

The influence of flashcards on reading skills in early childhood

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Abstract: This study aims to evaluate the effect of using flashcards on early reading skills of young children, while considering the potential drawbacks of overuse. The background acknowledges that although flashcards are effective for letter recognition and pronunciation, repetitive usage may cause learners' boredom—flashcards may serve as a solution to learning fatigue, yet variation remains essential (digilib.uinkhas.ac.id). This Classroom Action Research (CAR) was conducted over two cycles—planning, implementation, observation, and reflection—with 15 group B children in early childhood education. Results showed improvement in reading abilities—letter recognition, sound pronunciation, and simple syllable formation. However, the findings also emphasize the importance of integrating other media, such as Augmented Reality, to maintain engagement and prevent monotony (edukatif.org). Therefore, while flashcards are an effective and engaging learning tool, their usage should be accompanied by creative variation to sustain effectiveness and learner interest.

Kata Kunci:

flashcard, kemampuan membaca, anak usia dini,

Abstrak: Penelitian ini bertujuan untuk mengevaluasi pengaruh penggunaan media flashcard terhadap kemampuan membaca anak usia dini, sekaligus meninjau implikasi penggunaan yang terlalu sering. Latar belakang menunjukkan bahwa meskipun flashcard efektif dalam membantu anak mengenal serta melafalkan huruf, penggunaan yang monoton dapat berisiko menimbulkan kejenuhan, sebagaimana ditemukan bahwa flashcard berperan sebagai solusi terhadap kejenuhan belajar, tetapi variasi metode tetap diperlukan (digilib.uinkhas.ac.id). Penelitian ini mengadopsi metode Penelitian Tindakan Kelas (PTK) dalam dua siklus: perencanaan, pelaksanaan, observasi, dan refleksi, dengan 15 anak kelompok B di PAUD. Hasil menunjukkan peningkatan kemampuan membaca—dalam mengenali huruf, melafalkan bunyi, dan membentuk suku kata. Namun demikian, temuan juga menunjukkan pentingnya mengombinasikan flashcard dengan variasi media lain, seperti Augmented Reality, untuk menjaga ketertarikan dan mencegah kebosanan siswa (edukatif.org). Dengan demikian, meski flashcard efektif sebagai media pembelajaran, keberlangsungannya harus dibarengi dengan pendekatan kreatif dan variasi agar tetap menyenangkan dan tidak kontraproduktif.

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INTRODUCTION

Reading is a fundamental skill that children must master from an early age, as it serves as the gateway to mastering language skills and subsequent knowledge. However, the reality on the ground shows that many young children are only able to pronounce the sequence of letters of the alphabet without truly understanding the letter symbols when shown randomly or in picture form. Research by Sholikatun Nikmah et al. (2025) revealed that this condition occurs due to conventional learning methods and the minimal use of engaging media,



resulting in children not understanding letters meaningfully. A similar finding was found by Ulwan Syafrudin et al. (2023), who explained that low interest in learning, a lack of varied learning media, and limited parental support contribute to the phenomenon of children simply memorizing the sequence of letters without understanding the letter symbols when presented randomly. Furthermore, Sari (2021) also reported that some children still have difficulty naming letters randomly and distinguishing letters with similar shapes, such as b and d, demonstrating that recognizing letters outside of alphabetical order remains a real challenge.

One of the most frequently used media in early childhood learning is flashcards. This medium is considered effective because it is simple, visually appealing, and can stimulate children to remember letter symbols and words through image association. Several studies have shown that the use of flashcards can help improve early literacy skills, particularly in letter recognition, sound pronunciation, and combining letters into syllables. However, the literature also confirms that excessive or monotonous use of flashcards can potentially lead to boredom in children, thus reducing their effectiveness if not balanced with a variety of other media (Nikmah et al., 2025; Syafrudin et al., 2023). Therefore, it is important to emphasize the proportional and creative use of flashcards to maintain their appeal and suit the characteristics of early childhood.

