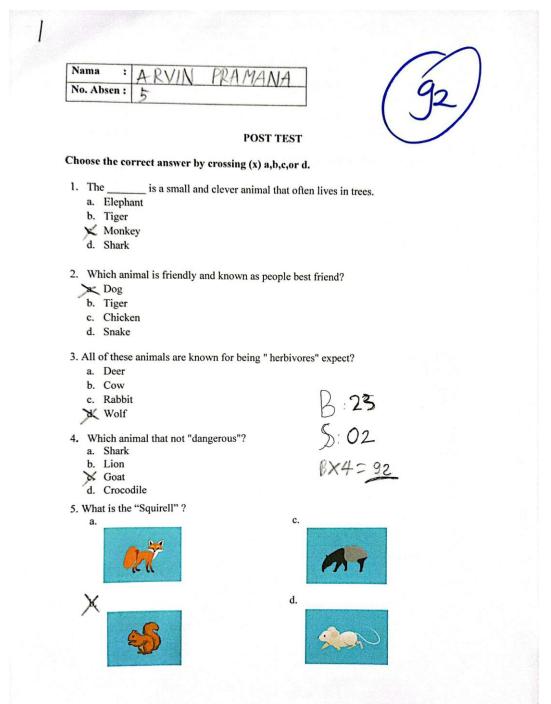








Post – Test



- The ______ is a cold object that is used to keep food fresh. 6. The

 - c. Sink
 - d. Table
- 7. The is a crunchy and orange vegetable that is good for your eyesight.
 - b. Apple
 - c. Broccoli
 - d. Banana
- 8. What is "weak" in Indonesia?
 - a. Kasar

 - b. Kuat Kuat Lemah d. Jahat

9. Which word is a synonym for "small"?

a. Heavy Big c. Soft

d. Tiny

10. Which object that not "electric"?

- a. Blender
- b. Microwave Fork d. Television

11. What is the antonym of "big"?

- a. Slow
- b. Comfortable
- c. Clean
- K Small

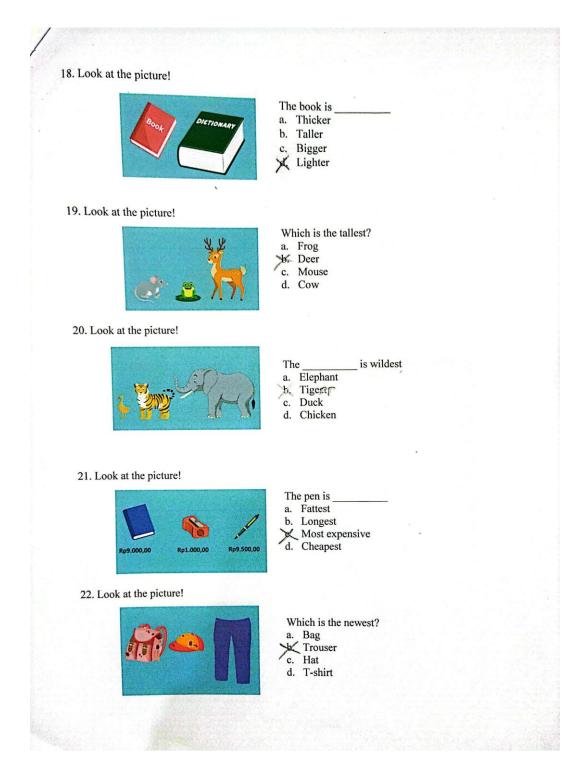
12. Look at the picture!



than the pen

- The stick is ______ a. Fatter
- K Longer c. Shorter
- d. Younger





23. Look at the picture!



The bear is? a. Thickest b. Lightest Sharpest Fattest

24. Look at the picture!

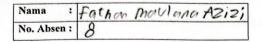


25. Look at the picture!



Which is the smartest animal? a. Cat Corang utan c. Bird Monkey

Which one is the biggest? a. Shark b. Whale c. Jellyfish d. Dolphin



POST TEST

B = 25

5=

Choose the correct answer by crossing (x) a,b,c,or d.

- is a small and clever animal that often lives in trees. 1. The
 - a. Elephant
 - b. Tiger
 - > Monkey
 - d. Shark

2. Which animal is friendly and known as people best friend?

- b. Tiger
- c. Chicken
- d. Snake

3. All of these animals are known for being " herbivores" expect?

- a. Deer
- b. Cow
- c. Rabbit
- Wolf

4. Which animal that not "dangerous"?

- a. Shark
- b. Lion
- 🔀 Goat
- d. Crocodile
- 5. What is the "Squirell" ?







c.





- is a cold object that is used to keep food fresh. 6. The
 - Refrigerator b. Stove
 - c. Sink
 - d. Table

7. The is a crunchy and orange vegetable that is good for your eyesight.

- Carrot
 b. Apple
 c. Broccoli
- d. Banana

8. What is "weak" in Indonesia?

- a. Kasar
- b. Kuat
- Y. Lemah d. Jahat
- 9. Which word is a synonym for "small"?
 - a. Heavy

 - b. Big c. Soft

10. Which object that not "electric"?

a. Blender

- b. Microwave
- Fork
- d. Television

11. What is the antonym of "big"?

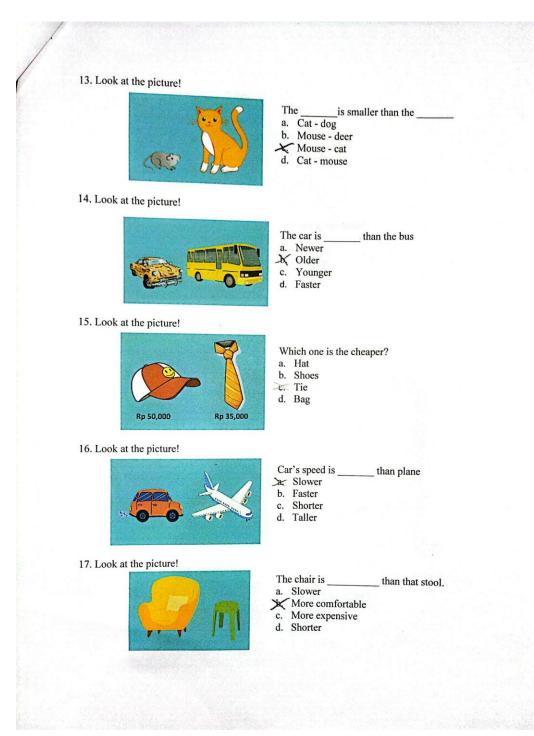
- a. Slow b. Comfortable
- c. Clean
- Small

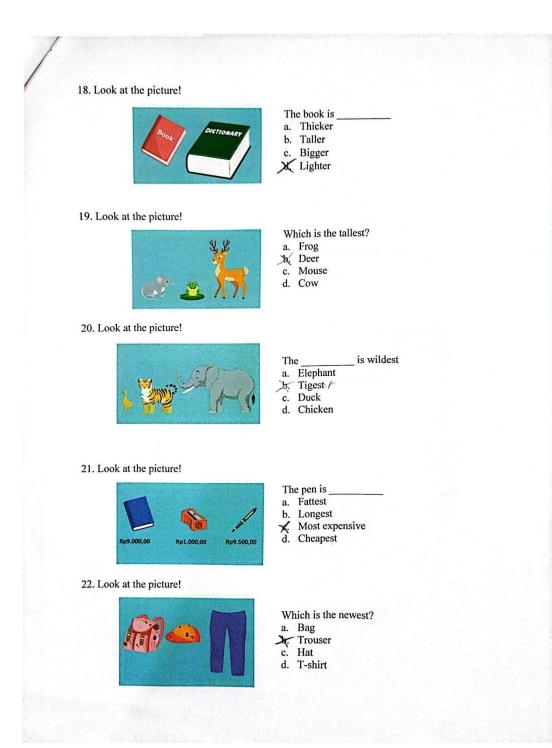
12. Look at the picture!

