



## **Trends in Interactive Media-Based Project-Based Learning (PjBL) Models in Elementary Education: A Literature Review**

**Yusrina Ginting<sup>1,\*</sup>, Wasino<sup>2</sup>, Nuni Widiarti<sup>3</sup>, Agus Yuwono<sup>4</sup>**

<sup>1,2,3,4</sup>Semarang State University, Indonesia

*Jl. Taman Siswa Sekaran, Kota Semarang, Jawa Tengah , Indonesia*

<sup>1</sup>yessyputri960@gmail.com

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### *Abstrak*

*Untuk mengkaji kecenderungan model pembelajaran PJBL berbasis media interaktif di sekolah dasar saat ini, maka tujuan dari penelitian ini adalah untuk menyelidiki situasi tersebut. Penelitian ini mengadopsi metodologi yang dikenal sebagai tinjauan pustaka. Analisis jurnal yang diterbitkan antara Sinta 6 dan Sinta 1 merupakan desain penelitian. Temuan analisis penelitian ini berasal dari jurnal yang diterbitkan selama lima tahun terakhir di Google Scholar. Ada dua puluh artikel yang tampaknya layak untuk dimuat lebih lanjut berdasarkan analisis temuan artikel yang relevan dengan kata kunci yang dicari dan kemudian dibaca secara keseluruhan selama lima tahun sebelumnya. Temuan pemeriksaan artikel, yaitu model pembelajaran PJBL berbantuan media interaktif, telah menunjukkan bahwa hal itu dapat meningkatkan hasil belajar dan kreativitas siswa sekolah dasar.*

**Kata Kunci:** *Media Pembelajaran; Project Based Learning; Sekolah Dasar.*

### *Abstract*

To examine the tendency of interactive media-based PJBL learning models in elementary schools today, the purpose of this study is to investigate the situation. This study adopts a methodology known as a literature review. The analysis of journals published between Sinta 6 and Sinta 1 is the research design. The findings of this research analysis come from journals published over the past five years on Google Scholar. There are twenty articles that seem worthy of further publication based on the analysis of article findings relevant to the keywords searched and then read in their entirety over the previous five years. The findings of the article examination, namely the interactive media-assisted PJBL learning model, have shown that it can improve the learning outcomes and creativity of elementary school students.

**Keywords:** Learning Media; Project Based Learning; Elementary School.

### **A. Introduction**

The evolution of education in the digital age necessitates the creation of innovative learning techniques that are capable of catering to the educational requirements of students in the 21st century (Nahdi, 2019). One learning model that is considered useful in developing certain

abilities is the project-based learning model. Through projects that are focused on collaborative learning, this approach gives students the opportunity to actively participate in the process of finding solutions to issues that are rooted in the real world (Afriana, 2016). At the primary school level, the implementation of project-based learning in elementary school courses has the potential to not only increase students' ability to work together and think critically but also to give them a more profound comprehension of the ideas that are being taught (Abidin, Z., 2021). In addition, the implementation of project-based learning in primary school topics enables students to acquire knowledge in a more practical and contextual manner (Kusumaningrum, S., & Djukri, 2016). Here, students acquire theoretical knowledge and put it into practice by working on actual projects (Wahyuningtyas, 2023).

This project's integration of a variety of fields of study provides students with a more comprehensive educational experience (Al-Kamzari, 2024). The use of digital media in project-based learning is becoming more significant in tandem with the further development of technology (Saadah, N., & Hakim, 2022). The use of digital media offers students various sources that may assist them in comprehending the content in a more profound and engaging manner (Ariani, D. N., Sumantri, 2022). Through the use of technology in project-based learning, students not only have an easier time gaining access to material, but they also increase their ability to work with digital tools (Karjiyati, V., & Agusdianita, 2017). The development of students' learning creativity and critical thinking skills has been fostered and improved via the use of various learning models and methodologies (Ayu, D., & Dita, 2017).

Implementing the Project-Based Learning (PjBL) learning paradigm is one of the ways to do this. In accordance with the findings of the study conducted by (Arisa, 2023), the PjBL learning model has the potential to enhance the creative abilities of students. Through the development of works as a component of the learning process and results, teachers foster innovation and creativity in their students (Barron, 2016). In the course of their education, students are taught to think in an active and creative manner via the implementation of the PjBL paradigm. Additionally, in accordance with the findings of the study conducted by (Winarso, 2018), the PjBL learning model has the potential to be used enhance the critical thinking abilities of students. This versatility is due to the fact that it incorporates activities that engage students in thought processes. The ongoing training of the thinking process can facilitate the development of pupils' critical thinking abilities (Yilmaz, L. dan Bas, 2021).

