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Improving Early Childhood Vocabulary Recognition through Flashcard Media: A Qualitative Study in Kindergarten

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ABSTRACT

This study aimed to explore how the use of flashcard media supports vocabulary recognition among children aged 5–6 years in Group B of Tunas Karya III Kindergarten, Sukanagara, Cianjur. A qualitative case study approach was employed to gain an in-depth understanding of children's learning experiences and teachers' instructional practices during vocabulary learning activities. The participants consisted of ten children, one classroom teacher, and the school principal, who were selected purposively based on their direct involvement in the learning process. Data were collected through classroom observations, semi-structured interviews, field notes, and documentation. The data were analyzed using thematic analysis, including data reduction, data display, and conclusion drawing. The credibility of the findings was ensured through triangulation of data sources, member checking, prolonged engagement, and peer debriefing. The findings revealed three major themes: (1) flashcards increased children's interest and engagement during literacy activities; (2) visual representations on flashcards facilitated children's recognition of letters, sounds, and simple vocabulary; and (3) interactive teacher-child communication strengthened children's confidence in recognizing and pronouncing words. The study concludes that flashcard media provides meaningful learning experiences that promote early vocabulary development and support language acquisition in early childhood education.

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1. INTRODUCTION

Early childhood is widely recognized as a critical period for language acquisition and literacy development because rapid brain growth occurs during the first years of life, providing the foundation for children's cognitive, linguistic, and socio-emotional development (Shonkoff & Phillips, 2000; UNESCO, 2021). During this developmental stage, children acquire fundamental communication skills that later influence academic achievement, social interaction, and lifelong learning (Snow & Matthews, 2016). Consequently, early childhood education has an important responsibility to provide meaningful learning experiences that promote language and literacy development through developmentally appropriate practices (NAEYC, 2020).

Vocabulary recognition is one of the most important components of emergent literacy because it enables children to understand the relationship between spoken language, written symbols, and meaning (Whitehurst & Lonigan, 1998). Children who develop strong vocabulary knowledge during preschool are more likely to become successful readers in elementary school, as vocabulary contributes directly to reading comprehension and overall literacy achievement (National Early Literacy Panel [NELP], 2008; Wasik & Hindman, 2020). According to Dickinson et al. (2019), vocabulary acquisition during early childhood is strongly associated with children's ability to communicate ideas, understand classroom instruction, and participate actively in learning activities.

Emergent literacy theory explains that literacy begins long before children receive formal reading instruction. Through meaningful interactions with adults, exposure to printed materials, storytelling, and play-based experiences, children gradually develop the ability to recognize letters, words, sounds, and symbols (Whitehurst & Lonigan, 1998). Similarly, Justice and Ezell (2004) argued that early literacy experiences should be integrated into children's daily routines because literacy develops naturally through authentic communication rather than isolated drills. Therefore, vocabulary recognition should be facilitated through interactive learning environments that encourage children's active engagement.

Despite the acknowledged importance of vocabulary development, many preschool children continue to experience difficulties recognizing letters, distinguishing similar letter forms, connecting phonemes with graphemes, and identifying simple words during classroom learning (Cabell et al., 2019). These challenges are often associated with teacher-centered instructional approaches that rely primarily on verbal explanation and repetitive exercises, providing limited opportunities for children to engage actively with learning materials (Piasta et al., 2020). Such instructional practices may reduce children's motivation and limit opportunities for meaningful literacy experiences.

Early childhood education emphasizes learning through play, exploration, and interaction rather than memorization (NAEYC, 2020). Consequently, instructional media should be visually attractive, interactive, and developmentally appropriate to support children's curiosity and language development. Visual media are particularly effective because young children process concrete representations more easily than abstract concepts (Piaget, 1952). Among various instructional media, flashcards have become one of the most frequently used resources for introducing vocabulary, letters, and beginning reading skills because they combine visual images with written language in an engaging format (Aksoy & Gürbüz, 2022).

Flashcards are instructional cards containing pictures, letters, words, or symbols designed to facilitate children's recognition and retention of vocabulary. Their effectiveness can be explained through **Dual Coding Theory**, which proposes that information presented simultaneously through verbal and visual channels is processed more efficiently than verbal information alone (Paivio, 1991). Because flashcards integrate images and written words, children are able to establish stronger cognitive connections between objects, sounds, and vocabulary, thereby improving memory retention and comprehension (Mayer, 2021).

