



Movekids Flashcard Learning Media to Enhance Physical Literacy for Third Grade Elementary School Students

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Abstract

This study aims to develop the Movekids Flashcard as a learning medium to enhance physical literacy among third-grade elementary school students. The research follows the ADDIE development model (Analysis, Design, Development, Implementation, Evaluation). The study involved 18 third-grade students from SD Negeri Talang Giring in the small-scale trial phase and 46 students from SD Negeri Bunga Sekoti and SD Negeri Kotanegara in the large-scale trial phase. Expert judgment in this study consisted of three experts: one learning media expert, one motor learning expert, and one physical educator. The content validity of the learning media was assessed using the Content Validity Index (CVI) and Content Validity Ratio (CVR), yielding a CVI score of 3.83 and a CVR score of 0.25. These results indicate a high level of content validity, allowing the study to proceed to the field trial phase. The findings suggest that the Movekids Flashcard effectively enhances students' physical literacy and can serve as an innovative learning medium in elementary school physical education.



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INTRODUCTION

The National Sports System Law is key to the development of sports, particularly in physical education. This law positions sports as a crucial instrument for national development (Ramadhan et al., 2020). Physical Education, Sports, and Health (PJOK) is an educational process that uses physical activities and sports to achieve general educational goals. It not only focuses on physical development but also supports emotional responses, social interactions, group dynamics, cognitive growth, intellectual development, emotional maturity, and aesthetic appreciation. (Pratama et al., 2024).

PJOK is an integral part of the overall education system. This educational process utilizes physical activity to produce holistic changes in individual qualities both physically, mentally and emotionally (Suyono et al., 2024). The provision of learning experiences is aimed at fostering and simultaneously shaping a healthy and active lifestyle for a lifetime. There is no education without pedagogical objectives (sudarsinah, 2021).

PJOK focus on promoting physical growth, psychological development, motor skills, cognitive abilities, value internalization (covering mental, emotional, sportsmanship, spiritual, and social aspects), and the cultivation of healthy lifestyle habits. Physical fitness literacy is a guarantee for an individual to engage in activities. The higher the level of physical fitness literacy of an individual or group, the better their productivity. Physical literacy provides the opportunity to consider all the factors that help an individual move: physical, psychological, cognitive, and social (Said & Hanafi, 2022).

"Sedentary" behavior, such as being inactive, refers to relaxed activities like sitting or lying down. Examples of such behaviors in daily life include watching television or playing video games. These behaviors are considered risky as they contribute to the blockage of blood vessels and negatively impact life expectancy (Ramadhani & Bianti, 2017).

PJOK serves as a means or platform for students to engage in physical activity during school hours. It also helps to build and enhance their knowledge about physical fitness. This knowledge becomes key to maintaining a healthy lifestyle, both during leisure time, at school, and outside of school hours (Wanjaya, 2019). Physical education promotes the development of motor skills, physical fitness, cognitive abilities, value appreciation (including attitudes, mental-emotional, religious, and social aspects), and healthy lifestyle habits. It is essential for supporting balanced growth and overall development. (Iswanto & Widayati, 2021).

The teacher, as one of the key components and as the organizer of the learning process, plays a crucial role in its execution. Therefore, teachers should aim to make the learning process more effective, engaging, and meaningful for students, ensuring that the learning objectives are achieved to their fullest potential (Wahyuni, 2020). Children's involvement in school activities should be enjoyable and aimed at enhancing their motor skills.

Physical educators must possess skills in designing, developing, and utilizing innovative and engaging learning media. These skills include the ability to select media that match the characteristics of the students, organize content that supports physical activities, and integrate technology to enhance the

effectiveness of learning. Additionally, teachers need to be creative and adaptive in aligning the media with learning objectives and the environmental conditions.

There are four fundamental competencies that a teacher must possess: professional competence, pedagogical competence, social competence, and personal competence. These competencies are essential for teachers to effectively deliver instruction, interact with students, and contribute to a positive learning environment (Hidayati, 2022). Based on the field observations conducted by the researcher (2024) regarding PJOK lessons for third-grade students at three elementary schools (SDN Talang Giring, SDN Bunga Sekoti, and SDN Kotanegara), the findings are as follows:

- 1) Student Behavior Issues (Sedentary Behavior); Many students tend to have a less active lifestyle, spending more time sitting and engaging in passive activities such as watching TV or playing on gadgets. This leads to lower physical fitness levels, reduced basic motor skills, and an increased risk of health issues like early obesity.
- 2) Challenges in Integrating Technology in Learning; Although technology can be an effective learning tool, PJOK teachers often struggle to integrate it optimally into physical education lessons. The main challenges include limited equipment, lack of training for teachers, and difficulty in finding appropriate digital applications or media to support physical activities.
- 3) Lack of Motivation and Interest in Physical Activities; Students show more interest in technology-based games rather than physical activities. This results in low active participation in PJOK lessons, a decline in motivation to move, and a

lack of enthusiasm for sports outside of school hours.