According to (Budiarti, R. S., 2023), interactive learning media is defined as learning that makes use of information and communication technology or a variety of different media. According to (ChanLin, 2018), Project-Based Learning (PjBL) is a learning approach that enables teachers to exercise control over the learning that takes place in the classroom by

including project work (Tamimu, S., Nurlia, & Kenta, 2022). Students may learn how to develop, solve issues, make judgments, and conduct investigations through this project, which is a demanding task. Students get the opportunity to work independently, apply their knowledge and abilities, and widen their horizons via the process of problem-solving and exploration when they participate in "Project-Based Learning." According to (Amalia., Surya, E and Syahputra, 2017) interactive learning media is defined as media that is created with the intention of making it interactive via the use of supplementary programs or software.

Interactive learning media possesses the following qualities: 1) is comprised of many convergent media, such as a combination of audio and visual components with one another. 2) may be considered interactive, in the sense that it can take into account the replies of users (Chang, T. S., 2021). According to (Graven, 2023), item number three is autonomous in the sense that it offers users the ease and comprehensiveness of material in such a manner that they can utilize it without the assistance of other people.

Due to the fact that it has both positive and negative aspects in terms of its application, the author is doing research on interactive learning mediums (Kusfabianto, 2019). Compared to textbooks, interactive learning media offers several benefits, such as improving learning outcomes, fostering creativity, enhancing critical thinking and problem-solving skills (Asfar, A.M.I.T., & Nur, 2018), and making it easier for students to understand the material. One of the drawbacks is that an instructor is required to engage in planning and creating, which consumes a significant amount of time and money. The impact of the purpose of learning media is to facilitate learning in the classroom (Bakhruddin, 2021). The media aims to increase learning efficiency, learning media aims to maintain the relevance of the material to learning objectives.

## **B. Research Method**

The research method used is a descriptive literature study research method. The literature study method, also known as the literature review method, collects and analyzes research articles related to a particular research problem topic (Hung, 2021). In the literature study method, the collection of research data comes from research articles related to a particular topic (Ika Maryani, 2021). The literature study research method, or literature study, is a research method that uses a literature review search, where there is a search for information and research data obtained from various library sources such as articles in scientific journals or textbooks (Isman, M., 2022). Literature studies are carried out through the analysis of various research articles in the last five years related to the interactive media-based PJBL model (López, 2018). The research was conducted from April to May 2025. The research data used is secondary data from research articles from national journals. The data collected specifically on research articles that examine the trend of interactive media-based PJBL models. Literature study was conducted

through the analysis of various research articles in the last five years, related to the interactive media-based PJBL model. The research was conducted from April to May 2025. The research data used were secondary data from research articles from national journals. The data collected specifically focused on research articles that examined the trend of interactive media-based PJBL models. The number of research data analyzed was 20 interactive media research articles. This research was conducted through the collection of reference data from related research articles, reading these articles, reviewing, recording and analyzing research data until a literature study research result was produced. The research procedure can be seen in the image below.

