

CHAPTER II

LITERATURE REVIEW

A. Vocabulary

1. Definition of Vocabulary

Vocabulary is a fundamental component of language proficiency and serves as the core element in language acquisition. It refers to the set of lexical items known and used by an individual within a particular language. According to Nation (2013), vocabulary consists of lexical units that include not only single words but also multi-word expressions such as idioms, phrasal verbs, collocations, and fixed phrases that function as meaningful units in communication. This broader perspective emphasizes that vocabulary extends beyond isolated word forms and encompasses various lexical combinations that contribute to meaning-making.

Similarly, Thornbury (2017) argues that vocabulary is not merely a collection of individual words but a network of interconnected items that form part of a language system. Words do not exist independently; they are linked semantically, syntactically, and pragmatically within discourse. This interconnectedness enables learners to construct and interpret meaning in communication, highlighting that vocabulary knowledge involves understanding relationships among words rather than memorizing isolated lexical items.

In the context of language learning, vocabulary plays a central role because it underpins the development of the four language skills: listening, speaking, reading, and writing. Schmitt (2010) emphasizes that learners with limited vocabulary knowledge often experience difficulties in comprehending spoken and written texts, regardless of their grammatical understanding. Even if learners possess adequate grammatical competence, communication cannot occur effectively without sufficient vocabulary. Therefore, vocabulary is widely regarded as the foundation of communicative competence.

For young learners, vocabulary development is particularly crucial because it forms the basis for further language growth. Early vocabulary acquisition facilitates comprehension of classroom instructions, participation in communicative activities, and understanding of academic content delivered in English. Thus, strengthening vocabulary knowledge at the elementary level is essential for long-term language proficiency and should become a primary concern in English language instruction for young learners.

2. Types of Vocabulary

Vocabulary knowledge can be categorized into several types based on how words are processed and used. The most commonly recognized classification distinguishes between receptive vocabulary and productive vocabulary (Nation, 2013). Understanding this distinction is important in vocabulary instruction because learners often comprehend more words than they can actively produce.

a. Receptive Vocabulary

Receptive vocabulary refers to words that learners can recognize and understand when they encounter them in listening or reading contexts but may not be able to use independently in speaking or writing (Nation, 2013). This type of vocabulary supports comprehension skills and usually develops earlier than productive vocabulary. Receptive vocabulary involves the ability to:

- 1) Recognize the spoken or written form of a word;
- 2) Connect the form with its meaning;
- 3) Understand the word within a given context.

For young learners, receptive vocabulary is often developed through exposure to stories, songs, teacher explanations, and visual media. Visual aids play an important role in strengthening receptive vocabulary because they provide contextual clues that help learners infer meaning without relying heavily on translation.

b. Productive Vocabulary

Productive vocabulary refers to words that learners can actively use in speaking and writing. It requires deeper mastery than receptive vocabulary because learners must retrieve the word accurately and apply it appropriately in communication. Productive vocabulary involves:

- 1) Correct pronunciation;
- 2) Accurate spelling;
- 3) Appropriate grammatical usage;
- 4) Knowledge of collocations and contextual constraints.

Developing productive vocabulary is generally more demanding because learners must not only recognize meaning but also retrieve and manipulate lexical items during communication. In classroom settings, activities such as labelling pictures, describing objects, role-playing, and sentence construction help transform receptive vocabulary into productive vocabulary.

The distinction between receptive and productive vocabulary is essential in vocabulary studies. However, this research specifically focused on students' receptive vocabulary knowledge, as it was measured through multiple-choice tests that assessed recognition and understanding rather than productive use.

3. Aspects of Vocabulary Knowledge

Vocabulary knowledge is multidimensional and cannot be reduced to simple word-meaning memorization. Nation (2013) proposes that knowing a word involves three major aspects: form, meaning, and use. Each aspect consists of several components that collectively determine the depth of vocabulary knowledge.

a. Form

The first aspect is form, which refers to how a word is represented in spoken and written language. According to Nation (2013), form consists of several components as follows:

- 1) Spoken form – the pronunciation of the word, including stress and intonation patterns;

- 2) Written form – the spelling of the word;
- 3) Word parts – morphological components such as prefixes, suffixes, and root forms.

Mastery of form enables learners to recognize and produce words accurately. For young learners, visual aids such as flashcards with written labels, illustrated word cards, and digital slides can support the association between spoken and written forms.

b. Meaning

The second aspect is meaning, which concerns the relationship between a word and the concept it represents. Nation (2013) identifies several components of meaning as follows:

- 1) Form-meaning connection – linking the word form to its concept;
- 2) Concept and referents – understanding what the word represents in the real world;
- 3) Associations – understanding related words, synonyms, antonyms, and semantic networks.