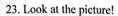


The stick is than the pen

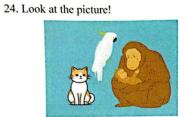
- a. Fatter
 - Longer
- K. Shorter d. Younger











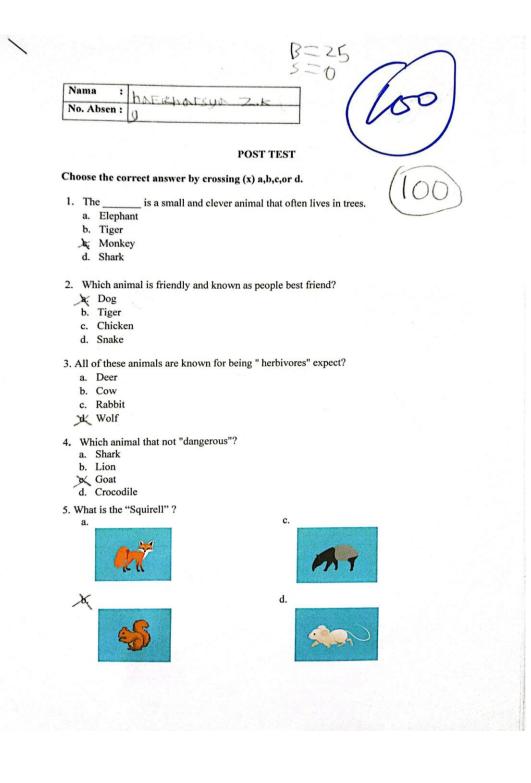
25. Look at the picture!



Which is the smartest animal? a. Cat b. Orang utan c. Bird d. Monkey

Which one is the biggest? a. Shark b. Whale c. Jellyfish d. Dolphin

The bear is? a. Thickest b. Lightest c. Sharpest Fattest



6. The is a cold object that is used to keep food fresh.

- Refrigerator
- b. Stove
- c. Sink d. Table

7. The is a crunchy and orange vegetable that is good for your eyesight.

- b. Apple
- c. Broccoli
- d. Banana
- 8. What is "weak" in Indonesia?
 - a. Kasar

 - b. Kuat Lemah d. Jahat
- 9. Which word is a synonym for "small"?
 - a. Heavy
 - b. Big
 - c. Soft
 - A Tiny

10. Which object that not "electric"?

- a. Blender
- b. Microwave
- d. Television

11. What is the antonym of "big"?

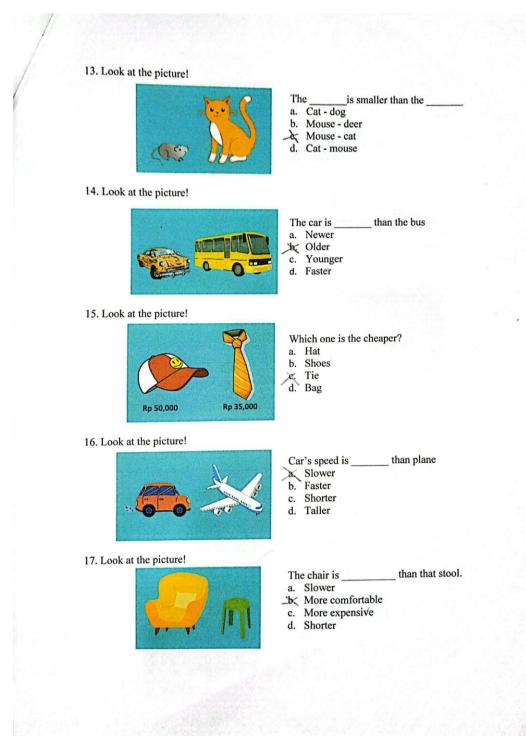
- a. Slow
- b. Comfortable c. Clean
- K Small
- 12. Look at the picture!

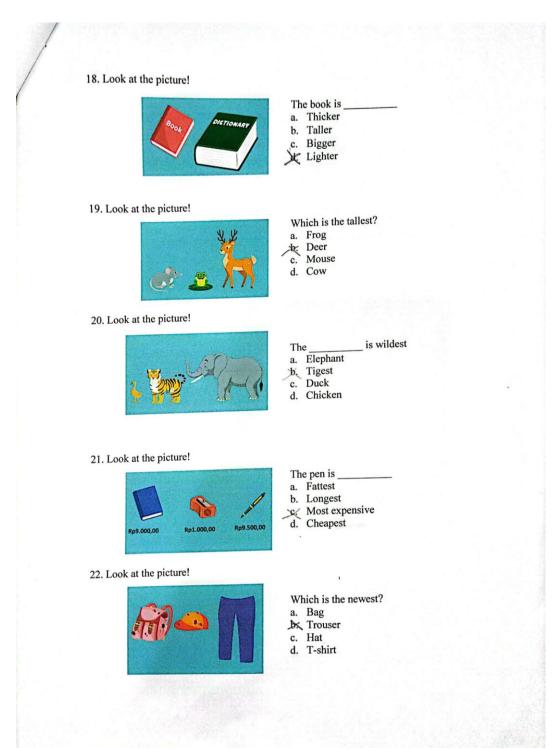


The stick is

than the pen

- a. Fatter
- X Longer c. Shorter
- d. Younger





23. Look at the picture!





Which is the smartest animal? a. Cat Corang utan c. Bird d. Monkey

The bear is? a. Thickest b. Lightest c. Sharpest

25. Look at the picture!



Which one is the biggest? a. Shark b: Whale c. Jellyfish d. Dolphin

ť



Students Code	Pre-Test	Post-Test
1 st Student	44	88
2 nd Student	60	100
3 rd Student	60	100
4 th Student	84	96
5 th Student	56	92
6 th Student	80	100
7 th Student	36	76
8 th Student	64	100
9 th Student	84	100
10 th Student	64	88
11 th Student	52	92
12 th Student	48	92
13 th Student	40	80
14 th Student	52	92
15 th Student	60	92
16 th Student	44	84
17 th Student	80	96
18 th Student	80	96
19 th Student	80	84
SUM OA	1168	1748
MEAN	61,47	92,00
MAXIMUN SCORE	84	100
MINIMUM SCORE	36	76

Appendix 8. The Results of Pre-Test and Post-Test in Experimental Class

Appendix 9. Lesson Plan

Meeting 1 and 2

MODUL AJAR

A. INFORMASI UMUM MODUL

Nama Penyusun	: Herdino Yanuari	
Instansi/Sekolah	: SDN 1 Karangaren	
Jenjang / Kelas	: SD / V	
Alokasi Waktu : 1 X 2 Pertemuan (2 X 35 Menit)		
Tahun Pelajaran	: 2024 / 2025	

B. KOMPONEN INTI

Capaian Pembelajaran Fase C

Pada akhir Fase C, peserta didik memahami dan merespon teks lisan, tulisan, dan visual sederhana dalam bahasa Inggris. Mereka menggunakan bahasa Inggris sederhana untuk berinteraksi dan berkomunikasi dalam situasi yang familiar/lazim/rutin. Peserta didik memahami hubungan bunyi huruf pada kosakata sederhana dalam bahasa Inggris dan menggunakan pemahaman tersebut untuk memahami dan memproduksi teks tulisan dan visual sederhana dalam bahasa Inggris dan pemahama dalam bahasa Inggris dan menggunakan pemahaman tersebut untuk memahami dan memproduksi teks tulisan dan visual sederhana dalam bahasa Inggris dengan bantuan contoh.

