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# Application of Pop Up Book Media on Locomotor Basic Movement Skills

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#### ARTICLE INFO

#### **ABSTRACT**

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The application of learning media is an option in developing a more effective learning process. Pop up book media for locomotor basic movements is an example of a product that can be used in elementary schools. The purpose of this study was to determine the application of new media used in learning physical education, health and recreation (PJOK). This research uses observation and test methods as data tools with quantitative descriptive analysis techniques. The research data was carried out by observation through pop up book media and tests with three test items which included walking on blocks, 20m sprints, and jumping over cardboard boxes with a population of 83 students and a sample of 28 regular class students with sampling techniques using purposive sampling. The results of research from the application of pop up book media to locomotor basic movement skills show an increase in basic movement skills of walking by 9.5%, sprinting by 9.7%, and jumping by 14.5% with a total percentage of 33.7% with an average of sufficient category. So, it can be concluded that the application of pop up book media can improve locomotor basic movement skills by 33.7% in third grade students of SDN Babatan IV/459 Surabaya.

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# **Abstract**

Keywords. media pembelajaran gerak lokomotor pendidikan jasmani

Penerapan media pembelajaran menjadi pilihan dalam mengembangkan proses belajar yang dirasa lebih efektif. Media pop up book gerak dasar lokomotor adalah contoh produk yang bisa digunakan di Sekolah Dasar. Tujuan dilakukan penelitian ini adalah mengetahui penerapan media yang baru digunakan dalam pembelajaran pendidikan jasmani, kesehatan dan rekreasi (PJOK). Penelitian ini menggunakan metode observasi dan tes sebagai alat data dengan teknik analisis deskriptif kuantitatif. Data penelitian dilakukan dengan observasi melalui media pop up book dan tes dengan tiga item tes yang meliputi berjalan di atas balok, sprint 20m, dan melompat melewati kardus dengan populasi sebanyak 83 peserta didik dan sampel sebanyak 28 peserta didik kelas regular dengan teknik pengambilan sampel menggunakan purposive sampling. Hasil penelitian dari penerapan media pop up book terhadap keterampilan gerak dasar lokomotor menunjukkan peningkatan keterampilan gerak dasar berjalan sebesar 9,5%, sprint sebesar 9,7%, dan melompat sebesar 14,5% dengan jumlah presentase sebesar 33,7% dengan rata-rata kategori cukup. Maka, dapat diambil sebuah kesimpulan bahwa penerapan media *pop up book* dapat meningkatkan keterampilan gerak dasar lokomotor sebesar 33,7% pada peserta didik kelas III SDN Babatan IV/459 Surabaya.

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#### **PENDAHULUAN**

Teachers and parents who do not provide enough space to learn basic movement skills will make it difficult for children to perform advanced movement activities. (Amirzan, 2017). Walking, running, jumping and throwing movements are basic movements in living things. Schools need to

develop basic locomotor, non-locomotor and manipulative movements in students. (A. Wijaya, 2020). These skills require practice, development and guidance at the elementary school level, the main one being locomotor movements. (Muslihin, 2020). Learning outcomes will certainly be better and the development of students' movements will certainly be better and more correct if supported by motor skills. students will easily do sports at school if supported by their motor skills. (Saputra & Firdaus, 2019).

Motor is the main component that must be mastered by children to perform a movement that is used to improve development and movement skills. (Mulyaningsih, 2021). These motor skills are included in learning Physical Education, Sports and Health (PJOK) at Elementary School. PJOK at school is the development of motor skills taught by PJOK teachers, with the aim of developing basic abilities that are in accordance with the age level of children. (Purwoto et al., 2022).. Teachers have a very important role as a service provider to help help children's learning process to develop their abilities. Teachers are also required to master the learning objectives that must be met. The quality of learning can be achieved by preparing lesson plans that aim to make learning in schools run systematically. (Romlah, 2022).