From a developmental perspective, Piaget's theory suggests that children aged five to six years remain in the preoperational stage, during which learning is facilitated through concrete visual representations and symbolic play rather than abstract reasoning (Piaget, 1952). Likewise, Vygotsky (1978) emphasized that children's cognitive development occurs through social interaction with more knowledgeable individuals. During flashcard activities, teachers scaffold children's learning by asking questions, providing feedback, modeling pronunciation, and encouraging peer interaction, thereby supporting vocabulary acquisition within the children's Zone of Proximal Development.

Numerous empirical studies have demonstrated that flashcards positively influence children's literacy development. For example, Aksoy and Gürbüz (2022) reported that visual flashcards significantly improved preschool children's vocabulary acquisition and engagement during classroom learning. Similarly, Wasik and Hindman (2020) found that integrating visual instructional materials into literacy instruction enhanced children's oral language development and early reading readiness. Cabell et al. (2019) also emphasized that vocabulary-rich classroom environments contribute significantly to children's later reading achievement.

Although previous studies have reported the effectiveness of flashcards using quantitative and experimental methods, relatively little research has explored how children experience flashcard-based learning within authentic classroom contexts. Most previous investigations have focused primarily on

measuring learning outcomes through standardized assessments, while giving less attention to children's engagement, teacher-child interaction, classroom communication, and learning experiences that occur during literacy activities (Braun & Clarke, 2021). A qualitative perspective is therefore necessary to understand not only whether flashcards improve vocabulary recognition but also how they facilitate meaningful learning experiences in early childhood classrooms.

Furthermore, classroom contexts differ considerably regarding children's developmental characteristics, teachers' instructional practices, and learning environments. These contextual differences may influence how flashcards are implemented and experienced during classroom instruction. Exploring children's responses and teachers' perspectives within natural learning environments may therefore provide richer evidence for improving literacy instruction in early childhood education (Creswell & Poth, 2018).

This study was conducted in Group B of Tunas Karya III Kindergarten, Sukanagara, Cianjur, Indonesia, where teachers observed that several children continued to experience difficulties recognizing letters, identifying simple words, and connecting visual representations with written vocabulary during classroom learning. Although flashcards had previously been introduced as learning media, there was limited understanding regarding how these instructional materials influenced children's learning experiences and classroom interaction. Therefore, this study employed a qualitative case study approach to explore the implementation of flashcard media in supporting vocabulary recognition among children aged five to six years.

The findings of this study are expected to contribute to both theory and practice. Theoretically, this research enriches the literature on emergent literacy by providing qualitative evidence regarding children's vocabulary learning processes through visual instructional media. Practically, the findings may assist teachers in designing more engaging literacy instruction, encourage schools to utilize developmentally appropriate learning media, and support parents in creating literacy-rich environments at home. Ultimately, meaningful vocabulary learning should emphasize children's active participation, social interaction, and joyful engagement as essential foundations for lifelong literacy development.

2. LITERATURE REVIEW

2.1 Early Childhood Vocabulary Development

Vocabulary development is one of the fundamental aspects of early childhood language acquisition and serves as a strong predictor of later reading achievement, academic performance, and

communication competence. During the preschool years, children rapidly acquire new words through interactions with adults, peers, and their surrounding environment. This process is not limited to memorizing isolated words but involves developing semantic knowledge, phonological awareness, and the ability to connect spoken language with written symbols (Wasik & Hindman, 2020). Research has consistently demonstrated that children with larger vocabularies exhibit stronger emergent literacy skills, greater reading comprehension, and higher levels of school readiness than peers with limited vocabulary knowledge (Cabell et al., 2019).

According to the National Early Literacy Panel (2008), vocabulary knowledge is among the strongest predictors of children's future literacy achievement. Similarly, Dickinson et al. (2019) argued that early vocabulary learning establishes the foundation for oral language development, reading comprehension, and critical thinking. Consequently, vocabulary instruction should be intentionally integrated into daily classroom activities through meaningful interactions, storytelling, conversations, and play-based learning experiences. The National Association for the Education of Young Children (NAEYC, 2020) also emphasizes that language learning during early childhood should occur in enjoyable, socially interactive, and developmentally appropriate environments that encourage children to communicate actively.

Emergent literacy theory further explains that literacy development begins before children receive formal reading instruction. Whitehurst and Lonigan (1998) proposed that young children gradually develop literacy knowledge through exposure to print-rich environments, shared book reading, oral language interaction, and opportunities to recognize symbols and written language in meaningful contexts. Therefore, vocabulary recognition should not be viewed solely as a prerequisite for reading but as a dynamic developmental process supported by rich language experiences.