Meaning is often easier to grasp when learners can see concrete representations of words. For example, showing a picture of an “apple” helps learners connect the word to its referent more effectively than abstract explanation. According to *Dual Coding Theory* (Paivio, 2013), combining verbal and visual input strengthens cognitive connections, thereby improving retention.

c. Use

The aspect of use concerns how vocabulary items are employed appropriately in communication. According to Nation (2013), knowing how to use a word involves understanding its grammatical behavior, common word partnerships, and contextual appropriateness. The aspect of use includes:

- 1) Grammatical functions – how the word behaves syntactically in a sentence;
- 2) Collocations – common word partnerships (e.g., “*make a mistake*,” not “*do a mistake*”);

- 3) Constraints of use – appropriateness in specific contexts (formal versus informal, spoken versus written).

Understanding usage is essential for productive mastery. Learners must know not only what a word means but also how and when it is appropriately used. For young learners, contextualized activities supported by pictures and real objects can help clarify usage in meaningful situations.

Although vocabulary knowledge consists of form, meaning, and use, this study primarily measured the recognition of meaning and written form through multiple-choice tests. Productive use and spoken form were not directly assessed in this research.

B. Vocabulary Mastery

1. Definition of Vocabulary Mastery

Vocabulary mastery refers to learners' comprehensive understanding of words, including their meaning, form, and appropriate usage. According to Nation (2013), knowing a word involves several aspects, such as its form (spoken and written), its meaning, and its use in context. Similarly, Read (2000) explains that vocabulary knowledge can be categorized into receptive and productive knowledge. Receptive knowledge refers to the ability to recognize and understand words when they are encountered, while productive knowledge involves the ability to use words accurately in speaking or writing.

In elementary school contexts, vocabulary mastery primarily emphasizes receptive vocabulary knowledge. At this level, learners are expected to recognize word meanings, understand words in simple contexts, identify relationships between words, and recognize correct written forms. These abilities demonstrate that students have established meaningful connections between word form and meaning.

Therefore, in this study, vocabulary mastery was defined as students' receptive understanding of vocabulary items, which included recognizing word meaning, interpreting words in context, identifying basic semantic relationships, and recognizing correct word form. This conceptual

definition aligned with foundational vocabulary learning principles for young learners and supported measurable assessment in classroom settings.

2. Indicators of Vocabulary Mastery

Vocabulary mastery is a multidimensional construct. According to Nation (2013), knowing a word involves understanding its form, meaning, and use. Similarly, Read (2000) explains that vocabulary knowledge can be viewed from receptive and productive perspectives. In elementary school contexts, vocabulary mastery is commonly reflected through students' receptive understanding of word meaning and basic word knowledge.

Based on these theoretical perspectives, the indicators of vocabulary mastery include:

a. Recognizing Word Meaning

Recognizing word meaning refers to students' ability to understand the basic meaning of a vocabulary item. This includes identifying the correct meaning of a word when it is presented independently or alongside several possible meanings.

At the elementary level, this aspect focuses on students' understanding of high-frequency and familiar vocabulary items that are commonly used in classroom contexts. The ability to recognize word meaning demonstrates that students have established a connection between the word form and its meaning.

b. Understanding Words in Context

Understanding words in context refers to students' ability to interpret the meaning of vocabulary items when they appear in sentences. Words may carry slightly different meanings depending on how they are used. Therefore, students need to rely on contextual clues to determine the most appropriate meaning.

This indicator reflects students' ability to process vocabulary not only as isolated items but also as part of meaningful language use. For elementary learners, contextual understanding typically involves simple sentences and familiar situations.

c. Identifying Semantic Relationships

Identifying semantic relationships refers to students' ability to recognize basic relationships between words, such as synonyms and antonyms. This ability shows that students understand how words are conceptually related within a lexical network.

Recognizing synonyms indicates that students understand similarity of meaning, while identifying antonyms shows awareness of contrast in meaning. These relationships strengthen students' depth of vocabulary knowledge and support better comprehension skills.

d. Recognizing Correct Word Form

Recognizing correct word form refers to students' ability to identify the correct written form of vocabulary items. This includes distinguishing correct spelling from incorrect forms.

At the elementary level, accurate recognition of spelling reflects familiarity with the visual form of words. Since vocabulary knowledge includes the relationship between spoken and written forms (Nation, 2013), recognizing correct word form becomes an important foundation for reading development.

The four indicators above primarily represent receptive vocabulary knowledge, which involves recognizing and understanding words when they are encountered in written form. For elementary school learners, receptive vocabulary knowledge forms the foundation for further language development, including speaking and writing skills.

Thus, vocabulary mastery in this study was conceptually framed as students' receptive understanding of word meaning, contextual usage, semantic relationships, and written form.