Fase B Berdasarkan Elemen

Elemen Menyimak – Berbicara	By the end of Phase C, students use English to interact in a range of predictable social and classroom situations using certain patterns of sentences. They change/substitute some elements of sentences to participate in learning activities such as asking simple questions, requesting clarification and seeking permission. They use some strategies to identify key information in most contexts such as asking a speaker to repeat or to speak slowly, or asking what a word means. They follow a series of simple instructions related to classroom procedures and learning activities.
Elemen Membaca –	By the end of Phase C, students understand familiar
Memirsa	and new vocabulary with support from visual cues or
	context clues. They read and respond to a wide range
	of short, simple, familiar texts in the form of print or
	digital texts, including visual, multimodal or interactive
	texts. They find basic information in a sentence and
Elemen Menulis –	explain a topic in a text read or viewed. By the end of Phase C, students communicate their
Mempresentasikan	ideas and experience through copied writing and their
wempresentasikan	own basic writing, showing evidence of a developing
	understanding of the writing process. They demonstrate
	an early awareness that written texts in English are

Tujuan Pembelajaran	 presented through conventions, which change according to context and purpose. With teachers' support, they produce simple descriptions, recounts and procedures using certain patterns of sentences and modelled examples at word and simple sentence level. They show awareness of the need for basic punctuation and capitalization. They demonstrate knowledge of some English letter-sound relationships and the spelling of high-frequency words. In their writing, they use vocabulary related to their class and home environments, and use basic strategies, such as copying words or phrases from books or word lists, using images and asking how to write a word. 1. Peserta didik dapat mengidentifikasi namanama binatang dan benda keseharian dalam bahasa Inggris. 2. Peserta didik dapat menyebutkan dan menggunakan kata sifat yang menggambarkan ciri-ciri binatang dan benda keseharian. 3. Peserta didik dapat membuat kalimat sederhana menggunakan vocabulary yang dipelajari. Mandiri Kreatif 	
Profil Pancasila	Mandiri	
	 Kreatif Berpikir kritis Bergotong royong 	
Kata kunci	Human, Animal, giraffe, deer, tall, short, old, young, big, small, fast, slow, new, old, expensive, cheap	

Target Peserta Didik :	
Peserta didik Reguler	
Jumlah Siswa :	
19 Peserta didik	
Assesmen :	
Guru menilai ketercapaian tujuan pembelajaran	
- Asesmen individu	
- Asesmen kelompok	
Jenis Assesmen :	
Presentasi	
Tertulis	
Unjuk Kerja	
Model Pembelajaran	
Tatap muka	
Ketersediaan Materi :	
 Pengayaan untuk peserta didik berpencapaian tinggi: YA/TIDAK 	
Alternatif penjelasan, metode, atau aktivitas untuk peserta didik yang sulit	

memahami konsep: YA/TIDAK ŀ

Kegiatan Pembelajaran Utama	/ Pengaturan peserta didik :	
Individu		
 Berkelompok (Lebih dari dua 		
Metode dan Model Pembelajar	an :	
Discovery Learning		
Media Pembelajaran		
1. Laptop		
2. Handphone		
 Jaringan internet Gambar yang berkaitan deng 	an materi	
Materi Pembelajaran		
How tall are you?		
-	fy features of people, animals, and common	
everyday objects	i) realaise ei people, aimilaid, and commen	
	adjectives to describe people, animals, and	
common everyday objects		
Sumber Belajar :		
1. Sumber Utama		
 Buku bahasa inggris My N 	ext Words kelas V SD	
Internet		
2. Sumber Alternatif		
	an alternatif sumber belajar yang terdapat di	
	uaikan dengan tema yang sedang dibahas.	
Persiapan Pembelajaran :		
	prasarana, alat, dan bahan tersedia	
b. Memastikan kondisi kelas ke		
c. Mempersiapkan bahan taya		
d. Mempersiapkan lembar kerj Langkah-langkah Kegiatan per		
Kegiatan Pembuka		
	didik secara fisik maupun psikis untuk dapat	
mengikuti pembelajaran denga		
	epada peserta didik di kelas agar bersemangat	
	n melalui apersepsi yang dapat membangkitkan	
semangat belajar peserta didil		
_	mpatan untuk memimpin doa bersama sesuai	
	aannya masing-masing sebelum pembelajaran	
dilaksanakan.	SAIFUU	
• Peserta didik bersama deng	an guru mendiskusikan tujuan dan rencana	
kegiatan pembelajaran.		
Kegiatan Inti		
PERTEMUAN 1		
Stimulation	Aktivitas	
Tujuan: Mengaktifkan	1. Guru memulai dengan pertanyaan pemantik:	
pengetahuan awal siswa tentang	"Apa saja binatang yang kalian ketahui?"	
binatang dan ciri-cirinya.	2. Peserta didik secara bergantian	
<u> </u>	menyebutkan binatang yang mereka tahu.	
Problem Statement	Aktivitas	

Telesco Marcola (101 - 11	4	
Tujuan: Mengidentifikasi	1.	Siswa diajak berpikir tentang kosakata baru
kosakata baru yang akan		yang berkaitan dengan hewan, misalnya:
dipelajari dan membuat siswa		"Apa saja kosakata Bahasa Inggris dari
berpikir tentang tujuan belajar		nama - nama binatang yang telah
mereka.		disebutkan?" dan "Apa saja kosakata
		bahasa Inggris yang kita butuhkan untuk
		mendeskripsikan ciri – ciri hewan?"
Data Collection		Aktivitas
Tujuan: Mengenalkan	1.	Guru menjelaskan secara mendalam
vocabulary baru dengan	-	mengenai kosakata Bahasa Inggris tentang
bantuan aplikasi berbasis	-	binatang dan ciri - cirinya.
Augmented Reality (AR).	2.	Guru menjelaskan cara menggunakan
ridginented ridding (rin).	2.	aplikasi AR kepada peserta didik.
	3.	Peserta didik menggunakan aplikasi AR
	5.	
		memindai kartu dan melihat binatan <mark>g da</mark> lam
		bentuk 3D.
	4.	Peserta didik secara berpasangan atau
	11	kelompok kecil mencoba aplikasi AR unt <mark>uk</mark>
		melihat model 3D binatang.
	5.	Guru membimbing siswa untuk mengamati
	11	ciri-ciri fisik binatang yang muncul di layar.
	6.	Guru memperkenalkan kata sifat dasar yang
		berhubungan dengan binatang (misalny <mark>a,</mark>
	6	big, small, fast, slow, cute, scary). Gur <mark>u</mark>
		membagikan kartu AR yang menampilk <mark>an</mark>
		gambar binatang.
Processing Data		Aktivitas
Tujuan: Peserta didik mampu		Permainan interaktif "Animal Charades"
membangun pemahaman yang	1.	Siswa dibagi menjadi dua kelompok.
lebih baik tentang kosakata	2.	
baru		kartu yang berisi nama hewan d <mark>an k</mark> ata sifat
		yang berkaitan, seperti "fast cheetah" atau
1.4	0	"big elephant."
	3.	Siswa harus meniru hewan tersebut dan
		memperagakan kata sifatnya tanpa
		berbicara, sementara timnya mencoba
	4.	menebak. Setiap jawaban yang benar mendapat poin,
	4.	dan tim dengan poin terbanyak menang.
Verification		Aktivitas
Tujuan: Melatih peserta didik	1.	
untuk menggunakan vocabulary	<u>-</u> .	berisikan pernyataan rumpang.
yang baru dipelajari.	2.	
	<u>∠</u> .	latihan soal tersebut.
Generelasation		
Generelasation		Aktivitas