2.2 Flashcards as Visual Learning Media in Early Childhood Education

Instructional media play an essential role in facilitating meaningful learning experiences during early childhood. Young children learn most effectively through concrete, visual, and interactive materials that stimulate multiple senses simultaneously. Visual instructional media are particularly valuable because preschool children are still developing abstract thinking abilities and rely heavily on observable representations to construct knowledge (Piaget, 1952). Consequently, teachers are encouraged to select learning media that combine visual appeal with opportunities for active engagement.

Flashcards are among the most widely used visual instructional media in early childhood classrooms. They typically consist of cards displaying pictures, letters, numbers, or words that help children associate visual representations with linguistic concepts. Their simplicity, portability, and flexibility enable teachers to implement various learning activities, including picture matching, vocabulary games, storytelling, letter recognition, and collaborative discussions (Aksoy & Gürbüz, 2022). Unlike conventional worksheets, flashcards encourage children to participate actively while creating enjoyable learning experiences that support attention and memory.

The effectiveness of flashcards can be explained by **Dual Coding Theory** proposed by Paivio (1991). This theory suggests that information presented simultaneously through visual and verbal channels is encoded into two interconnected cognitive systems, resulting in stronger memory retention and more efficient retrieval. Mayer (2021) further expanded this perspective through the Cognitive Theory of Multimedia Learning, arguing that learners understand information more effectively when words and images are integrated rather than presented separately. Because flashcards combine colorful illustrations with written vocabulary, they facilitate children's ability to recognize letters, connect sounds with symbols, and understand word meanings simultaneously.

Empirical evidence supports the educational value of flashcards in preschool literacy instruction. Aksoy and Gürbüz (2022) found that children who participated in flashcard-based vocabulary activities demonstrated greater engagement, increased vocabulary acquisition, and improved letter recognition compared with children receiving traditional instruction. Likewise, Wasik and Hindman (2020) reported that integrating visual instructional materials into language-rich classrooms enhanced children's oral language development and literacy readiness. These findings indicate that flashcards function not only as instructional tools but also as catalysts for interactive learning experiences that foster children's motivation and participation.

2.3 Theoretical Perspectives Supporting Flashcard-Based Learning

The implementation of flashcards in early childhood education is supported by several prominent learning theories. Piaget's Cognitive Development Theory explains that children aged five to six years are in the **preoperational stage**, during which learning occurs most effectively through concrete visual representations and symbolic play rather than abstract reasoning (Piaget, 1952). Flashcards provide tangible visual stimuli that correspond to children's developmental characteristics, enabling them to understand vocabulary through recognizable objects and images.

Vygotsky's Sociocultural Theory offers another important perspective by emphasizing that learning occurs through social interaction and guided participation (Vygotsky, 1978). According to Vygotsky, children's cognitive development is enhanced when teachers or more knowledgeable peers provide appropriate scaffolding within the **Zone of Proximal Development (ZPD)**. During flashcard activities, teachers encourage children to pronounce words, answer questions, identify pictures, and interact with peers, thereby facilitating language acquisition through collaborative learning experiences.

Furthermore, Bruner's theory of discovery learning highlights the importance of active exploration in children's cognitive development. Bruner (1966) suggested that children construct knowledge through direct interaction with learning materials rather than passive reception of information. Flashcards encourage children to observe, compare, classify, and interpret visual information, making vocabulary learning an active rather than mechanical process.

Collectively, these theoretical perspectives indicate that flashcards are more than simple teaching aids; they represent instructional tools that promote cognitive processing, language development, social interaction, and meaningful learning experiences. Their effectiveness derives from

the integration of visual stimuli, verbal communication, and guided interaction that aligns with children's developmental needs.

2.4 Research Gap and Conceptual Framework

Although numerous quantitative and experimental studies have demonstrated the effectiveness of flashcards in improving vocabulary acquisition, relatively few investigations have explored how flashcards influence children's learning experiences within authentic classroom settings. Most existing research has focused on measuring learning outcomes using pre-test and post-test scores, providing limited understanding of classroom interaction, children's engagement, teachers' instructional strategies, and the contextual factors influencing vocabulary development (Braun & Clarke, 2021).

Qualitative inquiry offers an opportunity to understand how instructional media facilitate children's meaning-making processes, social participation, and language development during classroom learning. Creswell and Poth (2018) argued that qualitative research enables researchers to explore participants' experiences in natural settings, thereby generating richer explanations of educational phenomena. Understanding teachers' perspectives and children's responses toward flashcard-based instruction is particularly important because classroom learning involves complex interactions among instructional media, pedagogy, learner characteristics, and social contexts.