3. Assessing Vocabulary Mastery

a. The Concept and Role of Vocabulary Assessment

Assessment is an integral component of the teaching and learning process. In language education, assessment is not merely a tool to assign scores but a systematic procedure to collect information about learners' achievement and development (Brown, 2004). In the context

of vocabulary learning, assessment is necessary to determine the extent to which learners have acquired the target words taught during instruction.

According to Harmer (2007), assessment provides feedback for both teachers and learners. For teachers, it functions as evidence of whether instructional strategies are effective. For learners, it indicates progress and areas that require improvement. In CAR, assessment plays a particularly significant role because it is used to measure improvement across cycles of intervention.

Vocabulary assessment refers to the procedures used to measure learners' knowledge of lexical items. Nation (2001) emphasizes that vocabulary knowledge must be measured systematically because vocabulary is a central component of language proficiency. Without sufficient vocabulary knowledge, learners may struggle to comprehend texts and express ideas.

In the context of young learners, assessment must also consider developmental characteristics. Cameron (2001) states that children learn languages differently from adults; therefore, assessment tasks should be clear, concrete, and appropriate to their cognitive level. For elementary school students, vocabulary assessment should avoid overly abstract tasks and instead use formats that are simple, structured, and familiar.

Thus, effective vocabulary assessment in primary school classrooms must fulfil four essential criteria: validity, reliability, practicality, and suitability to learners' level (Brown, 2004). These principles are particularly important in classroom-based research, where assessment results are used to determine instructional effectiveness.

b. Methods of Assessing Vocabulary Mastery

1) Multiple-Choice Tests

Multiple-choice tests are widely used in vocabulary assessment. According to Hughes (2003), multiple-choice items are

practical, objective, and reliable when constructed carefully. This format typically measures receptive vocabulary knowledge, particularly recognition of word meaning. For young learners, multiple-choice tests can be effective if the instructions are simple and the language used in the items is appropriate to their level. However, one limitation of this format is the possibility of guessing, which may influence test validity. Therefore, in this study, multiple-choice tests were used to measure students' receptive vocabulary mastery, particularly meaning recognition, contextual understanding, semantic relationships, and written form recognition.

2) Matching Tests

Matching tests require learners to match words with definitions, synonyms, or pictures. This format is considered suitable for elementary learners because it provides visual or contextual support. Nation (2001) notes that matching tasks are effective for assessing recognition knowledge while minimizing random guessing. Therefore, matching tests can serve as an effective alternative for assessing receptive vocabulary knowledge among young learners.

3) Gap-Filling or Cloze Tests

Gap-filling tasks require learners to complete sentences with appropriate vocabulary. This method measures learners' understanding of vocabulary in context. However, for lower-grade elementary students, this format may be more challenging because it requires greater language production ability. Consequently, this format may be more suitable for learners with higher levels of vocabulary proficiency.

4) Picture-Based Assessment

Picture-based assessment is particularly appropriate for young learners. Cameron (2001) explains that children respond well to visual stimuli, making picture-supported vocabulary tests effective

for primary classrooms. This format helps reduce cognitive load and supports comprehension. Therefore, picture-based assessment is often recommended for vocabulary instruction and evaluation in primary school contexts.

Each assessment method has advantages and limitations. Therefore, teachers must consider learners' age, proficiency level, and instructional objectives when selecting an appropriate vocabulary assessment format.

c. Multiple-Choice Tests in Vocabulary Assessment

Multiple-choice questions (MCQs) are widely used as an assessment instrument in classroom-based instruction and educational research. They are designed to measure learners' understanding and knowledge of specific learning materials. In CAR, MCQs are frequently employed to monitor students' learning progress and evaluate instructional effectiveness across cycles due to their objectivity and practicality (Malau-Aduli *et al.*, as cited in Liu *et al.*, 2023).

According to Brown (2004), well-constructed multiple-choice items can achieve high reliability because scoring is objective and consistent. Similarly, Hughes (2003) states that multiple-choice formats are efficient for assessing receptive knowledge, particularly in language learning contexts.

Structurally, a multiple-choice item consists of a stem and several answer options, including one correct answer (key) and several distractors. The stem may be presented as a direct question or an incomplete statement. Nitko & Brookhart (2014) explain that this format enables teachers to assess a wide range of vocabulary items efficiently within limited instructional time.

In relation to cognitive processes, Bloom *et al.* (1956) suggest that assessment instruments can measure different levels of thinking, ranging from remembering and understanding to applying and analysing information. When carefully constructed, multiple-choice questions can

assess not only vocabulary recognition but also contextual understanding.

For primary school learners, multiple-choice tests offer several practical advantages. They reduce the writing burden for young learners, provide clear answer choices, and are relatively easy to administer and score. These characteristics make MCQs suitable for classroom-based assessment in elementary settings.