Tuiner - Deserte didit menerer	1. Cumu mangaiale aigura untule harbagi hagil
Tujuan : Peserta didik mampu	1. Guru mengajak siswa untuk berbagi hasil
siswa mengaitkan pengetahuan	diskusi mereka di depan kelas.
baru dengan konsep-konsep	 Guru memberikan umpan balik dan koreksi jika diperlukan.
yang sudah ada dan membuat aturan atau kesimpulan yang	
lebih luas berdasarkan	 Guru menyimpulkan pembelajaran dengan membuat daftar kata sifat yang sering
pengalaman belajar mereka.	digunakan untuk mendeskripsikan hewan.
pengalaman belajar mereka.	digunakan untuk mendeskripsikan newan.
PERTEMUAN 2	
Stimulation	
Tujuan: Mengaktifkan	1. Siswa diminta untuk menyebutkan nama-
pengetahuan awal peserta didik	nama benda yang mereka temui sehari-hari.
tentang benda sehari-hari dan	2. Peserta didik secara bergantian
ciri-cirinya.	menyebutkan binatang yang mereka tahu.
ciri cirinya.	3. Guru menuliskan jawaban siswa di papan
	tulis.
Problem Statement	Aktivitas
Tujuan: Mengidentifikasi	1. Siswa diajak untuk berpikir tentang kosakta
kosakata baru yang akan	Bahasa Inggris dari benda sehari – hari se <mark>rta</mark>
dipelajari dan membuat peserta	tentang ciri - ciri benda tersebut. Contoh: "
didik berpikir tentang tujuan	Apa saja kosakata Bahasa Inggris dari benda
belajar mereka.	– benda yang telah disebutkan?" kemudian
	"Apa yang membuat bantal itu nyaman?"
	(jawaban: lembut, empuk).
Data Collection	Aktivitas
Tujuan: Peserta didik mampu	1. Guru menjelaskan cara menggunak <mark>an</mark>
mengenal kosakata baru	aplikasi AR kepada peserta didik.
d <mark>en</mark> gan bantuan aplikasi	2. Siswa menggunakan aplikasi AR pada t <mark>abl</mark> et
ber <mark>bas</mark> is Augmented Reality	atau smartphone untuk memindai kartu dan
(AR).	melihat benda dalam bentuk 3D.
	3. Guru membimbing siswa untuk mengamati
	ciri-ciri benda sehari – hari yang muncul di
K.H	layar.
	4. Setiap tampilan 3D disertai dengan
	informasi tentang benda tersebut dalam
	bahasa Inggris,
	5. Guru menjelaskan secara lebih mendalam
	mengenai kosakata tentang benda sehari -
	hari dan ciri - cirinya.
	6. Guru memperkenalkan kata sifat dasar yang
	berhubungan dengan benda sehari - hari
	(misalnya, big, small, soft, hard, sharp).
Processing Data	Aktivitas

Tujuan: Peserta didik mampu	1. Guru membagi peserta didik dalam
membangun pemahaman yang	beberapa kelompok.
lebih baik tentang kosakata	2. Guru mengajak peserta didik untuk
baru.	melakukan permainan interaktif secara
	berkelompok
	• "Find the Object": Guru menyebutkan
	sebuah kata sifat, dan peserta didik
	harus mencari objek yang sesuai dengan
	kata sifat tersebut menggunakan
	aplikasi AR.
Verification	Aktivitas
Tujuan: Peserta didik mampu	1. Guru memberikan latihan soal yang
untuk me <mark>nggu</mark> nakan kosakata	berkaitan dengan benda sehari – hari dan
yang tel <mark>ah d</mark> ipelajari.	ciri – cirinya.
	2. Peserta didik diminta untuk menjawab
	latihan soal tersebut menggunakan b <mark>an</mark> tuan
	aplikasi AR.
Generelasation	
Generelasation Tujuan : Peserta didik mampu	aplikasi AR.
	aplikasi AR. Aktivitas
Tujuan : Peserta didik mampu	aplikasi AR. Aktivitas 1. Guru mengajak siswa untuk berbagi hasil
Tujuan : Peserta didik mampu mengaitkan kosakta yang telah	aplikasi AR. Aktivitas 1. Guru mengajak siswa untuk berbagi hasil diskusi mereka di depan kelas.
Tujuan : Peserta didik mampu mengaitkan kosakta yang telah dipelajari dengan konsep-	aplikasi AR. Aktivitas 1. Guru mengajak siswa untuk berbagi hasil diskusi mereka di depan kelas. 2. Guru memberikan umpan balik dan koreksi
Tujuan : Peserta didik mampu mengaitkan kosakta yang telah dipelajari dengan konsep- konsep yang sudah ada dan	aplikasi AR. Aktivitas 1. Guru mengajak siswa untuk berbagi hasil diskusi mereka di depan kelas. 2. Guru memberikan umpan balik dan koreksi jika diperlukan.
Tujuan : Peserta didik mampu mengaitkan kosakta yang telah dipelajari dengan konsep- konsep yang sudah ada dan membuat kesimpulan yang lebih	aplikasi AR. Aktivitas 1. Guru mengajak siswa untuk berbagi hasil diskusi mereka di depan kelas. 2. Guru memberikan umpan balik dan koreksi jika diperlukan. 3. Guru menyimpulkan pembelajaran dengan
Tujuan : Peserta didik mampu mengaitkan kosakta yang telah dipelajari dengan konsep- konsep yang sudah ada dan membuat kesimpulan yang lebih luas berdasarkan pengalaman	 aplikasi AR. Aktivitas 1. Guru mengajak siswa untuk berbagi hasil diskusi mereka di depan kelas. 2. Guru memberikan umpan balik dan koreksi jika diperlukan. 3. Guru menyimpulkan pembelajaran dengan membuat daftar kata sifat yang sering
Tujuan : Peserta didik mampu mengaitkan kosakta yang telah dipelajari dengan konsep- konsep yang sudah ada dan membuat kesimpulan yang lebih luas berdasarkan pengalaman belajar mereka.Kegiatan Penutup	Aktivitas Aktivitas 1. Guru mengajak siswa untuk berbagi hasil diskusi mereka di depan kelas. 2. Guru memberikan umpan balik dan koreksi jika diperlukan. 3. Guru menyimpulkan pembelajaran dengan membuat daftar kata sifat yang sering digunakan untuk mendeskripsikan benda sehari - hari.
Tujuan : Peserta didik mampu mengaitkan kosakta yang telah dipelajari dengan konsep- konsep yang sudah ada dan membuat kesimpulan yang lebih luas berdasarkan pengalaman belajar mereka.Kegiatan Penutup• Peserta didik menjawab perta	Aktivitas Aktivi
Tujuan : Peserta didik mampu mengaitkan kosakta yang telah dipelajari dengan konsep- konsep yang sudah ada dan membuat kesimpulan yang lebih luas berdasarkan pengalaman belajar mereka.Kegiatan Penutup• Peserta didik menjawab perta mereka dalam pembelajaran H	Aktivitas Aktivi

Guru memberikan umpan balik positif dan korektif tentang aktivitas hari ini.

Pelaksanaan Asesmen

Sikap

- Melakukan penilaian antarteman.
 Mengamati refleksi peserta didik.

Pengetahuan

Demberikan tugas tertulis, lisan, dan tes tertulis

Keterampilan

- 🗏 Presentasi
- Proyek
- 🗏 Portofolio

Kriteria Penilaian :

- Penilaian proses: berupa catatan/deskripsi kerja individu. •
- Penilaian Akhir: Skor nilai 0-100

Rubrik Penilaian :

Indikator: Membuat kalimat sederhana mengenai binatang dan benda keseharian dengan memperhatikan penggunaan kata sifat yang tepat.