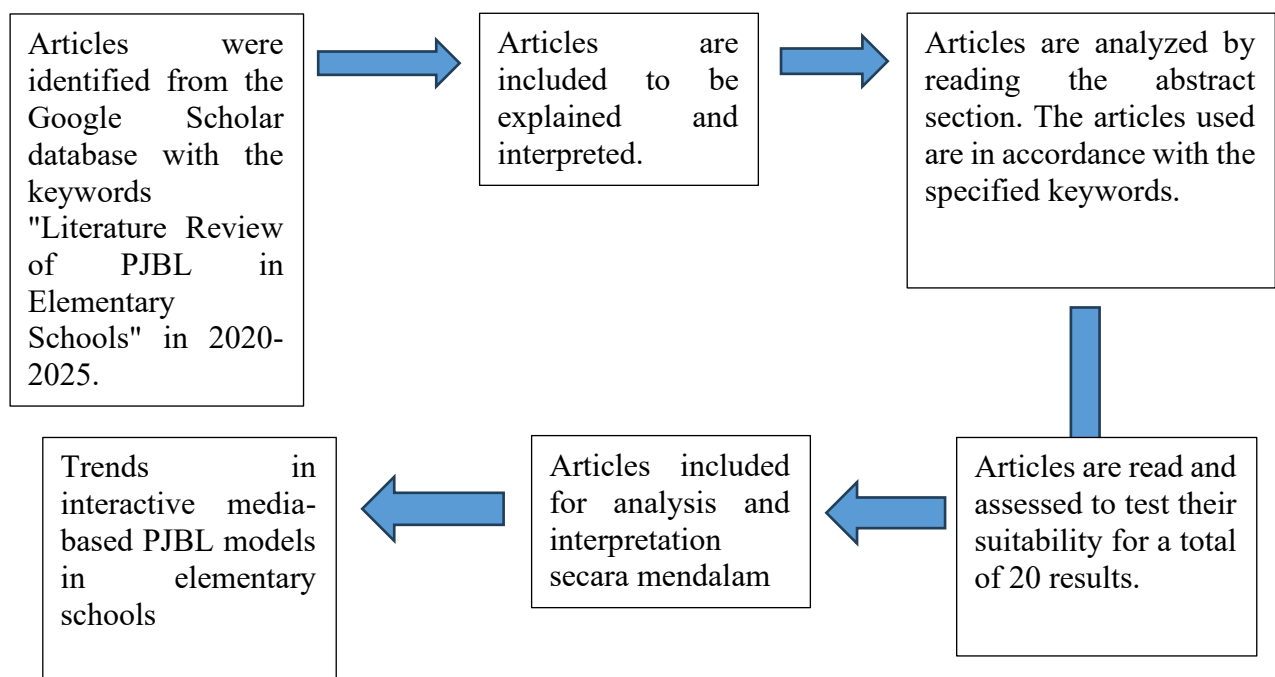


Figure 1. Flowchart of Article Selection Process in the Systematic Literature Review

Based on the image above, the following are the research steps that have been carried out, namely; 1). Collecting research articles that discuss the interactive media-based PJBL model in the last 5 years, 2). Taking and recording data on the findings of interactive media types and theories from the research articles, 3) (Triprani, 2023). Analyzing the findings. Secondary data searches were carried out through the Google Scholar page with the keywords "literature review of trends in interactive media-based PJBL models", through searching for reference articles accessed online in national journals, with the criteria being the lowest year 2020 and the highest year 2025

## D. Result and Discussion

Based on secondary data that has been collected and analyzed from literature studies in the last 5 years, information was obtained regarding various trends in interactive media-based PJBL models which can be seen in table 1 as follows:

Table 1. Research Journal on Trends in Interactive Media-Based Project Based Learning Models in 2023

No	Article Name	Author	Interactive media based PJBL	Volume Number	Results
1	Ulfadhilla Nasril , Desyandri		Interactive Multimedia Articulate Storyline 3	Journal of Practice Learning and Educational Development <a href="https://digitalpress.gae.s.edu.com/index.php/jpled">https://digitalpress.gae.s.edu.com/index.php/jpled</a> Submitted: 05-02-2023 E-ISSN: 2809-1205 Revised: 27-02-2023 Vol 3, No. 1 (2023) 77-88 Accepted: 04-03-2023 DOI: 10.58737/jpled.v3i1.97	This research was tested in class IV SDN 03. The results of. Thus, it can be concluded that the development of interactive multimedia Articulate Storyline 3 based on Project Based Learning (PjBL) in class IV of elementary school that has been developed is valid and practical to use.
2	Titin Nuraeni, Nurkholis , Fitri Aprianti, Dedeh.		Digital Media	Jurnal Elementaria Edukasia Volume 6 No. 2, Juni 2023, 480-489 DOI: 10.31949/jee.v6i2.5554 p-ISSN 2615-4625 e-ISSN 2655-0857	The results of this study indicate that the data obtained regarding student learning outcomes in pre-test activities obtained classical learning completion. Based on this, the use of project-based learning models assisted by digital media can improve student learning outcomes.
3	Chandra Sagul Haratua , Arini Widya Pratiwi , Titi Asfiyati,		Animated video media	Jurnal Multidisiplin Indonesia, Volume 2, No. 4 April 2023 Jurnal Multidisiplin	The results of this study can be concluded that, from the data, it can be