However, multiple-choice questions also have limitations. Haladyna *et al.* (2002) note that poorly constructed items may confuse students or encourage guessing. Furthermore, this format primarily measures recognition rather than productive vocabulary ability. Therefore, careful construction and alignment with instructional objectives are necessary to ensure validity (Biggs & Tang, 2011).

Despite these limitations, MCQs remain one of the most practical and reliable tools for measuring vocabulary achievement in CAR, particularly when improvement across cycles needs to be measured quantitatively.

C. Young Learners and Vocabulary Learning

1. Characteristics of Young Learners

Young learners are generally defined as children in primary school, typically aged between 6 and 12 years old. In *English as a Foreign Language* (EFL) contexts, they begin learning English during their early formal education. Their cognitive, emotional, and social development differs from that of older learners, which influences how they learn vocabulary.

According to Cameron (2001), young learners learn best through concrete experiences, visual stimulation, repetition, and meaningful interaction. Based on Piaget's theory of cognitive development, children at the primary level are in the concrete operational stage. At this stage, they understand concepts better when learning is connected to tangible objects and real-life situations.

Young learners typically:

- 1) Have short attention spans;
- 2) Learn effectively through visual and sensory input;
- 3) Respond positively to engaging and interactive activities;
- 4) Require repetition and recycling to retain vocabulary.

Harmer (2007) adds that children are more motivated when classroom activities are enjoyable and varied. These developmental characteristics should be considered when designing vocabulary instruction for young learners because they influence how children understand, retain, and use new words.

2. Vocabulary Learning in Primary EFL Context

Young learners acquire vocabulary more effectively when learning activities are meaningful, contextualized, and supported by concrete experiences. In EFL classrooms, vocabulary plays a fundamental role because it supports learners' ability to understand classroom instruction and participate in communication activities. According to Nation (2001), vocabulary knowledge is essential for the development of listening, speaking, reading, and writing skills. Without sufficient vocabulary, learners may experience difficulties in understanding language input and expressing ideas.

For young learners, vocabulary learning requires repeated exposure and meaningful reinforcement. Cameron (2001) explains that children learn vocabulary gradually through continuous interaction with language in various contexts. Vocabulary recycling and repeated encounters help strengthen learners' understanding and retention of new words.

The importance of repetition in vocabulary learning is also supported by Ebbinghaus's (1913) theory of memory retention, which states that repeated exposure strengthens long-term memory and reduces forgetting. Similarly, Schmitt (2008) argues that vocabulary acquisition requires multiple encounters and retrieval practice before vocabulary items can be retained effectively in long-term memory. Therefore, repetition activities supported by visual aids are important for helping young learners strengthen vocabulary retention and recall.

In addition, affective factors also influence vocabulary learning outcomes. Krashen (1982) explains through the *Affective Filter Hypothesis* that learners acquire language more effectively in supportive and low-anxiety learning environments. Young learners tend to participate more actively when classroom activities are enjoyable, interactive, and visually engaging. Therefore, effective vocabulary instruction for young learners should combine meaningful exposure, repetition, and supportive learning environments to facilitate long-term vocabulary acquisition.

3. Implications for Vocabulary Teaching

Considering the developmental characteristics of young learners, vocabulary instruction should be concrete, contextualized, visually supported, interactive, and repetitive. Since elementary school students rely heavily on sensory input and concrete experiences, abstract explanations should be minimized during vocabulary instruction. Visual support is particularly important because young learners tend to understand vocabulary more effectively when they can directly associate words with objects, pictures, or familiar situations. According to Cameron (2001), children learn language more successfully through meaningful and visually stimulating activities. Therefore, vocabulary instruction should involve visual media such as flashcards, pictures, real objects, labels, and digital materials to facilitate comprehension and retention.

Furthermore, Vygotsky (1978) emphasizes that learning occurs more effectively through social interaction and instructional support. In vocabulary learning, visual aids can function as scaffolding tools that help learners connect unfamiliar English vocabulary with familiar objects, situations, and classroom experiences. Teacher guidance combined with visual representation supports young learners in constructing vocabulary understanding more effectively.

Vocabulary teaching for young learners should also involve repetition and recycling activities because children require continuous reinforcement to retain new vocabulary. Activities such as pronunciation drills, picture matching, vocabulary labeling, and structured review sessions

can strengthen students' vocabulary retention while maintaining classroom engagement.

D. Visual Aids

The use of visual aids in language learning has been widely recognized as an effective strategy for enhancing vocabulary acquisition. Visual aids provide learners with concrete representations of abstract concepts, making it easier for them to understand and remember new vocabulary (Wright, 2010). This section explores the different types of visual aids used in language teaching and their effectiveness in improving vocabulary learning outcomes.