- 4) Limited Facilities and Environmental Support; Some schools face limitations in supporting facilities for PJOK lessons, such as small open spaces or inadequate sports equipment. Additionally, the lack of support from family and social environments also influences children's physical activity habits outside of school.

Based on the background of the issues described above, the researcher research and developed the "Movekids Flashcard" learning media to assist teachers in delivering Fundamental Movement Skills (FMS) learning materials. The goal is to boost students' learning motivation and enhance their physical fitness literacy, as FMS are valuable for everyone, including children with ID, providing the foundation to perform daily activities without significant difficulties (Kesumawati et al., 2024).

Learning media play a crucial role in supporting the teaching and learning process. Educators can utilize the evolving learning media as tools to effectively convey material, making the learning process easier to conduct. Since there is a wide variety of learning media, educators must be skilled in selecting the most appropriate media to be applied in schools or classrooms to ensure that learning objectives are achieved as expected (Sapriyah, 2019).

The role and function of learning media in the school learning process are highly essential (Alfiana & Purbawanto, 2021). Learning media is an instructional tool used by educators to facilitate the delivery of lesson materials in schools. It plays a crucial role in helping teachers effectively convey subject matter. The use of diverse learning media serves as a

solution to engage students, making the learning process more interesting and preventing boredom (Sari et al., 2023).

Learning media makes the presentation of lesson materials more effective, enhances students' learning motivation, and strengthens the bond between teachers and students (Setiyoningrum & Project, 2024). The development of learning media utilizing available facilities and infrastructure is a key solution to enhancing students' understanding of anatomy and physiology

Flashcard learning media includes attractive image cards that are easy to play with, allowing children to respond and engage more actively in their learning. Flashcards are tools that help teachers in facilitating play and learning for children. They can also be used at home with playmates (Pradana & Gerhni, 2019).

Human motor development is both a lifelong process and an academic field of study. As a process, it refers to the changes in our movement abilities and overall motor skills that occur throughout different stages of life (Payne & Isaacs, 2020).

Fundamental Movement Skills (FMS) are essential for elementary school students as they form the foundation for various motor skills that support physical and cognitive development. FMS, such as running, jumping, throwing, and catching, help children develop coordination, balance, agility, and confidence in physical activities. Mastering FMS from an early age also establishes a solid foundation for active participation in various sports and physical activities in the future while promoting a healthy and active lifestyle. Physical literacy relates to the ability to understand and perform human movement in connection with physical activity, motor skill outcomes,

environmental contexts, and broader social and emotional learning processes (WIDIANTO & Nugraha, 2023).

Physical fitness is a highly desirable condition for everyone. With good physical fitness, individuals can perform more dynamically and energetically, leading to increased productivity (Darmawan, 2017). Fundamental locomotor movements are crucial for a child's growth and development, as they serve as key determinants for their future physical abilities. Children who master fundamental movements well will find it easier to perform daily activities (Febriani et al., 2023).

In this study, the researcher developed the "Movekids Flashcard" learning media to assist teachers in enhancing fundamental movement learning for third-grade elementary school students. This media aims to provide physical fitness literacy and facilitate movement skill practice tailored to the characteristics and age of the students. Physical fitness is essential for every individual to perform daily activities efficiently. It reflects a person's ability to carry out physical tasks at a moderate level without experiencing excessive fatigue (Darmawan, 2017).

Movekids Flashcard

MoveKids Flashcard is a learning aid designed to enhance physical literacy in children aged 7–9 years by introducing fundamental movement skills. This flashcard set consists of 40 cards categorized into three main movement types: locomotor, non-locomotor, and manipulative skills. Each card features illustrations, instructions, and a movement analysis description that is easy for children to understand. The use of these flashcards helps third-grade elementary school students grasp fundamental movement concepts in a

more structured and engaging way. Additionally, this tool can boost children's motivation to learn and practice motor skills independently. From an anatomical perspective, MoveKids Flashcard helps children recognize the function of different body parts in various movements, such as using their legs for jumping and their hands for catching. From a physiological standpoint, activities performed with these flashcards can enhance muscle strength, balance, and motor coordination.

Practicing with flashcards also supports the development of the cardiovascular and respiratory systems, which play a crucial role in physical fitness. Additionally, this card-based learning method allows children to learn through play, making them more active and engaged in physical activities.