The preparation of learning activities by PJOK teachers is carried out by making a design for teaching and learning activities. Learning planning includes the preparation of teaching modules, preparation of learning media, learning assessment tools, and learning activities. (Rahayu et al., 2022).. Learning planning is an important thing to do to create effective and efficient teaching activities. The role of appropriate and enjoyable media can optimize the learning process. (Abdulla, 2016). Teachers must know the needs and problems faced by students about learning materials. Teachers need to develop media based on basic competencies, relevance and student characteristics. (Wibowo & Koeswanti, 2021).. Developments in the world of education continue to be updated, gaining knowledge is no longer fixated on student books alone but can be developed through learning media. (Rasyid, 2018).

The benefits of media are the same as honing teacher creativity with students and making students able to improve learning outcomes. (Wulandari et al., 2023).. Effective learning media is also required to be mastered by teachers because it can improve learning outcomes. (M. A. Wijaya & Kanca, 2019).. If the teacher only relies on textbooks, it is not fully in accordance with the characteristics and interests of students. (Shinta & Ain, 2021). So, it is necessary to develop learning media that is compiled to support more interesting learning (Venny & Radia, 2022). (Venny & Radia, 2022).

One form of teacher creativity can be seen from the media used when teaching, for example with *pop up book* media. (Artobatama et al., 2023).. A book made with a three-dimensional theme with flat paper that is combined into an image product that can move, can stand and can be folded (Farid et al., 2018). (Farid et al., 2018). *Pop up book* learning devices are also interesting, each page also has a different picture. (Kusumoningrum & Handriyotopo, 2021).. So that if used in the learning process, it

will attract learning interest (Umam et al., 2019). (Umam et al., 2019). The advantage of *pop up books* is that they can describe the material so that it is more interesting and easy to understand. (Magfira et al., 2023).. PJOK subjects at the elementary school level are physical subjects that study human movement. However, there is no research that examines the advantages of *pop up books* in PJOK subjects. After the *pop up book* is presented in the theme of PJOK at the low grade elementary school level, it is hoped that when they practice in the field, they already understand the correct basic psychomotor movements (Ningsih et al., 2023). (Ningsih et al., 2023).

Walking, running and jumping are elements of locomotor basic movement. Basic movement skills are the most important factor (fundamental basic movement) (Zulfikar et al., 2021). Based on this, to improve learning activities, it is necessary to have PJOK learning media that can create interest in students. Media that can attract interest in learning is pop up book, because it is considered effective when used during learning. (Sukmawarti, 2021). At the elementary school level, one of the movements that need to be developed is locomotor movement. To be able to do locomotor movements properly and correctly, it is the role of the teacher to be able to guide the development of basic movements so that PJOK learning can be carried out optimally. (Cahyaningtias & Ridwan, 2021).

## **METHODS**

This research is quantitative research with an experimental type in which one variable affects another. (Djollong, 2019). In this study, a Pre-Experiment design was used with *One-Group Pretest-Posttest Design*. This group was measured and observed before and after being given treatment (Nugralia et al., 2019). (Nugralia et al., 2019).. This research was conducted by giving a *pre-test* followed by giving treatment using *pop up book* media basic locomotor movements. The next stage the researcher will give a *post-test* as the final stage.

This study involved 83 students, grade III SDN Babatan IV/459 Surabaya. In this study, the sampling technique used *Purposive Sampling*. The researcher developed this method by taking a regular class, namely class III-A SDN Babatan IV/459 Surabaya, which consisted of 28 students.

The instruments in this study used tests of walking on blocks, 20m *sprints*, and jumping over cardboard boxes. The data collection technique in this study used an adopted assessment form from (Children et al., 2013) with the results of the assessment test score which is divided into three categories, namely less, enough, and good. Data analysis that has been obtained from the results of the locomotor basic movement skills test will then be processed using descriptive analysis test, normality test, homogeneity test, and percentage increase which will be used to see changes in locomotor basic movement skills given treatment with *pop up book* media.

## RESULTS AND DISCUSSION

The results of the research data are adjusted to the needs of data analysis. Assessment of locomotor

basic movement skills will be processed based on calculations using SPSS 25 with descriptive analysis tests, normality tests, and percentage increases.