Based on these considerations, this study adopts a qualitative case study approach to explore the implementation of flashcard media in supporting vocabulary recognition among preschool children. The study is guided by the assumption that vocabulary development is enhanced through meaningful interaction with visual learning media, teacher scaffolding, and active classroom participation. By examining children's learning experiences, teacher practices, and classroom interactions, this research seeks to contribute deeper insights into the role of flashcards in promoting early literacy development beyond measurable academic outcomes.

3. METHODOLOGY

3.1 Research Design

This study employed a **qualitative case study design** to explore how flashcard media support vocabulary recognition among children aged 5–6 years in an early childhood education setting. A qualitative approach was selected because it enables researchers to gain an in-depth understanding of participants' experiences, classroom interactions, and teaching practices within their natural context (Creswell & Poth, 2018). Rather than measuring the effectiveness of flashcards through statistical comparisons, this study sought to understand how teachers implemented flashcard-based learning, how children responded during classroom activities, and how the learning process contributed to vocabulary recognition.

The case study approach was considered appropriate because the research focused on a single educational setting—Group B at Tunas Karya III Kindergarten, Sukanagara, Cianjur—allowing

detailed exploration of the implementation of flashcard media in authentic classroom practice. According to Yin (2018), a case study is particularly suitable when researchers investigate a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident.

3.2 Research Setting

The research was conducted at **Tunas Karya III Kindergarten**, located in **Sukanagara District, Cianjur Regency, West Java, Indonesia**. The kindergarten was selected because vocabulary recognition had become one of the priorities in language learning for Group B children. Classroom observations conducted prior to the study indicated that several children experienced difficulties recognizing letters, identifying simple words, and connecting pictures with written vocabulary.

Data collection was carried out over approximately **two months**, from **April to May 2024**, during regular classroom learning activities. Conducting the study in the natural classroom environment enabled the researchers to observe children's authentic behaviors and interactions without manipulating instructional conditions.

3.3 Participants

Participants were selected using **purposive sampling**, which is commonly employed in qualitative research to identify information-rich participants capable of providing meaningful insights into the phenomenon under investigation (Patton, 2015).

The participants consisted of:

- **Ten children** aged **5–6 years** enrolled in Group B;
- **One classroom teacher** responsible for implementing literacy instruction;
- **One school principal**, who provided information regarding curriculum implementation and instructional policies.

The participating children represented diverse levels of vocabulary recognition ability, allowing the researchers to observe a variety of learning responses during flashcard activities.

3.4 Data Collection

Multiple qualitative data collection techniques were employed to ensure comprehensive understanding and enhance the credibility of the findings through methodological triangulation.

Classroom Observation

Non-participant classroom observations were conducted throughout the implementation of flashcard learning activities. The observations focused on children's participation, verbal responses,

attention, interaction with peers and teachers, and vocabulary recognition behaviors. Detailed field notes were recorded immediately after each observation session.

Semi-Structured Interviews

Semi-structured interviews were conducted with the classroom teacher and the school principal. The interview protocol included open-ended questions regarding instructional planning, the implementation of flashcard media, perceived benefits, challenges encountered during instruction, and children's responses throughout the learning process. The flexible interview format enabled participants to elaborate on their experiences while allowing researchers to explore emerging issues.

Documentation

Documentation was collected to support observational and interview data. The documents included lesson plans, learning materials, children's worksheets, photographs of classroom activities, assessment records, and school documents related to literacy instruction.

Reflective Field Notes

During every classroom visit, the researchers maintained reflective field notes describing classroom atmosphere, children's engagement, unexpected events, researcher reflections, and contextual factors influencing learning. These notes served as supplementary data during the interpretation process.

3.5 Data Analysis

The collected data were analyzed using **thematic analysis** following the six-step framework developed by **Braun and Clarke (2021)**.

The analysis involved the following stages:

1. **Data Familiarization**
   Researchers repeatedly read interview transcripts, observation notes, and documentation to gain a comprehensive understanding of the dataset.

2. **Generating Initial Codes**
   Meaningful statements relevant to vocabulary learning, classroom interaction, teacher strategies, and children's responses were systematically coded.

3. **Searching for Themes**
   Similar codes were grouped into broader categories representing emerging patterns across participants and data sources.

4. **Reviewing Themes**
   Candidate themes were examined by comparing them with the original data to ensure internal consistency and conceptual coherence.

5. **Defining and Naming Themes**
   Each theme was refined and clearly defined to accurately represent participants' experiences regarding flashcard implementation.

6. **Producing the Report**
   The final stage involved integrating thematic findings with existing literature and theoretical perspectives to construct meaningful interpretations.