				Α	Aspek					Rata-	
No	Nama		kura amm		Ket	unta	san	М	ekar	nik	rata
		1	2	3	1	2	3	1	2	3	
1											
2											
3											
4							1	1			
5											

Refleksi Guru:

No	Pertanyaan	Jawaban
1	Bagaimanakah reaksi peserta didik dalam mengikuti pembelajaran pada unit ini?	
2	Apa yang menjadi kendala dalam pembelajaran pada unit ini?	
3	Bagaimana pencapaian keberhasilan dalam pembelajaran unit ini?	$\mathcal{O}\mathcal{I}$
4	Poin penting apakah yang perlu menjadi catatan dalam menyelesaikan permasalahan pembelajaran pada unit ini?	
5	Tuliskan satu kata atau kalimat yang menggambarkan pencapaian pembelajaran pada unit ini?	3

C. LAMPIRAN

Materi Pembelajaran

Adjectives

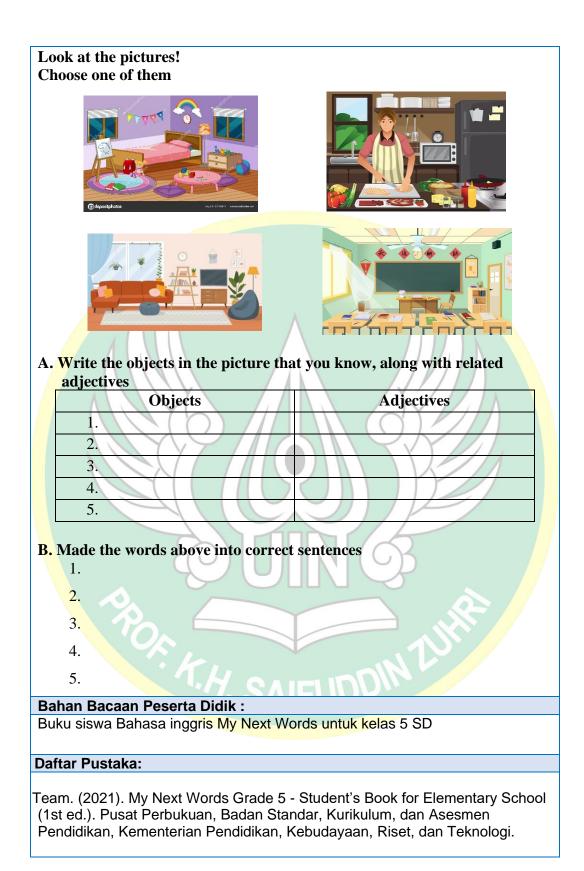
- 1) Adjectives are words used to describe or provide additional information about a noun or pronoun. Adjectives have the function of describing people, animals, or objects.
- One of the types of adjective is descriptive adjective. Descriptive adjective is an adjective that describes or explains the condition of a noun or pronoun which includes size, shape, color, smell, taste, and so on. Example :
 - Character and quality

Kind, friendly, humble, arrogant, charitable, careful, helpful, greedy, lazy, beautiful, pretty, handsome, smart, brilliant, bad, ugly, etc.

Size

Small, big, short, long, low, high, tall, huge, thin, thick, narrow, wide, near, far, etc





Meeting 3

MODUL AJAR

A. INFORMASI UMUM MODUL

Nama Penyusun	: Herdino Yanuari	
Instansi/Sekolah	: SDN 1 Karangaren	
Jenjang / Kelas	: SD / V	
Alokasi Waktu	: 1 X 2 Pertemuan (2 X 35 Menit)	
Tahun Pelajaran	: 2024 / 2025	

B. KOMPONEN INTI

Capaian Pembelajaran Fase C

Pada akhir Fase C, peserta didik memahami dan merespon teks lisan, tulisan, dan visual sederhana dalam bahasa Inggris. Mereka menggunakan bahasa Inggris sederhana untuk berinteraksi dan berkomunikasi dalam situasi yang familiar/lazim/rutin. Peserta didik memahami hubungan bunyi huruf pada kosakata sederhana dalam bahasa Inggris dan menggunakan pemahaman tersebut untuk memahami dan memproduksi teks tulisan dan visual sederhana dalam bahasa Inggris dengan bantuan contoh.

Fase B Berdasarkan Elemen

Elemen Menyimak – Berbicara	By the end of Phase C, students use English to interact in a range of predictable social and classroom situations using certain patterns of sentences. They change/substitute some elements of sentences to participate in learning activities such as asking simple questions, requesting clarification and seeking permission. They use some strategies to identify key information in most contexts such as asking a speaker to repeat or to speak slowly, or asking what a word means. They follow a series of simple instructions related to classroom procedures and learning activities
	related to classroom procedures and learning activities.
Elemen Membaca –	By the end of Phase C, students understand familiar
Memirsa	and new vocabulary with support from visual cues or
	context clues. They read and respond to a wide range
	of short, simple, familiar texts in the form of print or
	digital texts, including visual, multimodal or interactive
	texts. They find basic information in a sentence and
	explain a topic in a text read or viewed.
Elemen Menulis –	By the end of Phase C, students communicate their
Mempresentasikan	ideas and experience through copied writing and their
·	own basic writing, showing evidence of a developing
	understanding of the writing process. They demonstrate
	an early awareness that written texts in English are
	presented through conventions, which change
	according to context and purpose. With teachers'
	according to context and pulpose. With teachers

Tujuan	 support, they produce simple descriptions, recounts and procedures using certain patterns of sentences and modelled examples at word and simple sentence level. They show awareness of the need for basic punctuation and capitalization. They demonstrate knowledge of some English letter-sound relationships and the spelling of high-frequency words. In their writing, they use vocabulary related to their class and home environments, and use basic strategies, such as copying words or phrases from books or word lists, using images and asking how to write a word. 1. Peserta didik mampu menggunakan kata sifat parbondingan untuk menicleakan airi binatana. 				
Pembelajaran	 perbandingan untuk menjelaskan ciri binatang, dan benda-benda lainnya. 2. Peserta didik dapat membuat kalimat sederhana menggunakan yacabulan yang dipelajari 				
Profil Pancasila	menggunakan vocabulary yang dipelajari. Mandiri Kreatif Berpikir kritis Bergotong royong				
Kata kunci					
Target Peserta Didik :					
Peserta didik Reguler	Y Y Y Y				
Jumlah Siswa :					
19 Peserta didik					
Assesmen :	ion tuiuon nomh tlaionn				
- Asesmen individu	ian tujuan pembelajaran				
- Asesmen kelompok					
Jenis Assesmen :					
 Presentasi 					
 Tertulis 					
 Unjuk Kerja 					
Model Pembelajaran					
Tatap muka					
Ketersediaan Materi :					
 Pengayaan untuk peserta didik berpencapaian tinggi: YA/TIDAK 					
 Alternatif penjelasan, metode, atau aktivitas untuk peserta didik yang sulit memohami kanaan; 					
memahami konsep: YA/TIDAK					
Kegiatan Pembelajaran Utama / Pengaturan peserta didik :					
 Individu 					
 Berkelompok (Lebih dari dua orang) 					
Metode dan Model Pe					
Discovery Learning					
Media Pembelajaran					
1. Handphone					