	Alfiola Lutfi Yanti , Siti Mulia Kartikasari		Indonesia Journal homepage: <a href="https://jmi.rivierapublishing.id/">https://jmi.rivierapublishing.id/</a> ISSN 2963-2900 E-ISSN 2964-9048	interpreted that there has been a significant increase in value from cycle 1 to cycle 2. This still needs to be improved further with teacher efforts to be more intensive in implementing learning with various models.
4	Fitria Cahyani, Arwin	Capcut Application	Journal of Educational Science and Local Wisdom (JIPKL) Vol. 3 No. 3 June 2023, Pages 125-134 e- ISSN: 2964-0687	The results of this study indicate an increase. Thus, it can be concluded that the Project Based Learning learning model assisted by the CapCut application can improve student learning outcomes in integrated thematic learning.
5	Rizka Mei Wulandari, Erna Zumrotun , Dwiana Asih Wiranti	Quizizz Media	ISSN : 2579 – 6151 e- ISSN : 2614 – 8242. Website : <a href="http://jurnal.umj.ac.id/index2023.php/holistika">jurnal.umj.ac.id/index2023.php/holistika</a> Email : <a href="mailto:holistika@umj.ac">holistika@umj.ac</a>	The results of the study showed that the PjBL method assisted by quizizz media had an impact on the learning outcomes of fifth grade students of SDN Ngablak 01 Cluwak Pati on the main idea of the paragraph. The significance value in the t-test was $0.00 < 0.05$ , it can be concluded that $H_a$ is accepted and $H_0$ is rejected, and in the regression test, the significance value was $0.000 < 0.05$ , it can be concluded that there is an influence between variables X and Y.

6	Ariska Setya Widyaningrum, Dewi Nilam Tyas	Powtoon Media	JLJ 12 (2) 2023 Joyful Learning Journal <a href="https://journal.unnes.ac.id/sju/index.php/jlj">https://journal.unnes.ac.id/sju/index.php/jlj</a>	The results of the study showed that the application of a project-based learning model assisted by powtoon media to student activities in learning activities can be implemented.
7	Siska Aprilia Wati, Cicilia Ika Rahayu Nita, Kholiq	Flashcard Media	Journal of Learning, Guidance, and Educational Management, 3(8), 2023, 689–698 ISSN: 2797-3174 (online) DOI: 10.17977/um065v3i82023p689-698	These results indicate that the use of the PJBL learning model assisted by flashcard media is able to increase the interest and learning activity of grade 4 students at SDN Sukorejo Kediri.
8	Afifah Rochmatur Rodhiyah, Siti Halimatus Sakdiyah, Luluk Faridatuz Zuhro	Snake and Ladder Media	Journal of Learning, Guidance, and Educational Management, 3(8), 2023, 717–729 ISSN: 2797-3174 (online) DOI: 10.17977/um065v3i82023p717-729	The results of the study showed an increase in each indicator of creativity. Fluency indicators so it can be concluded that the PjBL model assisted by snakes and ladders media can improve the creativity of students in the Sbdp subject of Class I SDN Bandungrejosari 1.
9	Ni`matul Qomariyah, Nafiah, Nuril Kartika, Suroso	Animaker Video	National Conference For Ummah (Ncu) - Volume 01 Number 01 (2023) E-Issn: 2986-2264 P-Issn: 2986-4291 Submitted: 16 June 2023 Accepted: 16 June 2023 Published: 16 June 2023	In its implementation, two cycles were carried out. Based on the results obtained, the implementation of Project Based Learning (PjBL) assisted by Animaker videos can be said to have succeeded in increasing the motivation to learn science in the subject of cultural diversity. Keywords: Project Based Learning (PjBL); Animaker

videos; learning  
motivation

Table 2. Research Journal on Trends in Interactive Media-Based Project Based Learning Models in 2024