3.6 Trustworthiness

To enhance the rigor and trustworthiness of the study, several validation strategies proposed by **Lincoln and Guba (1985)** were employed.

Credibility

Credibility was established through prolonged classroom engagement, methodological triangulation (observations, interviews, and documentation), and member checking. Participants were invited to review interview summaries to confirm the accuracy of researchers' interpretations.

Transferability

Rich descriptions of the research setting, participants, instructional activities, and classroom context were provided to enable readers to determine the applicability of the findings to similar educational settings.

Dependability

The researchers maintained an audit trail documenting research procedures, methodological decisions, coding processes, and analytical reflections throughout the study.

Confirmability

Research findings were supported by multiple sources of evidence, including observation records, interview quotations, and documentation, thereby minimizing researcher bias and enhancing objectivity.

3.7 Ethical Considerations

This study adhered to established ethical principles governing educational research involving young children. Prior to data collection, permission was obtained from the principal of Tunas Karya III Kindergarten. Written informed consent was obtained from parents or legal guardians for children's participation.

Participants were informed about the purpose of the study, voluntary participation, confidentiality procedures, and their right to withdraw at any stage without negative consequences. To ensure anonymity, pseudonyms were assigned to all participants, and identifying information was

removed from transcripts and research reports. All digital files, interview recordings, and field notes were securely stored and used exclusively for research purposes.

3.8 Research Framework

This study was guided by the assumption that **flashcard media facilitate vocabulary recognition through visual stimulation, teacher scaffolding, and active classroom interaction**. The conceptual framework integrates **Emergent Literacy Theory** (Whitehurst & Lonigan, 1998), **Dual Coding Theory** (Paivio, 1991), and **Sociocultural Theory** (Vygotsky, 1978), suggesting that vocabulary acquisition occurs when children actively interact with meaningful visual materials while receiving instructional support from teachers.

Accordingly, the qualitative inquiry focused on three interconnected dimensions:

1. **Teachers' instructional practices** in implementing flashcard-based learning;
2. **Children's learning experiences and classroom engagement** during vocabulary activities; and
3. **Factors facilitating or constraining vocabulary recognition** within the classroom context.

Together, these dimensions provided a comprehensive understanding of how flashcard media contributed to early vocabulary development in authentic early childhood educational settings.

4. FINDINGS

The thematic analysis generated **four major themes** that explain how flashcard media supported vocabulary recognition among children in Group B at Tunas Karya III Kindergarten.

Theme 1. Flashcards Increased Children's Interest and Engagement in Vocabulary Learning

The first theme revealed that flashcards successfully attracted children's attention and encouraged active participation during literacy activities. Classroom observations showed that children became more enthusiastic when learning materials were presented through colorful picture cards instead of conventional teacher explanations. They demonstrated curiosity by looking carefully at the pictures, voluntarily answering questions, and participating in vocabulary games.

The classroom teacher explained that children's motivation increased because the flashcards transformed literacy learning into an enjoyable activity rather than a formal lesson. According to the teacher:

"When I showed the picture cards, almost all children immediately paid attention and wanted to answer. They competed to mention the names of the pictures and asked to play again." (Teacher Interview)

Observational data also indicated that children who were usually passive became more willing to participate after the flashcards were introduced. They smiled, raised their hands, and interacted more frequently with both the teacher and their peers.

These findings suggest that flashcards functioned as an engaging visual stimulus that promoted children's emotional involvement and active participation during vocabulary instruction.

Theme 2. Visual Representation Facilitated Letter and Vocabulary Recognition

The second theme demonstrated that the combination of pictures and printed words enabled children to recognize letters, associate sounds with symbols, and understand the meanings of simple vocabulary.

During classroom activities, children frequently pointed to pictures while pronouncing the corresponding words. They gradually learned to connect familiar objects with written vocabulary and became increasingly confident in identifying beginning letters.

One teacher explained:

"Children remember the words more easily because they can see the picture first. After that, they begin to recognize the letters and try to read the word." (Teacher Interview)

Classroom observations further showed that repeated exposure to flashcards strengthened children's ability to distinguish similar letters and recognize familiar vocabulary encountered in everyday life.

Documentation of children's learning activities also indicated improvement in their ability to identify picture-word relationships after repeated flashcard sessions.

Overall, the findings suggest that visual representations reduced children's cognitive load and supported vocabulary acquisition by linking images, sounds, and written language simultaneously.

Theme 3. Teacher Scaffolding Strengthened Children's Vocabulary Development

The third theme emphasized the important role of teacher support during flashcard-based learning. Rather than relying solely on the instructional media, teachers continuously guided children through questioning, modeling pronunciation, giving positive reinforcement, and encouraging peer interaction.