Table 1. Results of Descriptive Analysis Test Run

<b>Data Description</b>	Pre-test	Post-test
Mean	9,46	9,50
Minimal	7	8
Maximum	12	12
Standard Deviation	1,290	1,202

Source: Research Data. 2024

From the data presented in table 1, it can be seen that there is an average *pre-test of* 9.46 and *post-test* of 9.50 with a minimum value obtained of 7 in the *pre-test* and 8 in the *post-test*, and a maximum value obtained of 12 in the *pre-test* and *post-test*.

Table 2. Descriptive Analysis Test Results of Sprint Running

Data Description	Pre-test	Post-test
Mean	8,39	9,21
Minimal	7	6
Maximum	12	13
Standard Deviation	1,290	1,707

Source: Research Data. 2024

From the data presented in table 2, it can be seen that there is an average *pre-test of* 8.39 and *post-test of* 9.21 with a minimum value obtained of 7 in the *pre-test* and 6 in the *post-test*, and a maximum value obtained of 12 in the *pre-test* and 13 in the *post-test*.

Table 3. Descriptive Analysis Test Results of Running Jumping

Data Description	Pre-test	Post-test
Mean	7,54	8,64
Minimal	4	6
Maximum	9	10
Standard Deviation	1.503	1.193

Source: Research Data. 2024

From the data presented in table 3, it can be seen that there is an average *pre-test* of 7.54 and *post-test of* 8.64 with a minimum value obtained of 4 in the *pre-test* and 6 in the *post-test*, and a maximum value obtained of 9 in the *pre-test* and 10 in the *post-test*, followed by a normality test.

**Table 4.** Normality Test Results

Description	Test	Sig	Conclusion
Walk	Pre-test	.007	Normal
	Post-test	.018	Normal
Sprint	Pre-test	.009	Normal
	Post-test	.060	Normal
Jump	Pre-test	.086	Normal

Post-test .012 Normal Source: Research Data. 2024

From the data presented in table 4, it can be seen that the results of the normality test of basic locomotor skills show the *Kolmogorov-Smirnov* significance value of each variable with a *pre-test* and *post-test* significance value of basic locomotor skills table 4 significance> 0.05 so that the data is said to be normal which will continue with the homogeneity test.

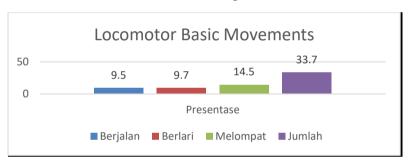
Table 5. Homogeneity Test Results

Value	Sign	Conclusion
Locomotor Basic	3,92	Homogeneous
Movements		

Source: Research Data. 2024

From the data presented in table 5, it can be seen that the results of the *pretest* and *posttest* tests of locomotor basic movement skills that the significance of 3.92> 0.05 so, it can be interpreted that the data is homogeneously distributed and will continue with the percentage increase.

 Table 6. Percentage Increase



From the data presented in table 6, it can be seen that the results of the percentage increase in locomotor basic movements in blue color show an increase in walking basic movements by 9.5% and red color shows an increase in running basic movements by 9.7% and green color shows an increase in jumping basic movements by 14.5% so, it can be concluded that in the application of *pop up book* learning media on locomotor basic movement material there is an increase in locomotor basic movement skills by 33.7% overall with an average of sufficient categories.

Pop up book media has the advantage of making students more active in the learning process, pop up book media is also flexible because it can be used to learn anywhere and anytime, can generate motivation to learn because of its attractive appearance when the page is opened and can move. However, this pop up book media also has a weakness, namely this media is that the animated images in the media need to be moved by the teacher or students because this media cannot move on its own (Permana & Sari, 2018). (Permana & Sari, 2018).

Thus, of course, it can be seen that the learning outcomes of locomotor basic movement skills of third grade students of SDN Babatan IV / 459 Surabaya at the time of the *pretest* and *posttest* have increased locomotor basic movement skills and *pop up book* media can provide an increase in the learning outcomes of locomotor basic movement skills of elementary school students.