No	Article Name	Author	Interactive media based PjBL	Volume Number	Results
1	Indah Setyaning Yusro, VuriPutri Yonatin, Heri Maria Zulfiati, Daimul Hasanah	Usri	Interactive Multimedia Oriented Guided Experiment	Pendas: Scientific Journal of Elementary Education, Print ISSN: 2477-2143 Online ISSN: 2548-6950 Volume 09 Number 03, September 2024	The use of interactive multimedia oriented guided experiments is one of the interactive and effective media, making students more critical in thinking and active, students answer questions more relaxed because they are not afraid of making mistakes, and are not burdened with writing assignments.
2	Sunarti Rauf , Kudus , Rifda Mardian Arif		Media word wall	Copyright © The Author(s) 2024 Journal of Teacher Studies and Learning, Vol. 7, No. 3, September – December 2024	The results of this study indicate that the application of the Project Based Learning (PjBL) model assisted by Wordwall media can improve the science learning outcomes of fifth grade students at SDN No. 47 Dumbo Raya.
3	Dinda Wulandari, Dedy Firduansyah, Lucy Asri Purwasi		Audio Visual Media	Published by LP3MKIL YLIP (yayasan Linggau Inda Pena) South Sumatera, Indonesia available at Linggau Journal Science Education P-ISSN: 2798-2149 E-	This type of research is quantitative research and the research method used is a quasi-experiment using a pre-test and post-test research design. So it can be



			ISSN: 2798-1479 Vol. 4 No. 1, Juni 2024 Page: 210 - 220	concluded that the learning outcomes of SBdP Class V Students of Wonokerto Elementary School after the Implementation of the PjBL Learning Model assisted by audio-visual media are significantly complete.
4	Elisabeth Nova Ekasari Fallo, Paulina Riwu Ga, Adam Bol Nifu Benu	Interactive PPT	Vol. 3 No. 2, Mei 2024 e-ISSN : 2963-6256 Journal of Character and Elementary Education	The results of the study showed that there was an increase in student learning outcomes in each cycle. Thus, it can be concluded that the application of the Project Based Learning learning model in learning can improve the learning outcomes of grade IV students on the material of making decorative lesson schedules at SD Advent Kota Kupang
5	Puput Sekar Andini, Emi Sulistri, Wasis Suprpto	Media Puzzle	Pendas: Scientific Journal of Elementary Education, Print ISSN: 2477-2143 Online ISSN: 2548-6950 Volume 09 Number 03, September 2024	The results of the study concluded: 1) There is a difference in students' creative thinking abilities using the Project Based Learning (PjBL) model assisted by Puzzle media with conventional learning models in class VI students of MIN Singkawang. 2) There is an increase in students' creative thinking abilities after the Project Based

					Learning (PjBL) model assisted by Puzzle media is applied to the creative thinking abilities of class VI students of MIN Singkawang.
6	Winda Fatakul Hidayah, Edy Herianto, Muh. Zubair, M. Ismail	Aurin	Instagram Media	Pendas: Scientific Journal of Elementary Education, Print ISSN: 2477-2143 Online ISSN: 2548-6950 Volume 09 Number 02, June 2024	The approach used is quantitative with the Pre-Experimental type. There is an influence of the implementation of project-based learning assisted by Instagram media on student learning outcomes in PPKn subjects. Proven by the acquisition of t count > t table = 27,693 > 2,042

Table 3. Research Journal on Trends in Interactive Media-Based Project Based Learning Models in 2025

No	Article Name	Author	Interactive media based PJBL	Volume Number	Results
1	Hafidza Azlin, F. Shoufika Hilyana, Siti Masfuah		Media Komik	Pendas: Scientific Journal of Elementary Education, Print ISSN: 2477-2143 Online ISSN: 2548-6950 Volume 10 Number 01, March 2025	The results of the Wilcoxon Signed-Rank Test analysis showed significant differences between the Pretest and Posttest values, as well as between Meeting 1 and Meeting 3, with a significance value of 0.003 (<0.05).
2	Mutyara Ichani		Media Augmented Reality	Pendas: Scientific Journal of Elementary Education, Print ISSN:	The results of the study showed that the percentage of student