Throughout classroom observations, the teacher rarely provided direct answers. Instead, she encouraged children to observe the pictures carefully, identify the first letter, pronounce the word together, and discuss the picture with classmates.

One participant stated:

"Sometimes the children hesitate, so I repeat the pronunciation slowly and ask them to say it together. After several repetitions, they become confident." (Teacher Interview)

This instructional strategy created opportunities for children to practice vocabulary collaboratively while receiving immediate feedback. Peer interaction was also evident as children helped each other pronounce unfamiliar words.

The findings indicate that flashcards became effective because they were accompanied by teacher scaffolding that supported children's learning within meaningful social interaction.

Theme 4. Repeated Flashcard Activities Fostered Children's Confidence in Using Vocabulary

The fourth theme revealed that repeated exposure to flashcard activities gradually increased children's confidence in recognizing and pronouncing vocabulary. At the beginning of the observations, several children appeared hesitant when asked to identify letters or simple words. However, after participating in repeated flashcard sessions, children demonstrated greater confidence in responding to teacher questions.

Observation notes showed that many children voluntarily volunteered answers without waiting to be called upon. They also began using newly learned vocabulary during classroom conversations and storytelling activities.

As one teacher described:

"The children are no longer afraid of making mistakes. They are happy to try reading the words because they already recognize the pictures." (Teacher Interview)

Documentation further showed that children became increasingly independent in completing vocabulary-related classroom tasks and required less teacher assistance over time.

These findings indicate that repeated visual exposure combined with supportive classroom interaction fostered children's self-confidence and encouraged independent vocabulary use.

5. DISCUSSION

This study explored how the implementation of flashcard media supported vocabulary recognition among children aged 5–6 years in an early childhood education setting. The findings revealed four interconnected themes: (1) flashcards increased children's interest and engagement in vocabulary learning, (2) visual representations facilitated letter and vocabulary recognition, (3) teacher scaffolding strengthened children's vocabulary development, and (4) repeated flashcard activities fostered children's confidence in using vocabulary. These findings demonstrate that vocabulary learning in early childhood is influenced not only by instructional media but also by meaningful

teacher-child interaction, repeated learning experiences, and active classroom participation. The discussion integrates these findings with existing theories and previous empirical studies.

The first finding indicates that flashcards significantly enhanced children's motivation and engagement during classroom learning. Children became more attentive, enthusiastic, and willing to participate when vocabulary activities were supported by colorful visual cards rather than conventional verbal instruction. This finding supports the principles of Developmentally Appropriate Practice proposed by the National Association for the Education of Young Children (NAEYC, 2020), which emphasizes that young children learn most effectively through enjoyable, interactive, and play-based experiences. Rather than functioning merely as visual aids, flashcards transformed literacy instruction into an engaging activity that stimulated children's curiosity and intrinsic motivation.

This finding is also consistent with Piaget's (1952) theory of cognitive development, which explains that children in the preoperational stage depend heavily on concrete visual representations to construct understanding. At this developmental stage, abstract explanations are less effective because children interpret knowledge through observable objects, symbols, and images. Flashcards therefore provided concrete representations that enabled children to connect familiar objects with written vocabulary. Similar findings were reported by Aksoy and Gürbüz (2022), who found that flashcard-based learning significantly increased preschool children's classroom engagement and participation because visual materials attracted children's attention more effectively than teacher-centered instruction.

The second theme demonstrated that visual representations facilitated vocabulary recognition by helping children connect pictures, letters, sounds, and meanings. During classroom observations, children often identified pictures before recognizing written words, suggesting that visual cues functioned as cognitive supports during literacy learning. This finding can be explained by Paivio's (1991) Dual Coding Theory, which proposes that information presented through both visual and verbal channels is processed more efficiently than information delivered through a single modality. When children simultaneously observed pictures and printed words, they encoded information in two complementary cognitive systems, thereby strengthening memory retention and vocabulary recall.

Mayer's (2021) Cognitive Theory of Multimedia Learning further supports this interpretation by explaining that meaningful learning occurs when learners actively integrate verbal information with visual representations. Flashcards reduced children's cognitive load by presenting vocabulary in an organized and visually meaningful manner. Instead of memorizing isolated words, children were able to associate vocabulary with concrete objects that they encountered in everyday life. These findings correspond with those of Wasik and Hindman (2020), who concluded that integrating visual instructional materials into literacy instruction substantially improved vocabulary acquisition and oral language development among preschool children.