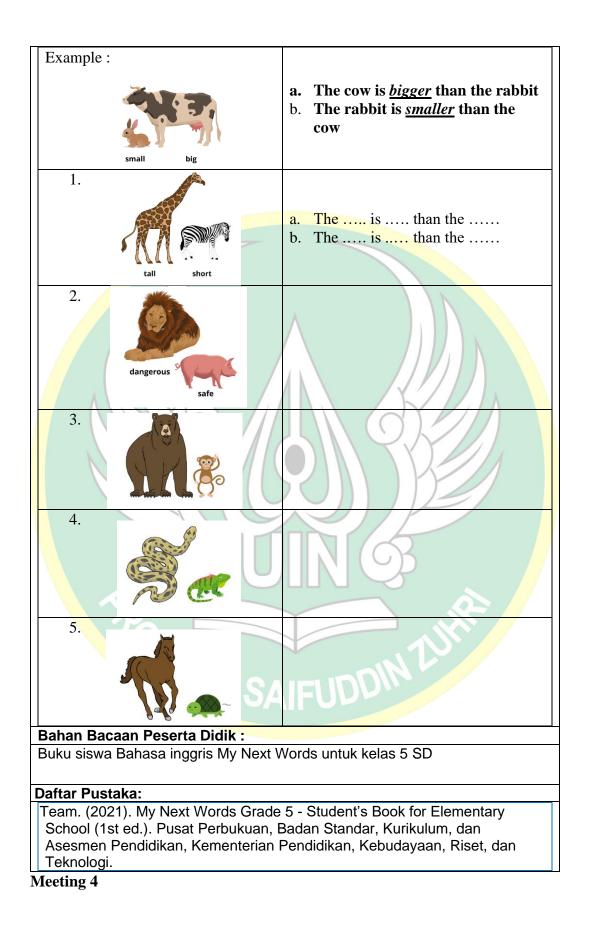
2. Laptop				
3. Jaringan internet				
4. Gambar yang berkaitan dengan materi				
Materi Pembelajaran				
The giraffe is taller than the deer				
• Students are able to use comparative adjectives to talk about people,				
animals, and things				
Sumber Belajar :				
1. Sumber Utama				
 Buku bahasa inggris My Next Words kelas V SD 				
Internet				
2. Sumber Alternatif				
Guru juga dapat menggunakan alternatif sumber belajar yang terdapat di				
lingkungan sekitar dan disesuaikan dengan tema yang sedang dibahas.				
Persiapan Pembelajaran :				
a. Memastikan semua sarana prasarana, alat, dan bahan tersedia				
b. Memastikan kondisi kelas kondusif				
c. Mempersiapkan bahan tayang				
d. Mempersiapkan lembar kerja siswa				
Langkah-langkah Kegiatan pembelajaran :				
Kegiatan Pembuka				
Guru mempersiapkan peserta didik secara fisik maupun psikis untuk dapat				
mengikuti pembelajaran dengan baik.				
Guru memberikan dorongan kepada peserta didik di kelas agar				
bersemangat pada saat mengikuti pelajaran melalui apersepsi yang dapat				
membangkitkan semangat belajar peserta didik.				
Peserta didik diberikan kesempatan untuk memimpin doa bersama sesuai				
dengan agama dan kepercayaannya masing-masing sebelum pembelajaran dilaksanakan.				
 Peserta didik bersama dengan guru mendiskusikan tujuan dan rencana kegiatan pembelajaran. 				
Kegiatan Pembelajaran				
Stimulation				
Tujuan: Mengaktifkan 1. Guru menampilkan video atau gambar				
pengetahuan awal siswa hewan dan benda sehari-hari. Siswa				
tentang binatang dan ciri- diminta mengamati dan mendeskripsikan				
cirinya. objek yang mereka lihat.				
2. Siswa diajak berpikir tentang "Apa yang				
lebih besar, seekor gajah atau seekor				
anjing?" atau "Mana yang lebih cepat,				
mobil atau sepeda?"				
Problem Statement Aktivitas				
kosakata baru yang akan cara kita mengatakan bahwa seekor gajah				
dipelajari dan membuat siswa lebih besar daripada seekor kucing dalam				
berpikir tentang tujuan belajar bahasa Inggris?"				
mereka.				

Data Collection	Aktivitas
Tujuan: Mengenalkan	1. Guru membagikan kartu AR yang
vocabulary baru dengan	menampilkan gambar binatang.
bantuan aplikasi berbasis	2. Guru menjelaskan cara menggunakan
Augmented Reality (AR).	aplikasi AR kepada peserta didik.
	3. Peserta didik menggunakan aplikasi AR
	pada tablet atau smartphone untuk
	memindai kartu dan melihat objek dalam
	bentuk 3D.
	4. Peserta didik secara berpasangan atau
	kelompok kecil mencoba aplikasi AR untuk
	melihat 2 objek 3D binatang dan benda sehari-hari.
1	5. Peserta didik menggunakan aplikasi AR
	untuk membandingkan 2 objek 3D hewan
	dan benda sehari-hari.
	6. Guru memperkenalkan kata <mark>s</mark> ifat
	perbandingan (misalnya, bigger, smaller,
	faster, slower, longer).
	7. Guru menjelaskan pengguna <mark>an</mark>
	<i>comparative adjective</i> . Contoh "Th <mark>e</mark>
	elephant is bigger than the deer", "The shirt
	is more expensive than the hat"
Processing Data	Aktivitas Permainan Interaktif
Tujuan : Peserta didik mampu membangun pemahaman yang	
lebih baik tentang kosakata	Comparative Degree Bingo Deskripsi: Permainan bingo tradisional
baru.	yang dimodifikasi untuk fokus pada kalimat
	comparative degree.
	Cara Bermain:
	Buat kartu bingo dengan beberapa
KH	kalimat comparative degree yang
1.H	belum lengkap, seperti "The cat is
	DA than the dog."
	 Guru memanggil kata sifat secara
	acak, seperti "bigger" atau "smaller."
	Siswa harus melengkapi kalimat pada
	kartu bingo mereka menggunakan kata
	sifat yang disebutkan.
	 Jika siswa berhasil melengkapi satu baris atau kolom dengan kalimat yang
	baris atau kolom dengan kalimat yang benar, mereka harus berteriak "Bingo!"
	-
	dan membacakan kalimatnya.

Verification	Aktivitas
Tujuan: Melatih peserta didik 1. Guru memb	berikan latihan soal mengenai
untuk menggunakan penggunaai	n comparative adjective
vocabulary yang baru 2. Peserta die	dik diminta untuk menjawab
dipelajari. latihan soal	tersebut.
Generelasation	Aktivitas
Tujuan : Peserta didik mampu1. Guru menga	ajak siswa untuk berbagi hasil
siswa mengaitkan diskusi mer	eka di depan kelas.
pengetahuan baru dengan 2. Guru men	nberikan umpan balik dan
konsep-konsep yang sudah koreksi jika	diperlukan.
ada dan membuat aturan atau 3. Guru menyi	impulkan pembelajaran dengan
kesimpulan yang lebih luas membuat c	daftar kata sif <mark>at</mark> yang sering
berdasarkan pengalaman digunakan	untuk membandingkan
belajar mereka. sesuatu.	
Kegiatan Penutup	
 Peserta didik menjawab pertanyaan guru 	
kesulitan mereka dalam pembelajaran How ta	
Guru menanyakan kesan siswa tentang pemb	
 Guru memberikan umpan balik positif dan kor Pelaksanaan Asesmen 	rektif tentang aktivitas hari ini.
Sikap	
 Melakukan observasi selama kegiatan be 	erlangsung dan menuliskannya
pada jurnal, baik sikap positif dan negatif.	
Melakukan penilaian antarteman.	
Mengamati refleksi peserta didik.	
Pengetahuan	
Memberikan tugas tertulis, lisan, dan tes	tertulis
Keterampilan Presentasi	
Proyek	
Portofolio	
Kriteria Penilaian :	
 Penilaian proses: berupa catatan/deskripsi ke 	erja saat diskusi kelo <mark>mp</mark> ok.
 Penilaian Akhir: Skor nilai 10-100 	
Rubrik Penilaian :	
Indikator: Menyusun kalimat sederhana mengena	ai comparative adjective.
Aspe	
No Nama Akurasi	Rata-
(grammar) Ketunt	tasan Mekanik rata
	3 1 2 3
1	
2	
3	
4	

No	Pertanyaan	Jawaban
1	Bagaimanakah reaksi peserta didik dalam	
	mengikuti pembelajaran pada unit ini?	
2	Apa yang menjadi kendala dalam	
	pembelajaran pada unit ini?	
3	Bagaimana pencapaian keberhasilan dalam	
	pembelajaran unit ini?	
4	Poin penting apakah yang perlu menjadi	
	catatan dalam menyelesaikan	
	permasalahan pembelajaran pada unit ini?	
5	Tuliskan satu kata atau kalimat yang	
	menggambarkan pencapaian pembelajaran	
	pada unit ini?	
	MPIRAN	

Materi Pembelajaran
Comparative Adjective
Comparative adjectives are adjectives that are used to compare two objects, people,
o <mark>r a</mark> nimals. In English, we use comparative adjectives to show that one thing is more
than another thing in some aspect (such as bigger, smaller, faster, etc.).
Types of Comparative Adjectives:
1. Short adjectives (one or two syllables):
 Add the ending -er to adjectives.
 If the adjective ends in -y, change the y to i and then add -er.
Examples:
\circ Big \rightarrow Bigger
(The lion is bigger than the cat.)
 o Heavy → Heavier Lucky - Luckier
(The stone is heavier than the paper)
2. Long adjectives (three or more syllables):
 Add more before the adjectives
Examples: • Beautiful \rightarrow More beautiful
(The flower is more beautiful than the leaf.)
• Expensive \rightarrow More expensive
(This car is more expensive than the bike.)
Formula :
1. object 1 + is + (adjective+ er)+ than+ object 2
2. Object 1 + is + (more + adjective) + than + object 2
Lembar Kerja :
Lembar Kerja Peserta Didik 1
Look at the pictures!
Make comparative sentences correctly!