1. Definition of Visual Aids

Visual aids refer to instructional materials that utilize visual elements such as pictures, flashcards, charts, real objects, videos, labels, and digital displays to support the learning process (Wright, 2010). In language teaching, visual aids function as instructional media that help learners connect linguistic forms with their meanings through concrete representation.

In vocabulary instruction, visual aids help learners understand vocabulary more easily because they provide direct visual representation of objects, places, or concepts. For example, presenting a picture of a classroom while introducing the word classroom allows learners to establish a direct connection between the vocabulary item and its meaning. This process helps reduce abstractness and facilitates comprehension among young learners.

According to Paivio's (2013) *Dual Coding Theory*, information presented through both verbal and visual channels is more easily retained because learners process information using two interconnected cognitive systems. The combination of words and images strengthens memory traces and improves vocabulary recall.

Similarly, Moreno & Mayer (2007) explain that learners understand information more effectively when verbal explanation and visual representation are presented simultaneously. The integration of words and images allows learners to process information through multiple cognitive

channels, which supports attention, comprehension, and meaningful learning. This principle is particularly relevant for young learners who depend heavily on visual stimulation during classroom activities.

Therefore, visual aids are considered effective instructional media for supporting vocabulary learning, especially among elementary school students who require concrete and engaging learning experiences.

2. Types of Visual Aids

Visual aids in language classrooms can be categorized into conventional and digital forms. This classification reflects the instructional context of elementary classrooms, especially those with varying technological facilities. Visual aids used in language classrooms vary in form and function. In general, they can be categorized into conventional visual aids and digital visual aids. Both categories provide visual support that facilitates vocabulary learning, although they differ in terms of media and classroom implementation.

a. Conventional Visual Aids

Conventional visual aids are non-digital materials traditionally used in classroom instruction. They are practical and highly suitable for elementary classrooms with limited technological resources. These include:

1) Flashcards

Flashcards are one of the most commonly used visual aids in vocabulary instruction, especially for young learners. Flashcards generally consist of cards containing pictures, words, or both, which are used to introduce and reinforce vocabulary items. According to Doff (1988), flashcards are effective teaching media because they provide clear visual representation and attract students' attention during learning activities. Similarly, Wright (1989) explains that flashcards help learner associate words with images, making vocabulary easier to understand and remember. Through repeated exposure, flashcards also support vocabulary retention and recall.

This is particularly important for young learners, who often learn more effectively through repetition and visual stimulation.

In addition, Harmer (2007) states that flashcards can increase classroom interaction because they allow teachers to conduct various engaging activities such as drilling, guessing games, matching activities, and repetition exercises. These activities encourage students to participate actively in vocabulary learning.

From the perspective of *Dual Coding Theory* (Paivio, 2013), flashcards combine verbal input and visual representation simultaneously. When students see a picture while hearing or reading the corresponding word, both verbal and visual cognitive systems are activated, which strengthens memory and comprehension. Therefore, flashcards are considered effective visual aids for introducing vocabulary, reinforcing word meaning, increasing students' participation, and supporting vocabulary retention among young learners.

2) Pictures

Printed pictures are visual materials used to represent objects, places, people, or activities in printed form. In vocabulary instruction, printed pictures function as concrete representation that help learners understand word meaning more easily. According to Wright (1989), pictures can stimulate students' interest and provide contextual support for language learning. Printed pictures are especially useful for young learners because children tend to understand vocabulary more effectively through concrete visual representation rather than abstract explanation. Cameron (2001) explains that young learners rely heavily on contextual and visual clues to understand meaning in foreign language learning.

Furthermore, printed pictures help learners connect vocabulary items with real-life situations. Vocabulary learning becomes more meaningful when students can visualize the objects or activities represented by the target words. This process supports

learners in understanding vocabulary in context, not merely memorizing isolated words. Printed pictures also support classroom interaction because teachers can use them in various instructional activities such as identification tasks, matching exercises, questioning activities, and discussion. According to Harmer (2007), visual materials help maintain students' attention and increase learning motivation. Therefore, printed pictures serve as effective visual aids that facilitate vocabulary comprehension, contextual understanding, and long-term retention among young learners.

3) Real Objects

Real objects, commonly referred to as realia, are authentic physical objects used directly in the teaching and learning process. Realia provide learners with direct and concrete learning experiences because students interact with actual objects rather than merely viewing pictures or verbal explanation.

According to Harmer (2007), realia are effective teaching media because they bring real-world context into the classroom and make learning more meaningful. Similarly, Wright (1989) explains that real objects help learners understand vocabulary more naturally through direct observation and interaction.

The use of realia is particularly suitable for young learners because children generally learn more effectively through concrete experiences. Cameron (2001) states that young learners tend to understand language better when learning is connected to real and familiar contexts. Through realia, students can directly associate vocabulary items with authentic objects or environments.