Another important finding concerns the significant role of teacher scaffolding throughout flashcard-based instruction. Although flashcards served as valuable instructional media, observations indicated that vocabulary learning became more meaningful when teachers actively guided children's learning through questioning, modeling pronunciation, encouraging discussion, and providing positive reinforcement. Rather than simply presenting flashcards, teachers facilitated children's thinking by prompting them to identify letters, pronounce words, and explain picture meanings.

This finding strongly supports Vygotsky's (1978) Sociocultural Theory, particularly the concept of the Zone of Proximal Development (ZPD). According to Vygotsky, children's learning is optimized when they receive appropriate support from more knowledgeable individuals during challenging tasks. The teacher's scaffolding enabled children to accomplish vocabulary tasks that they could not complete independently, gradually reducing assistance as children became more competent. Classroom interaction therefore became an essential mechanism through which flashcards promoted vocabulary development.

Similarly, Bruner (1966) argued that effective instruction involves scaffolding learners through guided discovery rather than direct transmission of knowledge. During flashcard activities, teachers encouraged children to observe visual information, formulate responses, compare vocabulary, and communicate with peers. Such guided interaction transformed vocabulary instruction into an active learning process rather than passive memorization. Consequently, the educational value of flashcards depended not solely on the media itself but also on the quality of pedagogical interaction surrounding their use.

The fourth theme revealed that repeated flashcard activities gradually strengthened children's confidence in recognizing and using vocabulary. Initially, several children appeared hesitant when asked to identify letters or pronounce unfamiliar words. However, continuous exposure to flashcard activities reduced anxiety and increased children's willingness to participate voluntarily. By the end of the observation period, children demonstrated greater confidence in answering teacher questions, identifying vocabulary independently, and participating in classroom discussions.

This finding aligns with Bandura's (1997) Social Cognitive Theory, which emphasizes that repeated successful learning experiences contribute to the development of self-efficacy. As children repeatedly succeeded in recognizing pictures and pronouncing vocabulary correctly, their confidence increased, encouraging further participation during literacy activities. Positive teacher feedback and peer encouragement further reinforced children's beliefs in their own abilities. Consequently, vocabulary learning became not only a cognitive process but also an emotional experience that strengthened children's motivation to continue learning.

The findings also support emergent literacy theory proposed by Whitehurst and Lonigan (1998), which argues that literacy develops gradually through repeated exposure to meaningful language experiences rather than through isolated reading instruction. Flashcard activities provided repeated opportunities for children to encounter familiar vocabulary within authentic classroom interactions, allowing literacy skills to develop naturally through communication, play, and exploration. Instead of emphasizing memorization, teachers integrated vocabulary learning into enjoyable classroom experiences that encouraged children's active participation.

An important contribution of this study lies in its qualitative perspective. While many previous studies have examined the effectiveness of flashcards using experimental or quasi-experimental designs, this study provides deeper understanding of how flashcards influence children's learning experiences within authentic classroom settings. Rather than focusing exclusively on measurable learning outcomes, the present study highlights the importance of children's engagement, teacher support, classroom interaction, and emotional responses during vocabulary learning. This qualitative

evidence complements previous quantitative findings by demonstrating that the effectiveness of flashcards depends on pedagogical implementation rather than instructional media alone.

The classroom context also played an important role in shaping children's learning experiences. Vocabulary development occurred within a supportive learning environment where teachers encouraged exploration, respected children's responses, and created opportunities for collaborative interaction. This finding supports Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner & Morris, 2006), which emphasizes that children's development is influenced by interactions within immediate learning environments. Flashcards functioned effectively because they were embedded within positive teacher-child relationships and developmentally appropriate classroom practices.

The practical implications of this study are particularly relevant for early childhood educators. Teachers should consider flashcards as interactive instructional resources rather than simple memorization tools. Effective implementation requires integrating flashcards into storytelling, questioning, games, collaborative discussions, and playful literacy activities that encourage children's active participation. Professional development programs should therefore emphasize instructional strategies that combine visual learning media with scaffolding techniques, formative feedback, and child-centered pedagogy.

Despite its contributions, this study has several limitations. The research was conducted in a single kindergarten involving a relatively small number of participants; therefore, the findings cannot be generalized to all early childhood settings. Furthermore, the study focused specifically on vocabulary recognition without examining other dimensions of language development such as narrative skills, phonological awareness, or reading comprehension. Future studies could involve multiple schools, larger participant groups, and longitudinal qualitative designs to explore how flashcard-based learning influences children's literacy development over time. Researchers may also investigate the integration of digital flashcards, augmented reality, or interactive multimedia applications as innovative approaches to vocabulary learning in contemporary early childhood education.