#### **CONCLUSIONS**

The results of this study if it is concluded that *pop up book* learning media is able to improve basic movement skills in terms of the skills of students who increase after being given treatment in the form of *pop up book* media which is felt to help students understand and then apply basic locomotor movement skills correctly. Future research is expected to make *pop up book* media even better in terms of increasing pages, the paper used is thicker so that the possibility of tearing is smaller, and the use of images that become more numerous and interesting.

#### REFERENCES

- Abdulla, R. (2016). Pembelajaran Dalam Perspektif Kreativitas Guru Dalam Pemanfaatan Media Pembelajaran. 4(1).
- Amirzan, A. (2017). Pengembangan Model Pembelajaran Gerak Dasar Lokomotor Pada Siswa SD Kelas V. *Journal Physical Education*, *Health and Recreation*, 2(1), 85. https://doi.org/10.24114/pjkr.v2i1.7843
- Artobatama, I., Hastuti, W. S., Zubaidah, E., & Wibowo, S. E. (2023). STEM Learning Design with Literation-Based Pop-Up Book Media in Elementary Schools. *Jurnal Prima Edukasia*, 11(2), 152–160. https://doi.org/10.21831/jpe.v11i2.56628
- Cahyaningtias, V. P., & Ridwan, M. (2021). *Efektivitas Penerapan Media Pembelajaran Interaktif*. 55–62.
- Children, P., An, F., & Lifestyle, H. (2013). Movement Skills The Tools for Learning, Teaching.
- Djollong, A. F. (2019). Tehnik Pelaksanaan Penelitian Kuantitatif (Technique of Quantitative Research). *Istiqra': Jurnal Pendidikan Dan Pemikiran Islam*, 2(1), 86–100. https://jurnal.umpar.ac.id/index.php/istiqra/article/view/224
- Farid Ahmadiyah, Fakhruddind, Trimurtinik, K. K. (2018). The Development Of Pop-Up Book Media To Improve 4th Grade Students' Learning Outcomes Of Civic Education. *Asia Pacific Journal of Contemporary Education and Communication Technology*, 4(1), 42–50. https://doi.org/10.25275/apjcectv4i1edu5
- Kusumoningrum, I. D., & Handriyotopo, H. (2021). Media Buku Pop Up Pembelajaran Bahasa Jawa Anak Sekolah Dasar. *CITRAWIRA*: *Journal of Advertising and Visual Communication*, 2(1), 50–66. https://doi.org/10.33153/citrawira.v2i1.3669
- Magfira, A., Pristiwaluyo, T., & Syamsuddin, S. (2023). Developing audio-based pop-up book learning media for introducing numbers 1-10 for children with intellectual disability grade ii in SLB negeri