In vocabulary learning, realia strengthen word-object association because learners observe the actual form of the object while learning its corresponding vocabulary item. This direct association facilitates vocabulary recognition and retention. Furthermore, realia increase students' motivation and participation

because learning activities become more interactive and experiential.

In this study, real objects included actual rooms and facilities in the school environment. Students learned vocabulary by directly observing the rooms while reading the attached vocabulary labels. This authentic learning experience supported students in understanding vocabulary meaning more concretely.

Therefore, realia can enhance vocabulary mastery by providing authentic context, facilitating direct association between words and objects, and increasing students' engagement in the learning process.

4) Vocabulary Labels

Vocabulary labels are written words attached to objects, places, or classroom environments to support vocabulary learning. Labels function as visual reminders that repeatedly expose learners to target vocabulary items during classroom activities. According to Nation (2013), repeated exposure is an important factor in vocabulary acquisition because learners need to encounter words multiple times before they can retain them effectively. Vocabulary labels support this process by providing continuous visual exposure to target words. Similarly, Cameron (2001) explains that environmental print and classroom labeling can facilitate incidental vocabulary learning among young learners. Students gradually become familiar with vocabulary items because they repeatedly see the written words in meaningful contexts.

Vocabulary labels also strengthen word-object association. When students see the written word attached directly to the corresponding object or place, they can more easily connect the vocabulary form with its meaning. This process supports receptive vocabulary development, particularly vocabulary recognition. Furthermore, vocabulary labels create a print-rich learning environment that encourages learners to notice vocabulary naturally

during classroom interaction. Wright (1989) states that visual environmental support can strengthen learners' memory and comprehension. Therefore, vocabulary labels provide continuous visual reinforcement that supports vocabulary recognition, word–meaning association, and incidental vocabulary mastery.

5) Illustrated Worksheets

Illustrated worksheets are learning sheets containing pictures and visual-based exercises used to reinforce students' understanding of vocabulary items. In vocabulary learning, illustrated worksheets provide guided practice that combines verbal instruction with visual support. According to Harmer (2007), practice activities are essential in vocabulary learning because students need opportunities to apply and reinforce newly learned words. Illustrated worksheets provide structured activities that help students review vocabulary systematically. Illustrated worksheets are especially beneficial for young learners because visual support makes exercises more interesting and easier to understand. Cameron (2001) states that young learners require engaging and meaningful activities to maintain attention during learning.

Furthermore, illustrated worksheets help reinforce vocabulary retention through repeated exposure and guided exercises. Activities such as matching pictures with words, identifying objects, and completing vocabulary tasks strengthen students' recognition and comprehension of target vocabulary items. Illustrated worksheets also support independent learning because students can complete exercises individually while still receiving visual guidance. This allows learners to practice vocabulary recognition more actively and confidently.

In this study, illustrated worksheets were used during guided exercises to reinforce vocabulary introduced through flashcards, pictures, and digital materials. The worksheets functioned as reinforcement activities that helped students practice vocabulary

recognition in structured ways. Therefore, illustrated worksheets can support vocabulary mastery by providing structured reinforcement, visual-supported practice, and meaningful vocabulary exercises for young learners.

b. Digital Visual Aids

In addition to conventional visual aids, technological developments have enabled teachers to utilize digital visual materials in vocabulary instruction. These materials provide visual support through electronic devices and can enhance classroom interaction. Digital visual materials refer to visual learning resources presented electronically through technological devices such as projectors, computers, or IFPs. In this study, digital visual materials were displayed through the IFP to support vocabulary instruction.

According to Mayer (2014), multimedia learning occurs more effectively when verbal information is combined with visual presentation. Mayer explains that learners understand and retain information better when words and images are presented together rather than separately. Therefore, digital visual materials can facilitate meaningful vocabulary learning.

The use of digital visual materials also enhances students' attention and engagement. Harmer (2007) states that technological media can create more interesting and interactive classroom environments. Moving images, colorful displays, and large visual presentations can help young learners maintain focus during learning activities.

In addition, digital materials displayed through the IFP provide clearer visual representation compared to conventional board explanation. The enlarged images and interactive presentation help students recognize vocabulary items more easily. This visual clarity is particularly beneficial for young learners, who require concrete and attractive learning media.

From the perspective of *Cognitive Load Theory* (Sweller, 2011), digital visual materials can reduce cognitive burden because learners receive organized and visually structured information. Visual presentation helps student process vocabulary meaning more efficiently without relying solely on verbal explanation. Therefore, digital visual materials through the IFP can support vocabulary mastery by increasing students' attention, improving comprehension, facilitating meaningful learning, and creating interactive classroom activities.