MODUL AJAR

A. INFORMASI UMUM MODUL		
Nama Penyusun	: Herdino Yanuari	
Instansi/Sekolah	: SDN 1 Karangaren	
Jenjang / Kelas	: SD / V	
Alokasi Waktu	: 1 X 2 Pertemuan (2 X 35 Menit)	
Tahun Pelajaran	: 2024 / 2025	

B. KOMPONEN INTI

Capaian Pembelajaran Fase C

Pada akhir Fase C, peserta didik memahami dan merespon teks lisan, tulisan, dan visual sederhana dalam bahasa Inggris. Mereka menggunakan bahasa Inggris sederhana untuk berinteraksi dan berkomunikasi dalam situasi yang familiar/lazim/rutin. Peserta didik memahami hubungan bunyi huruf pada kosakata sederhana dalam bahasa Inggris dan menggunakan pemahaman tersebut untuk memahami dan memproduksi teks tulisan dan visual sederhana dalam bahasa Inggris dengan bantuan contoh.

Fase B Berdasarkan Elemen

Elemen Menyimak -	By the end of Phase C, students use English to interact in
Berbicara	a range of predictable social and classroom situations using certain patterns of sentences. They change/substitute some elements of sentences to participate in learning activities such as asking simple questions, requesting clarification and seeking permission. They use some strategies to identify key information in most contexts such as asking a speaker to repeat or to speak slowly, or asking what a word means. They follow a series of simple instructions related to classroom procedures and learning activities.
Elemen Membaca - Memirsa	By the end of Phase C, students understand familiar and new vocabulary with support from visual cues or context clues. They read and respond to a wide range of short, simple, familiar texts in the form of print or digital texts, including visual, multimodal or interactive texts. They find basic information in a sentence and explain a topic in a
	text read or viewed.
Elemen Menulis – Mempresentasikan	By the end of Phase C, students communicate their ideas and experience through copied writing and their own basic writing, showing evidence of a developing understanding of the writing process. They demonstrate an early awareness that written texts in English are presented through conventions, which change according to context and purpose. With teachers' support, they produce simple descriptions, recounts and procedures using certain patterns of sentences and modelled examples at word and simple sentence level. They show awareness of the

	need for basic punctuation and capitalization. They
	demonstrate knowledge of some English letter-sound
	relationships and the spelling of high-frequency words. In
	their writing, they use vocabulary related to their class and
	home environments, and use basic strategies, such as copying words or phrases from books or word lists, using
	images and asking how to write a word.
Tujuan Pembelajaran	1. Peserta didik mampu mengidentifikasi superlative
rujuan remociajaran	degree untuk mendeskripsikan hewan dan benda
	sehari-hari.
	2. Peserta didik mampu menggunakan superlative
	degree untuk mendeskripsikan hewan dan benda
	sehari-hari.
	3. Peserta didik dapat membuat kalimat sederhana
	menggunakan vocabulary yang dipelajari.
Profil Pancasila	Mandiri
	Kreatif
	Berpikir kritis
	Bergotong royong
Kata kunci	
Target Peserta Didik :	
Peserta didik Reguler	
Jumlah Siswa :	
19 Peserta didik	
Assesmen :	
Guru menilai ketercapaia	an tujuan pembelajaran
- Asesmen individu	
- Asesmen kelompok	
Jenis Assesmen :	
Presentasi	
Tertulis	
 Unjuk Kerja 	
Model Pembelajaran	
 Tatap muka 	
Ketersediaan Materi :	
 Pengayaan untuk per YA/TIDAK 	serta didik berpencapaian tinggi:
Alternatif penjelasan	, metode, atau aktivitas untuk p <mark>eserta di</mark> dik yang sulit
memahami konsep:	
YA/TIDAK	
Kegiatan Pembelajaran l	Jtama / Pengaturan peserta didik :
 Individu 	
Berkelompok (Lebih	
Metode dan Model Pem	belajaran :
Discovery Learning	
Media Pembelajaran	
1. Laptop	
2. Handphone	
3. Jaringan internet	

4. Gambar yang berkaitan denga	in materi				
Materi Pembelajaran					
The elephant is the biggest					
 Students are able to use superlative adjectives to talk about people, animals, and things 					
and things					
Sumber Belajar : 1. Sumber Utama					
Buku bahasa inggris My Next Words kelas V SD					
Internet Sumber Alternetif					
2. Sumber Alternatif					
Guru juga dapat mengg <mark>unakan alternatif sumber belaja</mark> r yang terdapat di lingkungan sekit <mark>ar dan disesuaikan dengan tema yang sedan</mark> g dibahas.					
	aikan dengan tema yang sedang dibanas.				
Persiapan Pembelajaran :	reserves alst den haben teresdie				
	prasarana, alat, dan bahan tersedia				
c. Mempersiapkan bahan tayar	-				
d. Mempersiapkan lembar kerja					
Langkah-langkah Kegiatan per	mbelajaran :				
Kegiatan Pembuka					
	a didik secara fisik maupun psikis untuk da <mark>pat</mark>				
mengikuti pembelajaran deng					
	kepada peserta didik di kelas agar bersemangat				
	n melalui apersepsi yang dapat membangkitkan				
	semangat belajar peserta didik.				
Peserta didik diberikan kesempatan untuk memimpin doa bersama sesuai					
dengan agama dan keperca	mpatan untuk memimpin doa bersama sesuai yaannya masing-masing sebelum pembelajaran				
dengan agama dan keperca dilaksanakan.					
dengan agama dan keperca dilaksanakan. • Setelah berdoa selesai.	yaannya masing-masing sebelum pembelajaran				
dengan agama dan keperca dilaksanakan. • Setelah berdoa selesai. • Peserta didik bersama den					
 dengan agama dan kepercag dilaksanakan. Setelah berdoa selesai. Peserta didik bersama den kegiatan pembelajaran. 	yaannya masing-masing sebelum pembelajaran				
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berpikir tentang tujuan belajar	2	Guru menuliskan beberapa kalimat contoh
mereka.	2.	penggunaan superlative degree sederhana.
Data Collection		Aktivitas
Tujuan: Mengenalkan	1	Guru membagikan kartu AR yang
vocabulary baru dengan	д.	menampilkan gambar binatang.
bantuan aplikasi berbasis	2.	
Augmented Reality (AR).	Z.	Guru menjelaskan cara menggunakan aplikasi AR kepada peserta didik.
Augmented Reality (AR).	3.	Peserta didik menggunakan aplikasi AR
	Э.	pada tablet atau smartphone untuk
		memindai kartu dan melihat objek dalam
	-	bentuk 3D.
	4.	Peserta didik secara berpasangan atau
	4.	kelompok kecil mencoba aplikasi AR untuk
		melihat 3 objek 3D binatang dan benda
		sehari-hari.
	5.	Peserta didik menggunakan aplikasi AR
	0.	untuk membandingkan 3 objek 3D hewan
		dan benda sehari-hari. Mereka mencatat
		informasi tentang ukuran, berat, kecepatan,
	//	atau karakteristik lainnya.
	6.	Guru memperkenalkan kata sifat
	//	perbandingan (misalnya, biggest, smallest,
		fastest, slowest, longest).
	7.	Guru menjelaskan penggunaan superlative
	6	adjective. Contoh "The elephant is biggest",
		"The pillow is the softest"
Processing Data		Aktivitas
Tujuan: Peserta didik mampu	1.	Guru membagi peserta didik menjadi
me <mark>mb</mark> angun pemahaman yang		kelompok kecil.
lebih baik tentang kosakata	2.	Setiap kelompok diberikan beberapa kartu
baru.		AR dan diminta untuk mendiskusikan 3
		objek mengenai binatang dan benda sehari -
K.H		hari serta ciri-cirinya.
	3.	Kelompok secara bergantian menyebutkan
		hasil diskusi mereka dengan menyebutkan
		perbandingan dari dua objek. Contoh: "The
		elephant is biggest."
Verification		Aktivitas
Tujuan: Melatih peserta didik	1.	Guru memberikan latihan soal yang
untuk menggunakan vocabulary	_	berisikan pernyataan rumpang.
yang baru dipelajari.	2.	Peserta didik diminta untuk menjawab
		latihan soal tersebut.
Generelasation		Aktivitas