- 1 barru. *Jurnal Psikologi Pendidikan Dan Konseling: Jurnal Kajian Psikologi Pendidikan Dan Bimbingan Konseling*, 9(June), 29. https://doi.org/10.26858/jppk.v0i0.41420
- Mulyaningsih, R. (2021). Analisis Faktor-Faktor Penyebab Kesulitan Guru Pjok Dalam Menilai Keterampilan Motorik Siswa Pada Masa Pandemi Covid-19. *Jurnal Pendidikan Guru Sekolah Dasar*, 2(2), 340–357.
- Muslihin, H. Y. (2020). Bagaimana Mengajarkan Gerak Lokomotor Pada Anak Usia Dini? *Jurnal Paud Agapedia*, 2(1), 76–88. https://doi.org/10.17509/jpa.v2i1.24390
- Ningsih, Y. F., Hariadi, N., Sugeng, I., & Ardiansyah, D. (2023). *Pengembangan media pembelajaran* pop up book digital pada pembelajaran PJOK. 6(1), 15–24. https://doi.org/10.29408/porkes.v6i1.12214
- Nugralia, S., Habudin, H., & Juhji, J. (2019). Pengaruh Penggunaan Strategi Card Sort Terhadap Hasil Belajar Ipa Materi Sumber Energi (Pre Eksperimen Siswa Kelas Iv Sd Negeri Kemang Kota Serang). *Ibtida'i*: *Jurnal Kependidikan Dasar*, 6(01), 79. https://doi.org/10.32678/ibtidai.v6i01.2492
- Permana, E. P., & Sari, Y. E. P. (2018). Development of Pop Up Book Media Material Distinguishing Characteristics of Healthy and Unfit Environments Class III Students Elementary School. *International Journal of Elementary Education*, 2(1), 8–14. https://doi.org/10.23887/ijee.v1i1.13127
- Purwoto, S. P., Himawan, A., Handayani, H. Y., Anwar, K., Widodo, H. M., & Utama, F. H. (2022). Sosialisasi Kemampuan Motorik Dasar Pasca Pembelajaran Daring Pada Siswa Sekolah Dasar. *Abdi Masyarakat*, *4*(1), 49–53. https://doi.org/10.58258/abdi.v4i1.3806
- Rahayu, R., Rosita, R., Rahayuningsih, Y. S., Hernawan, A. H., & Prihantini. (2022). Implementation of Independent Curriculum in Driving School. *Jurnal Basicedu*, *6*(4), 6313–6319.
- Rasyid, I. (2018). Manfaat Media Dalam Pembelajaran. 282.
- Romlah, S. (2022). *pengertian pendidikan jasmani, ruang lingkup, manfaat dan contohnya*. 18 Januari 2022. https://dosenpenjas.com/pendidikan-jasmani/
- Saputra, M. W., & Firdaus, K. (2019). Hubungan Keterampilan Gerak Dasar Lokomotor dengan Hasil Belajar Penjasorkes. *Jurnal Pendidikan Olahraga*, 2(8), 14–20.
- Shinta, M., & Ain, S. Q. (2021). Strategi Sekolah Dalam Membentuk Karakter Siswa di Sekolah Dasar. *Jurnal Basicedu*, 5(5), 4045–4052. https://doi.org/10.31004/basicedu.v5i5.1507
- Sukmawarti, E. (2021). Pengembangan Media Pop Up Book Pada Pembelajaran PKN Di SD. *Ability: Journal of Education and Social Analysis*, 2(4), 110–122. https://doi.org/10.51178/jesa.v2i4.321
- Umam, N. K., Bakhtiar, A. M., & Iskandar, H. (2019). Pengembangan Pop Up Book Bahasa Indonesia Berbasis Budaya Slempitan. *Trapsila: Jurnal Pendidikan Dasar*, 1(02), 1. https://doi.org/10.30742/tpd.v1i02.857
- Venny, R., & Radia, E. H. (2022). Pengembangan Media Pop-Up Book Materi Sumber Energi Sebagai Media Pembelajaran Kelas 3 SD. 4, 6876–6887.

- Wibowo, S. A., & Koeswanti, H. D. (2021). Pengembangan Media Pembelajaran Berbasis Komik untuk Meningkatkan Karakter Kemandirian Belajar Siswa Sekolah Dasar. *Jurnal Basicedu*, *5*(6), 5100–5111. https://doi.org/10.31004/basicedu.v5i6.1600
- Wijaya, A. (2020). Fleksibilitas Siswa Sekolah Dasar. *Indonesian Journal of Primary Education*, 4(1), 118–123. https://doi.org/10.17509/ijpe.v4i1.25136
- Wijaya, M. A., & Kanca, I. N. (2019). Media Pembelajaran Aktivitas Pengembangan PJOK untuk Pendidikan Dasar dan Menengah. *JOSSAE: Journal of Sport Science and Education*, 4(1), 1. https://doi.org/10.26740/jossae.v4n1.p1-6
- Wulandari, A. P., Salsabila, A. A., Cahyani, K., & Shofiah, T. (2023). *Pentingnya Media Pembelajaran dalam Proses Belajar Mengajar*. 05(02), 3928–3936.
- Zulfikar, M., Hasyim, A. H., Ikadarny, I., & Anwar, N. I. A. (2021). Penguasaan Keterampilan Gerak Dasar Siswa Sekolah Dasar. *Jurnal Sport Science*, 11(1), 27. https://doi.org/10.17977/um057v11i1p27-34