3. Effectiveness and Advantages of Visual Aids

The effectiveness of visual aids in vocabulary learning is supported by several cognitive and educational theories. First, based on *Dual Coding Theory* proposed by Paivio (2013), vocabulary presented through both verbal explanation and visual representation is processed through two cognitive systems simultaneously. This dual representation increases learners' ability to understand, retain, and recall vocabulary items more effectively.

Second, *Cognitive Load Theory* proposed by Sweller (2011) explains that learners possess limited working memory capacity. Visual aids help reduce extraneous cognitive load by presenting vocabulary meaning more clearly and directly. Instead of relying solely on verbal explanation, learners receive immediate visual clarification that facilitates comprehension and reduces cognitive burden.

Third, Mayer (2014) explains through *Multimedia Learning Theory* that meaningful learning occurs more effectively when words and images are integrated during instruction. The combination of verbal and visual information helps learners process information more efficiently and supports deeper understanding.

Furthermore, Keller (1987) through the *ARCS Motivation Model* explains that attention is an important component of learning motivation. Attractive visual presentation can stimulate learners' curiosity, maintain classroom attention, and increase participation during learning activities.

Therefore, visual aids not only facilitate comprehension but also improve students' motivation and classroom engagement.

Visual aids also provide several instructional advantages. They:

- 1) increase students' attention and motivation;
- 2) make vocabulary more concrete and meaningful;
- 3) facilitate faster comprehension;
- 4) strengthen vocabulary retention through repeated visual exposure;
- 5) create more interactive and engaging classroom activities.

For young learners who tend to have short attention spans and rely heavily on visual experiences, visual aids provide meaningful learning support that facilitates vocabulary acquisition and classroom participation.

4. Limitations of Visual Aids

Although visual aids offer numerous instructional benefits, their effectiveness depends on appropriate selection and implementation. Overreliance on pictures may lead students to depend excessively on visual cues rather than developing inference skills (Mayer, 2014). Additionally, poorly designed visuals may create confusion or even increase cognitive load. According to *Cognitive Load Theory* (Sweller, 2011), excessive decoration or irrelevant images may distract learners and hinder learning. Digital visual aids may also involve technical constraints, such as device malfunction or limited accessibility. Furthermore, preparing high-quality visual materials requires time and pedagogical consideration. Therefore, visual aids should be selected and implemented strategically, integrated with clear explanations, repetition, and contextual practice to maximize their instructional value.

E. Classroom Action Research

CAR is a reflective process conducted by teachers to improve instructional practices and solve classroom problems systematically. According to Kemmis & McTaggart (1988), CAR consists of cyclical stages involving planning, acting, observing, and reflecting. Reflection becomes an important component because it allows teachers to evaluate instructional weaknesses and make improvements in subsequent cycles. Similarly, Hopkins (2008) explains

that CAR enables teachers to improve classroom practices through reflective and collaborative inquiry. Through systematic observation and evaluation, teachers can identify students' learning difficulties and revise instructional strategies to achieve better learning outcomes.

Furthermore, Richards & Lockhart (1994) state that reflective teaching helps teachers analyze classroom interaction, instructional effectiveness, and students' responses in order to improve the quality of teaching and learning. Reflection allows teachers to modify classroom procedures and provide more effective learning support based on students' needs. In addition, Slavin (2018) emphasizes that active participation, immediate feedback, and structured reinforcement significantly contribute to students' learning achievement. Therefore, instructional revision and continuous improvement in CAR can optimize the effectiveness of vocabulary learning activities.

Based on these theories, CAR in this study functioned as a systematic approach to improve the implementation of visual aids and enhance students' vocabulary mastery progressively across research cycles.

F. Theoretical Framework

This study was grounded in cognitive learning theories that explained how visual support enhances students' vocabulary mastery. In this study, vocabulary mastery refers to students' ability to recognize and understand vocabulary items as reflected in their performance on multiple-choice vocabulary tests. In elementary classrooms, vocabulary mastery requires instructional strategies that support memory retention and meaningful understanding. Two major cognitive theories underpin the use of visual aids in improving vocabulary mastery: *Dual Coding Theory* and *Cognitive Load Theory*. These theories provide psychological explanations of how visual and verbal information interact in the learning process and contribute to stronger vocabulary retention.

1. Dual Coding Theory

Dual Coding Theory, proposed by Paivio (2013), states that human cognition operates through two distinct but interconnected systems: the verbal system and the non-verbal (visual) system. The verbal system

processes linguistic information such as spoken and written words, while the visual system processes images and mental representations. When information is presented through both systems simultaneously, learners form two mental representations instead of one. These dual representations increase the likelihood of retrieval because the information can be accessed through either channel or through the associative link between them.