me • Gu	serta didik menjawa ereka dalam pembela ru menanyakan kesa	ajaran an sisv	How wa te	tall a ntan	are yo g pem	u? bela	jaran	men	iggui	naka	an	AR.	
	ru memb <mark>erikan</mark> ump anaan Asesmen	an ba	пк ро	SILI	uan ko	лек	ii ten	lang	акц	vita	ST	an m	1.
 Melakukan observasi selama kegiatan berlangsung dan menuliskannya pada jurnal, baik sikap positif dan negatif. Melakukan penilaian antarteman. Mengamati refleksi peserta didik. Pengetahuan Memberikan tugas tertulis, lisan, dan tes tertulis Keterampilan Presentasi Portofolio Kriteria Penilaian : Penilaian proses: berupa catatan/deskripsi kerja saat diskusi kelompok. Penilaian Akhir: Skor nilai 10-100 Rubrik Penilaian : Indikator: Menyusun kalimat sederhana mengenai superlative adjective. 													
Kriteria • Per • Per • Per	Presentasi Proyek Portofolio a Penilaian : nilaian proses: berup nilaian Akhir: Skor ni k Penilaian :	lai 10	-100		meng	enai	supe	P		2			
Kriteria Per Per Rubril Indika	Presentasi Proyek Portofolio a Penilaian : nilaian proses: berup nilaian Akhir: Skor ni k Penilaian : tor: Menyusun kalin	lai 10 nat se	-100 ederh	ana	meng	9	supe	P		2			ta-
Kriteria • Per • Per • Per	Presentasi Proyek Portofolio a Penilaian : nilaian proses: berup nilaian Akhir: Skor ni k Penilaian :	lai 10 nat se Al	-100 ederh	ana si	meng	enai speł	supe	erlati		dje	ctiv	/e.	
Kriteria • Pei • Pei Rubril	Presentasi Proyek Portofolio a Penilaian : nilaian proses: berup nilaian Akhir: Skor ni k Penilaian : tor: Menyusun kalin	lai 10 nat se Al	-100 ederh	ana si	meng As	enai speł	supe	erlati	ve a	dje	ctiv	/e. Rat	
Kriteria Pei Pei Rubril Indika	Presentasi Proyek Portofolio a Penilaian : nilaian proses: berup nilaian Akhir: Skor ni k Penilaian : tor: Menyusun kalin	ai 10 nat se Ak (gra	derh	ana si ar)	meng As Ketu	enai speł unta	supe san	erlati M	ve a	djeo nik	ctiv	/e. Rat	
Kriteria Per Per Rubril Indika No 1 2	Presentasi Proyek Portofolio a Penilaian : nilaian proses: berup nilaian Akhir: Skor ni k Penilaian : tor: Menyusun kalin	ai 10 nat se Ak (gra	derh	ana si ar)	meng As Ketu	enai speł unta	supe san	erlati M	ve a	djeo nik	ctiv	/e. Rat	
Kriteria Per Per Rubril Indika No 1 2 3	Presentasi Proyek Portofolio a Penilaian : nilaian proses: berup nilaian Akhir: Skor ni k Penilaian : tor: Menyusun kalin	ai 10 nat se Ak (gra	derh	ana si ar)	meng As Ketu	enai speł unta	supe san	erlati M	ve a	djeo nik	ctiv	/e. Rat	
Kriteria Per Per Rubril Indika No 1 2	Presentasi Proyek Portofolio a Penilaian : nilaian proses: berup nilaian Akhir: Skor ni k Penilaian : tor: Menyusun kalin	ai 10 nat se Ak (gra	derh	ana si ar)	meng As Ketu	enai speł unta	supe san	erlati M	ve a	djeo nik	ctiv	/e. Rat	

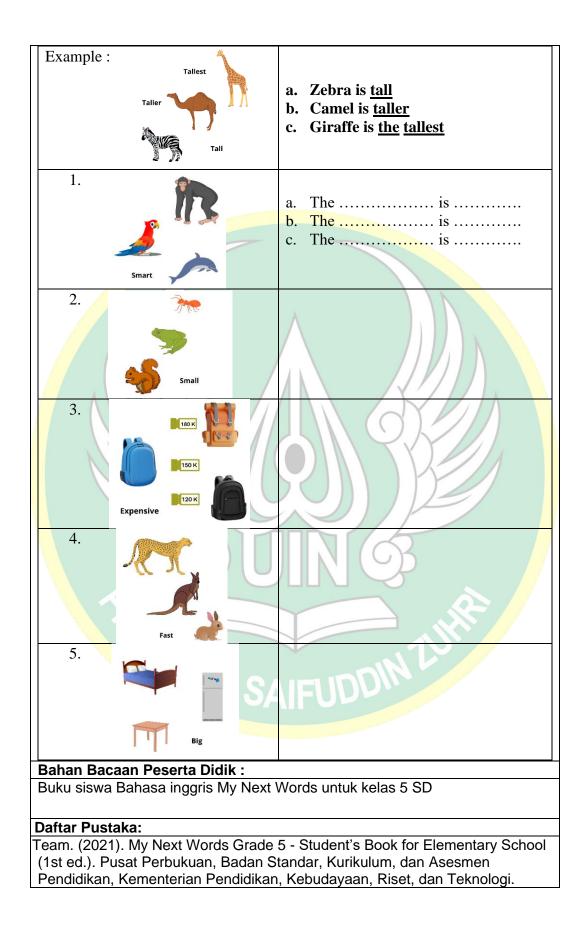
Refleksi Guru:

No	Pertanyaan	Jawaban
1	Bagaimanakah reaksi peserta didik dalam	
	mengikuti pembelajaran pada unit ini?	
2	Apa yang menjadi kendala dalam	
	pembelajaran pada unit ini?	
3	Bagaimana pencapaian keberhasilan dalam	
	pembelajaran unit ini?	

4	Poin penting apakah yang perlu menjadi catatan dalam menyelesaikan permasalahan pembelajaran pada unit ini?	
5	Tuliskan satu kata atau kalimat yang menggambarkan pencapaian pembelajaran pada unit ini?	

C. LAMPIRAN

Materi Pembelajaran
Superlative Adjective
Supenative Adjective
Superlative adjectives are adjectives used to compare more than two things, people, or animals, and indicate that one thing is the most in a category.
How to shape Superlative Adjectives:
 Short adjectives (one or two syllables): Add the ending -est to the adjective. If the adjective ends in -y, change the y to i and then add -est Example: Big → Biggest
 Add the most before the adjective. Example:
• Beautiful \rightarrow The most beautiful
(This is the most beautiful flower in the garden.)
 Expensive → The most expensive (This is the most expensive ser is the showroom)
(This is the most expensive car in the showroom.) \circ Interesting \rightarrow The most interesting
(That was the most interesting book I have ever read.
(That was the most interesting book mave even read.
The formula of Superlative Adjective
3. Subject + to e+ adjective + est + noun (optional).
 Subject + to be + the most + adjective + noun (optional).
Lembar Kerja :
Lembar Kerja Peserta Didik 1
Look at the pictures!
Make superlative sentences correctly!



Appendix 10. Documentations of the Research