Thus, MoveKids Flashcard serves as an effective learning tool for building a strong foundation in fundamental movement skills from an early age.

Teachers should minimize verbal instructions and focus on using tactile, kinesthetic, visual, and other concrete methods to enhance learning (Kesumawati & Fahrtsani, 2021). The use of learning media featuring animations is expected to stimulate students' motivation to learn, as it offers attractive shapes and colors, and can clarify the understanding of lesson concepts (Yunarti et al., 2022).



Fig.1 Movekids Flashcard
Asep, et.,al (2025)

Product Specification

- **Number of Cards:** 40 cards
- **Movement Content:** Locomotor, Non-Locomotor, and Manipulative Movements, along with anatomical movement analysis.
- **Material:** Durable thick paper (260 GSM) with a silky matte finish.
- **Card Size:** 5 x 7 cm, compact and easy to carry.
- **Suitable for:** Children aged 7–9 years.

METHODS

This study employs a research and development method using the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) to develop and evaluate MoveKids Flashcard as a learning tool for enhancing physical literacy among third-grade elementary school students.

- Analysis Stage: Identifies the needs of students and teachers in fundamental movement skill instruction.
- Design Stage: Involves designing the flashcards while considering visual, instructional, and movement analysis aspects that align with students' characteristics.
- Development Stage: The developed product is reviewed and validated by three experts—one learning media expert, one motor learning expert, and one physical education practitioner—to ensure the appropriateness of the content and the effectiveness of the learning media.
- Implementation Stage: Involves testing the MoveKids Flashcard with the study participants, third-grade elementary school students.
- Evaluation Stage: Assesses and measures the effectiveness of MoveKids Flashcard in improving PE movement learning and students' physical literacy.

The study participants were third-grade elementary school students, consisting of 18 students from SDN Talang Giring for the small-scale trial and 46 students from SD Negeri Bunga Sekoti and SD Negeri Kotanegara for the large-scale trial phase.

The data collection

This study utilized a rubric to assess the "MoveKids Flashcard" product, involving three experts: one learning media expert, one motor learning expert, and one physical education practitioner. The rubric consists of 10 questions that assess various aspects, including content (learning material), movement safety, the attractiveness of the presented animated images, and the quality of the flashcard material.

RESULT

The evaluation was conducted by assessing content validity using the Content Validity Index (CVI) and Content Validity Ratio (CVR). The validation analysis by experts resulted in a CVI score of 3.83 and a CVR score of 0.25, indicating a high level of content validity. Therefore, Movekids Flashcard is deemed suitable as an innovative learning tool in physical education to enhance the physical literacy of elementary school students.

The results of the assessment by experts can be seen in the table 1 below:

Table 1. CVI and CVR

No.	E1	E2	E3	ne	N	N/2	ne- (N/2)	CVR	C
1	4	4	4	3	4	2	1	0.5	V
2	4	4	4	3	4	2	1	0.5	V
3	4	4	4	3	4	2	1	0.5	V
4	4	4	3	2	4	2	0	0	V
5	4	4	3	2	4	2	0	0	V
6	4	3	4	2	4	2	0	0	V
7	4	3	4	2	4	2	0	0	V
8	3	4	4	2	4	2	0	0	V
9	4	4	4	3	4	2	1	0.5	V
10	4	4	4	3	4	2	1	0.5	V
Total	39	38	38		Total			2.5	
Mean	3.9	3.8	3.8		Mean			0.25	Valid
Means	3.83								

DISCUSSION

Movement is an essential trait and a fundamental means for a person to sustain life. It is necessary for individuals to move in order to carry out daily activities. Hence, learning how to move effectively is crucial. To perform movements efficiently, individuals require biomotor skills and key components such as strength, speed,

coordination, balance, agility, and flexibility. These components can be enhanced through targeted physical activities specifically designed for their development.

Understanding and skill in combining teaching methods, media, and strategies are essential creative aspects that can enhance students' learning motivation (Prabowo et al., 2022). The use of media should be packaged as creatively as possible by a teacher. The aim is to enhance the learning process in a fun and engaging way. One type of media that teachers can use is visual media. Its function is to attract and direct students' attention to concentrate on the lesson content. Therefore, its use must be tailored and aligned with the material that will be taught (Fadilah et al., 2023). Essentially, physical education, by utilizing human movement, can also foster the development of mental and moral aspects (Taufan et al., 2018).

CONCLUSION

The design and content of the flashcard are highly engaging for students, making MoveKids Flashcard an excellent tool for enhancing physical literacy in elementary school children. It effectively improves their movement skills and offers valuable insights into the importance of movement from both anatomical and physiological perspectives, making it a great alternative for teaching movement in physical education.

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