In the context of vocabulary mastery, presenting words together with visual representations—such as pictures, flashcards, real objects, or digital images—activates both cognitive systems. For example, when students see a picture of a classroom while hearing or reading the word classroom, they encode both the lexical form and its visual meaning. This dual encoding strengthens memory traces and improves retention. Mayer (2014) explains that meaningful learning occurs when learners actively integrate verbal and visual information. For young learners, who rely heavily on perceptual input and concrete experiences, visual aids facilitate this integration process. As a result, vocabulary items become easier to remember, recognize, and recall during assessment activities. Therefore, *Dual Coding Theory* provides a theoretical justification for using visual aids to enhance students' vocabulary mastery.

2. Cognitive Load Theory

Cognitive Load Theory, introduced by Sweller (2011), emphasizes that working memory has limited capacity. Learning becomes less effective when instructional materials overload learners' cognitive resources. Therefore, instructional design should aim to reduce unnecessary cognitive load and optimize information processing.

In vocabulary instruction, lengthy verbal explanations without visual support may burden students' working memory, especially young learners whose cognitive capacity is still developing. Visual aids help reduce extraneous cognitive load by presenting meaning clearly and directly. Instead of requiring students to infer meaning abstractly, pictures and concrete representations provide immediate clarification. By reducing unnecessary mental effort, learners can allocate more cognitive resources to

encoding and storing new vocabulary. This process supports stronger retention and more accurate recall, which are essential components of vocabulary mastery.

However, *Cognitive Load Theory* also warns that poorly designed visuals may increase cognitive burden. Irrelevant images, excessive decoration, or overly complex multimedia presentations may distract learners and hinder processing. Therefore, visual aids must be carefully selected and aligned with learning objectives to effectively support vocabulary mastery.

Based on these theories, the use of visual aids was expected to enhance students' vocabulary mastery, which would be reflected in measurable enhancement across research cycles.

G. Previous Studies

Previous studies have demonstrated the effectiveness of visual aids in improving students' vocabulary mastery. Sari (2009) in "*The Use of Visual Aids to Improve Students' Vocabulary Mastery (An Action Research at the Fourth Year in SDN Gumpang 2 Kartasura)*", found that visual aids significantly improved fourth-grade students' vocabulary mastery and classroom engagement. Setyorini (2010), in "*Optimizing the Use of Visual Aids to Improve Students' Vocabulary Mastery (A Classroom Action Research at the Fourth-Grade of SDN Kenokorejo 04 Sukoharjo)*", showed that visual aids enhanced students' vocabulary achievement and learning motivation, as reflected in increased mean test scores and active participation. More recently, Prasetyo (2023) in "*The Use of Visual Aids to Enhance Junior High School Students' Vocabulary in Rural Area*", revealed significant vocabulary improvement based on pre-test and post-test analysis, and students expressed positive attitudes toward visual aids, especially in a rural educational context.

Although these studies consistently reported positive findings, several contextual and methodological differences remain. Therefore, a research gap analysis is necessary to identify areas that require further investigation. To highlight the research gaps in existing studies and to position the present study,

a research gap analysis of previous studies and the current research is presented in Table 2.1.

Table 2.1. Research Gap Analysis of Previous Studies and Researcher's Study

Aspect	Sari's Study (2009)	Setyorini's Study (2010)	Prasetyo's Study (2023)	Researcher's Study
Participant	Fourth-grade elementary students	Fourth-grade elementary students	Junior high school students	Third-grade elementary students
School Context	Public elementary school	Public elementary school	Rural public school	Private multilingual learning elementary school
Research Design	CAR	CAR	CAR mixed-method	CAR
Teaching Media	Visual aids	Visual aids	Visual aids	Integrated conventional and digital visual aids
Focus	Vocabulary mastery	Vocabulary mastery and motivation	Vocabulary mastery	Vocabulary mastery
Key Finding	Visual aids improved vocabulary scores	Students' motivation and vocabulary scores increased	Significant improvement based on statistical analysis	Enhancement of vocabulary mastery across CAR cycles
Difference with Researcher's Study	Conducted in public school, fourth-grade	Did not involve multilingual learning context	Conducted at secondary school level	Lower grade level, private multilingual learning context

(Source: Compiled by the researcher, 2026)

As shown in Table 2.1., although previous studies confirmed the effectiveness of visual aids in vocabulary learning, most were conducted in public schools and involved fourth-grade or secondary school students. Limited research had examined the use of visual aids in multilingual private elementary school contexts, particularly at the lower-grade level. Furthermore,

previous studies did not explicitly report the integration of conventional and digital visual aids in CAR designs. Therefore, this study addressed these gaps by investigating the implementation of integrated visual aids to enhance vocabulary mastery among third-grade students at SD Mulia Bakti Purwokerto.