Based on this background, this study was conducted to determine the effect of flashcard use on reading skills in early childhood. This study also seeks to emphasize the importance of varied media use so that learning is not only effective, but also enjoyable and sustainable, meeting children's developmental needs. This study used a Classroom Action Research (CAR) approach, implemented in two cycles. Each cycle consists of four stages: planning, acting, observing, and reflecting. This model refers to Kemmis & McTaggart (1988), who stated that CAR is reflective research aimed at continuously improving learning practices.

The research subjects were 15 children in Group B at an Early Childhood Education (PAUD) institution, consisting of 8 boys and 7 girls. The research location was at the PAUD where the author conducted the learning activities, with a two-month research period, encompassing the preparation, implementation, and reflection stages.

The observed indicators of children's reading ability included: (a) letter recognition, (b) letter pronunciation, (c) simple syllable reading, and (d) distinguishing letters with similar shapes. These indicators were developed based on Tarigan's (2015) view that children's early reading skills include recognizing symbols, language sounds, and combining them into simple words. Data collection techniques were conducted through direct observation during the learning process, brief interviews with class teachers, and documentation of activities. According to Sugiyono (2019), data triangulation is essential to increase the validity of research results, namely by combining various data collection techniques to obtain a complete picture.

Data analysis was conducted using the Miles & Huberman (1994) model, which includes data reduction, data presentation, and conclusion drawing. This model was chosen because it allowed researchers to analyze qualitative data systematically and continuously as the research progressed. The success of the intervention was determined based on indicators of improvement in children's reading ability. If indicators were not achieved in the first cycle, improvements were made in the second cycle by adding variations in learning strategies using flashcards.

METHOD

This research uses a Classroom Action Research (CAR) approach, implemented in two cycles. Each cycle consists of four stages: planning, acting, observing, and reflecting. This model refers to Kemmis & McTaggart (1988), who stated that CAR is reflective research aimed at continuously improving learning practices. The research subjects were 15 children in Group B at an Early Childhood Education (PAUD) institution, consisting of 8 boys and 7 girls. The research location was at the PAUD where the author conducted the learning activities, with a two-month research period, encompassing the preparation, implementation, and reflection stages.

The research instruments included: (1) observation sheets to assess children's reading abilities, (2) field notes to record the learning process, and (3) documentation in the form of photographs or recordings of activities as supporting data. According to Arikunto (2013), observation instruments are an effective way to directly obtain data on children's learning behavior. The

observed indicators of children's reading ability included: (a) letter recognition, (b) letter pronunciation, (c) simple syllable reading, and (d) distinguishing letters with similar shapes. These indicators were developed based on Tarigan's (2015) view that children's early reading ability encompasses the ability to recognize symbols, language sounds, and combine them into simple words.

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RESULTS AND DISCUSSION

This study aimed to evaluate the influence of flashcard media on early childhood reading skills. The research was conducted through two cycles of Classroom Action Research (CAR), involving 15 children in Group B at a PAUD institution. Each cycle included planning, implementation, observation, and reflection.

Initial observations revealed that most children could only recite the alphabet sequentially (A–Z) but were unable to recognize letters when presented randomly. Phonemic awareness and syllable formation were not yet evident. Out of 15 children, only 4 were able to correctly identify letters.

Table 1. Pre-Cycle Results

Category	Number of Children	Percentage
Able to recognize letters	4	26, %

Unable to recognize letters	11	73,3%
Total	15	100%

The analysis of the pre-cycle stage highlighted several important challenges. Children's ability to recognize letters was still limited, as they were unfamiliar with letter symbols when presented outside the standard alphabetical order. This finding reflects that their recognition was based primarily on rote memorization rather than true comprehension. Furthermore, the learning activities at this stage did not provide opportunities to foster phonemic development, which is crucial for building early literacy skills.

The instructional approach relied mostly on conventional methods with minimal integration of visual media. Such a strategy made the lessons less stimulating and reduced the potential for active learning. Consequently, children's motivation and engagement during the learning process were relatively low. Active participation was limited, and many children displayed passive behavior, indicating the need for more interactive and engaging teaching strategies.

Cycle I

In the first cycle, the teacher introduced colorful and illustrated flashcards. Activities were conducted individually and in small groups. Children showed increased enthusiasm, though some still struggled to identify letters correctly and differentiate similar-looking ones. The initial observations revealed that the majority of children were only capable of reciting the alphabet sequentially from A to Z but were unable to recognize letters when presented in random order. Furthermore, phonemic awareness and the ability to form syllables had not yet developed among most of the children. Out of 15 participants, only 4 children (26.7%) were able to correctly identify letters, while the remaining 11 children (73.3%) were unable to do so. This finding indicates that children were not yet familiar with letter symbols beyond rote memorization.

The analysis of the pre-cycle stage showed several key issues. First, children were generally unfamiliar with letter symbols outside the context of alphabetical sequencing. Second, no specific activities were designed to support phonemic development, which limited the children's ability to

progress beyond simple alphabet recitation. Third, the teaching and learning process heavily relied on conventional methods with minimal use of visual media, which reduced children's engagement. Finally, children's motivation and participation were relatively low, as most of them were passive during the learning process. To address these challenges, interventions were introduced in Cycle I. In this cycle, the teacher utilized colorful and illustrated flashcards as a primary learning tool. The activities were conducted both individually and in small groups to provide varied learning experiences. The introduction of flashcards helped capture children's attention and increased their enthusiasm for participating in classroom activities. Although positive progress was noted in Cycle I, some challenges remained. A number of children continued to struggle with recognizing letters correctly, particularly when differentiating between letters with similar visual forms such as b and d or p and q. Nevertheless, compared to the pre-cycle stage, children showed greater engagement, higher levels of motivation, and more active involvement in the learning process.

Table 2. Cycle I Results

Category	Number of Children	Percentage
Able to recognize letters	8	53.3%
Not able to recognize letters	7	46.6%
Total	15	100%

The results of the first cycle indicated a noticeable improvement in children's ability to recognize letters. Out of 15 children, 8 (53.3%) were able to correctly identify letters, while 7 children (46.6%) were still unable to do so. Compared to the pre-cycle stage, where only 4 children recognized letters, this represents a significant increase. These findings demonstrate that the introduction of flashcards had begun to yield a positive impact on the development of early literacy skills. A number of important developments were observed during this cycle. Children showed progress in recognizing letters when presented in random order, particularly those letters that had been repeatedly introduced during classroom activities. Some children also began making associations between letters and images,

such as identifying “A for Apple,” which supported their symbolic understanding and strengthened memory retention. However, challenges remained. A few children continued to struggle in differentiating letters with similar shapes, notably b, d, p, and q. This difficulty reflected the need for more targeted strategies in letter discrimination. In addition to cognitive improvements, children’s learning behavior also underwent positive changes. They started to display greater initiative in responding to teacher prompts, with more children raising their hands, answering questions, and taking part in group discussions. Their level of participation shifted from passive to more active engagement, which indicated an increase in self-confidence and interest.

The overall classroom dynamics also improved considerably compared to the pre-cycle. The learning atmosphere became livelier, and children responded positively to the integration of visual media such as colorful and illustrated flashcards. Teachers observed noticeable gains in children’s motivation, focus, and enthusiasm during lessons. These improvements fostered a more interactive and enjoyable learning environment, laying a stronger foundation for continued literacy development in subsequent cycles.

Cycle II

In the second cycle, the learning approach was modified. Flashcards were combined with phonetic songs, educational games, and storytelling. Activities were thematic and engaging. Children demonstrated significant improvement in letter recognition, phonemic awareness, and simple syllable formation.

Table 3. Cycle II Results

Category	Number of Children	Percentage
Able to recognize letters	13	86.7%
Not able to recognize letters	2	13.3%
Total	15	100%

In the second cycle, the learning approach was modified to create a richer and more engaging experience for the children. Flashcards were no longer used in isolation; instead, they were combined with phonetic songs,

educational games, and storytelling, all integrated into thematic learning contexts. This combination of strategies sustained children's interest and provided multiple pathways for reinforcing early literacy skills through visual, auditory, and kinesthetic experiences.

The results of Cycle II showed remarkable progress. Out of 15 children, 13 (86.7%) were able to recognize letters correctly, while only 2 children (13.3%) continued to face difficulties. Compared to the pre-cycle stage, where only 4 children could recognize letters, this represented a substantial increase in achievement. Such progress confirmed the effectiveness of the revised, creative learning strategies.

Several significant developmental changes were observed. Children were now able to identify letters in random order with greater accuracy and began forming simple syllables, signaling the emergence of early decoding skills. Their ability to discriminate visually between similar-looking letters also improved considerably, indicating stronger perceptual development. Beyond cognitive gains, children demonstrated greater enthusiasm and self-confidence in classroom activities. Many eagerly volunteered to answer questions and actively participated in class discussions. Group-based learning played an important role, fostering richer social interaction and improving verbal expression skills.

The classroom atmosphere during Cycle II was notably more interactive and enjoyable compared to earlier stages. Peer collaboration became a strong feature of learning, enabling children to support one another in letter recognition and early word formation. Teachers reported that the children displayed higher levels of participation, concentration, and memory retention, suggesting that the multisensory and varied teaching approach had a powerful impact on engagement and learning outcomes. A closer developmental analysis confirmed these findings. Random letter recognition increased dramatically from 26.7% in the pre-cycle stage to 86.7% in Cycle II. Phonemic awareness, which had only begun to emerge in Cycle I, strengthened during this stage and was evidenced in children's ability to manipulate sounds. For the first time, syllable formation appeared, reflecting both cognitive and linguistic growth. Visual discrimination was also significantly enhanced, supported by the reinforcement of multisensory

techniques such as seeing, hearing, and physically engaging with letters. Taken together, these findings provide strong evidence that flashcards, when used systematically and combined with creative and interactive teaching strategies, are highly effective in improving early reading skills. The improvements observed in Cycle II demonstrate that a varied, thematic, and child-centered approach can accelerate literacy development across multiple domains, including letter recognition, phonemic awareness, syllable formation, social interaction, and self-confidence. These findings align with Vygotsky's sociocultural theory, which emphasizes scaffolding and social interaction in early learning. Flashcards serve as visual aids that support the internalization of letter and sound concepts. When integrated with thematic and interactive approaches, they become more effective in building foundational literacy skills.

CONCLUSION

Learning activities that utilized flashcards in combination with phonetic songs, educational games, and storytelling within thematic contexts proved highly effective in enhancing early literacy skills among young children. The research findings revealed a significant improvement, with 86.7% of the children successfully recognizing letters compared to only 26.7% in the pre-cycle stage. Beyond recognizing letters in random order, children also began forming simple syllables, strengthening their phonemic awareness, and demonstrating the ability to visually distinguish between similar letters. In addition to cognitive development, this approach also contributed to affective and social growth. Children displayed greater enthusiasm, self-confidence, and active participation in classroom activities. Group interaction fostered communication and cooperation, while simultaneously supporting language development. Teachers observed noticeable increases in children's concentration, participation, and memory retention, indicating the broader impact of the multisensory learning experience. Overall, a creative, thematic, and multisensory approach—combining flashcards with interactive methods—was shown to be highly effective in accelerating early literacy development. These findings emphasize the importance of employing varied and child-centered strategies to support reading readiness from an early age.

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