	Pangestika, Sigit Yulianto		2477-2143 Online ISSN: 2548-6950 Volume 10 Number 01, March 2025	activity in the experimental class was higher, namely 80%, while in the control class it was 68%.
3	Wanda. M Taheri Akhbar, Kiki Aryaningrum	Media Karya Seni 3 Dimensi	Imah Journal of Basic Education (JIPDAS) Journal Page is available at <a href="https://jurnal.spada.ipt&lt;br/&gt;s.ac.id/index.php/JIPD&lt;br/&gt;AS">https://jurnal.spada.ipt s.ac.id/index.php/JIPD AS</a> Email: jipdas8@gmail.com Vol. 5 No. 1 Edition February 2025 E. ISSN. 2775-2445	Based on the data analysis, the significant value is $0.000 < 0.025$ . So if the significant value is
4	Sudirman , Abd. Kadir , Arman	Aplikasi Canva	Available online at MACCA: Science-Edu Journal (ISSN: 3048- 0507) Journal homepage: <a href="https://etdci.org/journal/macca/index">https://etdci.org/journal/macca/index</a> Received: January 12, 2025 Accepted: February 12, 2025 Online Published: February 28, 2025	There is a difference in the learning outcomes of students in science in grade IV of SD Inpres 5/81 Lemoape, Bone Regency before using the Project Based Learning learning model assisted by the Canva application, which is in the very poor category and after using the Project Based Learning learning model assisted by the Canva application, it is in the very good category.
5	Nadia Elpa Meilanda, Endang Widi Winarni, Gumono	Media Robot Education Box	E-ISSN: 2829-1522 - P-ISSN: 2829-7318 Vol. 4 No. 1, Maret 2025, Hal. 17-22 <a href="https://ejournal.unib.a&lt;br/&gt;c.id/index.php/kapeda&lt;br/&gt;s/index">https://ejournal.unib.a c.id/index.php/kapeda s/index</a>	There is a significant influence of science learning with the Project Based Learning model assisted by Robot Education Box media on creative thinking skills in Whitney's flexible thinking ability dimension.

Based on tables 1, 2 and 3, it can be said that the research based on Systematic Literature Review (SLR) was conducted to study the application of the project based learning (PjBL) learning model. This research was conducted by reviewing 20 articles from research results from 20 national journals. Applying the PjBL learning model in the classroom can improve students' creative thinking skills. This is influenced by the syntax of the project-based learning model. This means that teachers are directly involved in completing project assignments by students by asking questions, designing projects, making schedules, monitoring students, testing and evaluating results. By implementing the PjBL model, students can gain real-world learning experiences by creating projects based on project-based learning steps. The success of implementing PjBL on creative thinking skills has been studied by Zakiah & Fajriadi. Furthermore, we show that PjBL is a learning method that has the potential to develop students' thinking skills. By delivering projects, students are encouraged to be creative, from product planning to product creation (building knowledge, understanding and skills, product development), to product presentation and evaluation. So that evaluation can be carried out objectively and comprehensively, not only based on the final results. Project-based learning words: more active student involvement in the learning process, student collaboration in forming groups for problem solving, and the preparation we do. Project-based learning is an innovative approach that focuses on situational learning through complex activities. Complex activities are based on challenging questions and tasks that require students to plan, solve, make decisions, and work independently (Maharani, S., Romandoni, 2024).

Project learning focuses on problem solving, which is the main goal of learning to provide more meaningful learning. Because when we learn, we not only understand what we learn but, we also learn to inform students about how learning benefits the environment. In addition, the benefits of the project-based learning approach include: (1) increasing student independence, (2) increasing responsibility for their own learning, (3) increasing problem-solving skills, and (4) expanding access to learning (Subakir, F., Mabruroh, 2023) .

## **E. Conclusion**

Based on the results of a literature review on the trend of interactive media-based PJBL models in elementary schools, the research data source is in the form of national journal articles . The results of the study showed that out of 20 articles obtained, those that were in accordance with the title topic. The purpose of the literature review was to identify what interactive media are applied by teachers in learning using the PJBL model in elementary schools. The interactive media used are Interactive Multimedia Oriented Guided Experiment, Interactive Multimedia Articulate Storyline 3, Wordwall Media, Digital Media, Audio Visual Media, Animated Video

Media, CapCut Application, Quizizz Media, Powtoon Media, Comic Media, Augmented Reality Media, Flash Card Media, Interactive PPT Media, Snakes and Ladders Media, 3-Dimensional Artwork Media, Canva Application Media, Animaker Video Media, Robot Education Box Media, Puzzle Media, and Instagram Media. From the interactive media above, it can improve learning outcomes, student creativity, thinking skills, and student learning motivation in elementary schools. The use of project-based learning (PjBL) learning models to empower students with greater creativity and problem-solving abilities when involved in projects. The impact of using learning media can foster students' interest in learning new things in the learning material delivered by the teacher so that it can be easily understood. Learning media that is interesting for students can be a stimulus for students in the learning process

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