Overall, the findings suggest that flashcard media contribute to children's vocabulary recognition by creating meaningful, visually rich, and socially interactive learning experiences. Their educational value extends beyond improving vocabulary knowledge to fostering children's motivation, confidence, communication skills, and active participation in literacy learning. When combined with effective teacher scaffolding and developmentally appropriate instructional practices, flashcards become powerful pedagogical tools that support the holistic development of early literacy during the preschool years.

6. CONCLUSION

This study explored the implementation of flashcard media in supporting vocabulary recognition among children aged 5–6 years at Tunas Karya III Kindergarten through a qualitative case study approach. The findings revealed that flashcards provided meaningful learning experiences by increasing children's engagement, facilitating the recognition of letters and simple vocabulary through visual representations, strengthening vocabulary development through teacher scaffolding, and

fostering children's confidence in using newly acquired words. These findings demonstrate that vocabulary learning is not solely influenced by instructional media but also by the quality of teacher-child interaction, repeated learning experiences, and active participation in literacy activities.

The study further confirms that flashcards function as effective visual learning media because they integrate images and written words in ways that are developmentally appropriate for young children. When combined with guided instruction, questioning, repetition, and collaborative classroom interaction, flashcards create an enjoyable learning environment that encourages children to explore language, recognize vocabulary, and communicate with greater confidence. These findings support theories of emergent literacy, dual coding, and sociocultural learning, emphasizing that early literacy develops through meaningful social interaction and rich visual experiences.

From a practical perspective, the findings suggest that early childhood educators should integrate flashcards into interactive and play-based literacy activities rather than using them solely as memorization tools. Teachers are encouraged to employ questioning techniques, storytelling, games, and peer interaction to maximize children's language development. Schools may also consider providing professional development programs that strengthen teachers' competence in designing engaging visual literacy instruction.

This study contributes to the growing body of qualitative research on early childhood literacy by providing in-depth insights into children's learning experiences during flashcard-based instruction. Nevertheless, the study was conducted in a single kindergarten with a limited number of participants; therefore, the findings should not be generalized to all educational contexts. Future research is recommended to involve multiple early childhood institutions, larger participant groups, and diverse cultural settings. In addition, future studies may explore the integration of digital flashcards, interactive multimedia, or artificial intelligence-based learning technologies to further enrich vocabulary development and early literacy instruction among young children.

7. REFERENCES

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.

Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. Sage.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 793–828). John Wiley & Sons.

Bruner, J. S. (1966). *Toward a theory of instruction*. Harvard University Press.

Cabell, S. Q., Justice, L. M., Logan, J. A. R., & Konold, T. R. (2019). Emergent literacy profiles among preschool children. *Early Childhood Research Quarterly, 47*, 324–335. https://doi.org/10.1016/j.ecresq.2018.12.015

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.

Dickinson, D. K., Griffith, J. A., Golinkoff, R. M., & Hirsh-Pasek, K. (2019). How reading books fosters language development around the world. *Child Development Research, 2019*, Article 3687834. https://doi.org/10.1155/2019/3687834

Justice, L. M., & Ezell, H. K. (2004). Print referencing: An emergent literacy enhancement strategy and its clinical applications. *Language, Speech, and Hearing Services in Schools, 35*(2), 185–193. https://doi.org/10.1044/0161-1461(2004/018)

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.

Mayer, R. E. (2021). *Multimedia learning* (3rd ed.). Cambridge University Press.

National Association for the Education of Young Children. (2020). *Developmentally appropriate practice (DAP): Position statement*. National Association for the Education of Young Children.

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Paivio, A. (1991). Dual coding theory: Retrospect and current status. *Canadian Journal of Psychology, 45*(3), 255–287. https://doi.org/10.1037/h0084295

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage.

Piaget, J. (1952). *The origins of intelligence in children*. International Universities Press.

Shonkoff, J. P., & Phillips, D. A. (Eds.). (2000). *From neurons to neighborhoods: The science of early childhood development*. National Academies Press.

Snow, C. E., & Matthews, T. J. (2016). Reading and language in the early grades. *The Future of Children, 26*(2), 57–74.

UNESCO. (2021). *Reimagining our futures together: A new social contract for education*. UNESCO Publishing.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wasik, B. A., & Hindman, A. H. (2020). Increasing vocabulary learning in early childhood classrooms. *The Reading Teacher, 73*(4), 519–529. https://doi.org/10.1002/trtr.1867

Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development, 69*(3), 848–872. https://doi.org/10.1111/j.1467-8624.1998.tb06247.x

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage.