

IMPROVING LEARNING OUTCOMES IN FRACTION MULTIPLICATION THROUGH PROBLEM-BASED LEARNING MODELS ASSISTED BY EDUTAINMENT MEDIA IN GRADE V

PENINGKATAN HASIL BELAJAR PERKALIAN PECAHAN MELALUI MODEL PROBLEM BASED LEARNING BERBANTUAN MEDIA EDUTAINMET DI KELAS V

Ayu Harlinda¹, Somakim², Fitri Widyastuti³

^{1,2} Universitas Sriwijaya, Sumatra Selatan, Indonesia

³ SD Negeri 55 Palembang, Sumatra Selatan, Indonesia

E-mail: ayuharlinda0@gmail.com¹, somakim@fkip.unsri.ac.id², fitriwidyastuti31@guru.sd.belajar.id³

Submitted

15 September 2025

Accepted

17 September 2025

Revised

5 Oktober 2025

Published

30 Oktober 2025

Kata Kunci:

Problem Based
Learning;
Media Edutainment;
Hasil Belajar;
Perkalian Pecahan

Keyword:

Problem Based
Learning;
Media Edutainment;
Learning Outcomes;
Fraction
Multiplication

Abstrak

Penelitian ini bertujuan untuk meningkatkan hasil belajar peserta didik pada materi perkalian pecahan melalui penerapan model Problem Based Learning berbantuan media edutainment di kelas V SD Negeri 55 Palembang. Penelitian ini merupakan Penelitian Tindakan Kelas (PTK) yang dilaksanakan dalam dua siklus menggunakan model tindakan Kemmis dan McTaggart, melalui tahapan perencanaan, pelaksanaan, observasi, dan refleksi. Subjek penelitian adalah 22 peserta didik kelas V. Teknik pengumpulan data menggunakan tes hasil belajar dan observasi aktivitas belajar, yang dianalisis secara kuantitatif dan kualitatif. Hasil penelitian menunjukkan Rata-rata nilai peserta didik meningkat dari 36,82 pada pretest menjadi 68,73 pada post-test siklus I, dan mencapai 76,45 pada post-test siklus II. Tingkat ketuntasan belajar juga meningkat dari 0% pada pretest menjadi 77% pada post-test siklus II. Aktivitas belajar peserta didik mengalami peningkatan dari kategori "Baik" menjadi "Sangat Baik". Peningkatan hasil belajar dan keaktifan ini menunjukkan bahwa kombinasi Problem Based Learning dengan media edutainment mampu menciptakan suasana belajar yang lebih interaktif, menyenangkan, serta mendorong peserta didik untuk lebih memahami materi perkalian pecahan secara lebih sistematis dan kontekstual.

Abstract

This study aims to improve students' learning outcomes in fraction multiplication material through the application of the Problem Based Learning model assisted by edutainment media in grade V of SD Negeri 55 Palembang. This study is a Classroom Action Research (CAR) which is carried out in two cycles using the Kemmis and McTaggart action model, through the stages of planning, implementation, observation, and reflection. The research subjects were 22 grade V students. Data collection techniques used learning outcome tests and observation of learning activities, which were analyzed quantitatively and qualitatively. The results showed that the average student score increased from 36.82 in the pretest to 68.73 in the post-test of cycle I, and reached 76.45 in the post-test of cycle II. The learning completeness level also increased from 0% in the pretest to 77% in the post-test of cycle II. Student learning activities increased from the category "Good" to "Very Good". This increase in learning outcomes and activeness shows that the combination of Problem Based Learning with edutainment media is able to create a more interactive and enjoyable learning atmosphere, and encourage students to better understand the material on fraction multiplication in a more systematic and contextual manner.

Citation :

Harlinda, Ayu, dkk. (2025). Improving Learning Outcomes in Fraction Multiplication Through Problem-Based Learning Models Assisted by Edutainment Media in Grade V. *Jurnal Kiprah Pendidikan*, 4 (4), 705-714. DOI : <https://doi.org/10.33578/kpd.v4i4.p705-714>

INTRODUCTION

Mathematics is one of the basic subjects that has an important role in developing students' logical, systematic, and critical thinking skills. At the primary school level, mathematics learning not only aims to introduce abstract concepts, but also to equip students with numerical skills that are applicable in everyday life (Kurniati et al., 2025). One of the materials taught in grade V is fraction multiplication, which is often a challenge for students. Difficulties arise because this material involves understanding the concept of fractions as well as complex calculation operations. This material is generally presented in the form of story problems, so students must understand the context of the problem first before doing the calculations. This process requires the ability to read, reason, and solve problems thoroughly (Agustini & Pujiastuti, 2020).

Preliminary observations in class V of SD Negeri 55 Palembang indicate that students continue to experience challenges in comprehending story problems and translating them into the appropriate mathematical operations. Preliminary assessments indicated that no students attained the Learning Objective Completion Criteria (KKTP). This finding suggests a prevalent lack of comprehension among students regarding the steps involved in solving fraction multiplication problems. A review of interviews conducted with classroom teachers indicates that conventional methods remain the norm. These methods primarily consist of lectures and practice questions. Teachers reported that despite the consistent application of these methods, many students continued to face challenges and exhibited a lack of engagement in the lessons. The challenges encountered by the students were not solely attributable to a rudimentary comprehension of the concept of fractions, but also to a paucity of motivation stemming from the monotony of the instructional methods employed. Muqtafia et al. (2022) posit that a salient reason for students' challenges in comprehending mathematics lies in the dearth of active, creative, and engaging learning models. This paucity of effective pedagogy engenders feelings of boredom among students, impeding their comprehensive understanding of the subject matter.

The Problem-Based Learning (PBL) model is an alternative that can be applied to overcome these problems because PBL encourages students to learn through solving contextual problems that are close to their lives. PBL has been proven to build a deeper understanding of concepts (Indiyanti et al., 2023; Martiasari & Kelana, 2022) and train critical thinking skills (Ariyani & Prasetyo, 2021; Huda & Abduh, 2021; Utomo & Hardini, 2023). To make learning more interesting, PBL can be combined with edutainment media, which is learning media that combines elements of education and entertainment (Hamid, 2012).

According to Nur'Aini (2022), edutainment is an approach to make the educational process more enjoyable so that students can more easily capture the essence of learning without feeling like they are learning. Edutainment media such as animation, educational games, or interactive videos are able to create a pleasant learning atmosphere and are in accordance with the learning characteristics of elementary school children (Adventyana et al., 2023; Alfina et al., 2022; Einstein et al., 2022; Ruswan et al., 2024; R. K. Sari et al., 2021). This media can improve cognitive and affective abilities, facilitate independent and group learning, and provide many opportunities to be used anywhere and anytime (Ardani et al., 2024). In addition, edutainment media has proven effective in improving understanding of mathematical concepts (Laswadi et al., 2023) and learning outcomes (Harlinda et al., 2023).

While a substantial body of research has been dedicated to the study of PBL and edutainment as discrete entities, the integration of these two approaches in the pedagogy of fraction multiplication in elementary schools remains under-explored. This study offers a novel contribution by directly

combining PBL and edutainment media, which is expected to increase students' motivation, conceptual understanding, and learning outcomes.

Based on this background, this classroom action research (CAR) aims to improve the mathematics learning process, particularly in the subject of fraction multiplication, through the application of a PBL model assisted by edutainment media in fifth grade elementary school classrooms, which is expected to gradually improve student learning outcomes in each action cycle. The results of this study are also expected to provide practical solutions for teachers in overcoming difficulties in learning mathematics and to contribute to the development of more innovative, interactive, and enjoyable learning strategies.

METHOD

This study is a Classroom Action Research (CAR) that aims to improve students' mathematics learning outcomes through the application of the Problem-Based Learning model assisted by edutainment media on fraction multiplication material in grade V of SD Negeri 55 Palembang. The research used the Kemmis and McTaggart action model, which consists of four stages, namely: (1) planning, developing learning tools, instruments, and action plans according to the problems found; (2) implementation of actions, applying learning with the Problem-Based Learning model assisted by edutainment media; (3) observation, observing student engagement and collecting learning outcome data through tests and observation sheets; and (4) reflection, analyzing the results of the action to assess its success and design improvements for the next cycle. The stages of this research can be seen in Figure 1.

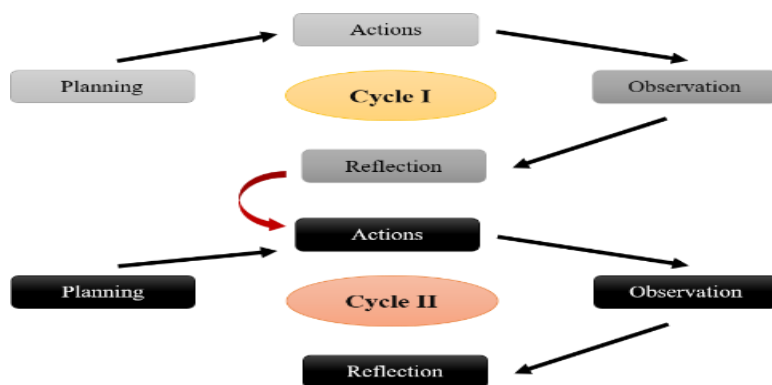


Figure 1. Kemmis & McTaggart's Classroom Action Research Model

The research subjects were 22 fifth-grade students at SD Negeri 55 Palembang in the even semester of the 2024/2025 academic year. The research was conducted in two cycles. The data collection techniques used in this study included tests and observations. Tests were used to measure the improvement in students' learning outcomes in understanding fraction multiplication. Observations were conducted to observe student engagement and the effectiveness of the learning model implementation.

Quantitative data was analyzed by calculating the percentage of learning completeness using the following formula:

$$\text{Percentage of learning completeness} = \frac{\Sigma \text{Learners who score above KKT}}{\Sigma \text{Learners}}$$

Students are declared complete if at least 70% reach the Criteria for Completeness of Learning

Objectives (KKTP). Meanwhile, qualitative data from observations were analyzed to provide an in-depth picture of the learning process and outcomes.

RESULTS AND DISCUSSION

Result

The research was conducted in two cycles to improve the mathematics learning process and enhance students' understanding and learning outcomes in fraction multiplication through the application of the Problem-Based Learning (PBL) model assisted by edutainment media in grade V of SD Negeri 55 Palembang. The research results are presented based on the pre-cycle, cycle I, and cycle II.

Pre-cycle

The pretest results showed that students' understanding of fraction multiplication was still low. The data is shown in Table 1.

Table 1. Student Learning Outcomes in the Pre-cycle

Stage	Average Value	Completeness (%)	Number of Completed Students
Pretest	36,82	0	0

Table 1 shows that the average score was only 36.82 with a mastery level of 0%. This condition indicates that students have difficulty understanding the concept of fraction multiplication. This may be due to the limited use of relevant media and the lack of learning strategies that actively involve students. Thus, the application of the media-assisted Problem Based Learning model is expected to be a solution to improve student understanding.

Cycle I

In cycle I, the research was conducted through the stages of planning, implementation, observation, and reflection in accordance with the Kemmis & McTaggart model. In the planning stage, the researcher developed a learning design using the Problem-Based Learning model assisted by edutainment media, prepared educational videos on fraction multiplication, educational games through maze games, and research instruments in the form of worksheets, tests, and activity observation sheets. The implementation stage was carried out by applying the PBL syntax. Students were invited to understand the contextual problems presented, then watch the learning videos, and participate in educational games. After that, they worked in groups to discuss fraction multiplication story problems, followed by group maze games to reinforce understanding and build cooperation. Each group presented the results of their discussions, and the activity was closed with a joint reflection. The researcher acted as a facilitator who accompanied the discussion and as an observer in each activity. The results of the observation of student activities in cycle I can be seen in Table 2.

Table 2. Results of Student Activity Observations in Cycle I

Observed Aspects	Score
Paying attention to the teacher's explanations and media	3
Follow the instructions for using the media	4
Understanding the content of the story questions	2
Trying to solve fraction multiplication problems	3
Expressing an opinion	3
Active in group discussions	3
Working together with group members	3
Showing enthusiasm for learning	4
Expressing difficulties/successes	3
Participate in the evaluation	4
Total Score	32
Percentage (%)	80%
Category	Good

Based on Table 2, student learning activities were in the good category with a percentage of 80%. Students were quite enthusiastic about participating in edutainment-assisted learning, but not all of them were actively involved in group discussions, and some still had difficulty understanding the content of the story questions.

The improvement in student learning outcomes can be seen by comparing the pretest and post-test scores in cycle I, as presented in Table 3.

Table 3. Results of pretest and post-test scores for cycle I

Aspect	Pretest	Post-test	Improvement
Total value	810	1512	702
Average	36,82	68,73	31,91
Number of Completed Students	0	9	
Completeness (%)	0	41	

Based on Table 3, there was a significant increase in learning outcomes from an average of 36.82 on the pretest to 68.73 on the posttest, with an increase of 31.91 points. This shows that the application of PBL assisted by edutainment media had a positive impact on students' understanding of fraction multiplication compared to the pre-cycle.

Cycle II

In cycle II, a number of improvements were made to address the obstacles encountered in cycle I. Canva learning media continued to be used as an introduction to the material, but was combined with interactive quizzes through Educaplay to increase the number of story problems. Teachers also applied scaffolding strategies more intensively, for example by providing context-based examples from real life, such as regional specialties, and systematically demonstrating the steps to solve them. Students were also directly involved in explaining the solutions to problems in front of the class. In addition, the instructions for completing the exercises were clarified and the practice time was extended so that students had more room for exploration.

Table 4. Results of observations of student activity in cycle II

Observed Aspects	Score
Paying attention to the teacher's explanations and media	3
Follow the instructions for using the media	4
Understanding the content of the story questions	3
Trying to solve fraction multiplication problems	4
Expressing an opinion	4
Active in group discussions	4
Working together with group members	3
Showing enthusiasm for learning	4
Expressing difficulties/successes	4
Participate in the evaluation	4
Total Score	37
Percentage (%)	93%
Category	Very Good

Based on Table 4, student learning activities increased to 93% with a very good rating. Almost all students showed active involvement in group discussions, were more confident in expressing their opinions, and had a better understanding of the story questions compared to cycle I.

The improvement in student learning outcomes in cycle II can be seen in Table 5.

Table 5. Results of the post-test for cycle I and post-test for cycle II

Aspect	Post-test Siklus I	Post-test Siklus II	Improvement
Total value	1512	1628	116
Average	68,73	76,45	7,72
Number of Completed Students	9	17	
Completeness (%)	41	77	

Based on Table 5, there was an increase in the average learning outcomes of students from 68.73 in cycle I to 76.45 in cycle II, with a total increase of 39.63 points compared to the pretest. The level of learning completeness also increased significantly, from 41% in cycle I to 77% in cycle II.

Visually, the comparison of the average learning outcomes and mastery of students on the pretest, cycle I, and cycle II is shown in Figure 2.

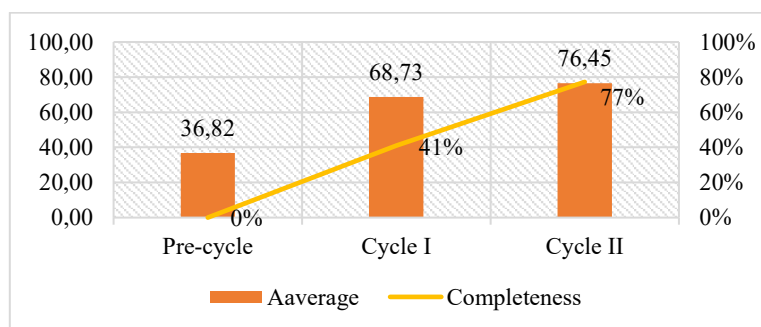


Figure 2. Graph Comparing Student Learning Outcomes

Based on Figure 2, it appears that student learning outcomes improved in each cycle. This shows that improving learning strategies through question variation, intensive guidance, and strengthening effective discussions helped students understand the concept of fraction multiplication.

Discussion

The results of the study indicate an increase in student learning outcomes and activities after the implementation of the Problem-Based Learning (PBL) model assisted by edutainment media. In general, the average score of students increased from 36.82 in the pre-cycle to 68.73 in cycle I, and increased again to 76.45 in cycle II. The learning completeness rate, which was 0% in the pre-cycle, rose to 41% in cycle I and reached 77% in cycle II. Meanwhile, learning activities also increased from 80% in the good category in cycle I to 93% in the very good category in cycle II. These findings confirm that the integration of the PBL model and edutainment media can make a real contribution to increasing student engagement and learning achievement.

However, the learning outcomes achieved in cycle I were not fully in line with the research targets because there were still students who had not completed the course. Reflection at this stage confirms the need to improve strategies, especially in providing intensive guidance when students discuss, clarifying instructions on the use of media, and providing more story problems so that students become accustomed to identifying important information and formulating the correct steps to solve problems. These obstacles are in line with Fahrozy (2023) opinion, which states that errors in understanding math story problems are often caused by language barriers, such as the inability to read questions correctly, understand the meaning of the story, and retell it in one's own words. Therefore, teachers need to revise their actions in cycle II by emphasizing understanding of story problems through varied exercises, strengthening group discussions, and providing more intensive guidance in the use of learning media.

The improvement of the strategy in cycle II proved to be effective. The learning activities of the students increased to 93% with a very good category. Almost all students showed active involvement in group discussions, were more courageous in expressing their opinions, and had a better understanding of the content of the story compared to cycle I. This shows that the use of edutainment media contributes to creating a more enjoyable learning atmosphere while encouraging active student involvement. These findings are in line with the opinion of Nurcahya and Rakhmayanti (2023), who stated that learning that integrates the concept of learning while playing can increase students' interest in participating in learning, thereby improving their mathematical problem-solving skills. Similarly, Sari dan Ahmad (2022) emphasized that learning with educational games can make the learning process more enjoyable and effective in increasing learning motivation.

The improvement in learning outcomes obtained in cycle II shows an improvement in students' understanding of fraction multiplication concepts. The increase in the average score from 36.82 in the pre-cycle to 76.45 in cycle II (39.63 points) and the increase in mastery from 0% to 77% indicate the success of the intervention. This improvement was not only quantitative but also qualitative, as students were better able to understand the steps to solve story problems systematically. This confirms that the combination of PBL and edutainment has a positive effect on the mastery of abstract concepts through a contextual, interactive, and enjoyable approach.

These research findings are also supported by previous studies which state that Problem Based Learning can increase learning motivation and mathematics learning outcomes (Nurmawati, 2024), as well as students' critical thinking skills (Aritonang et al., 2024). The use of edutainment media has been proven to improve learning outcomes (Harlinda et al., 2023) and understanding of mathematical concepts (Laswadi et al., 2023). Interactive and contextual learning approaches are also considered to help students better understand abstract concepts (Kurniati et al., 2024). This is further reinforced by Dewi and Sintaro (2019) and Rahmadhani and Hidayati (2020), who emphasize that educational games can improve problem-solving skills through the development of more organized thinking

strategies. Thus, it can be concluded that the application of PBL assisted by edutainment media successfully achieved the research objectives, namely improving the learning process, increasing concept understanding, and improving student learning outcomes in fraction multiplication material. This study also contributes to the development of more innovative, interactive, and enjoyable learning strategies and can be a practical reference for teachers in implementing mathematics learning in elementary schools.

CONCLUSION AND RECOMMENDATION

The classroom action research conducted in two cycles showed that the application of the Problem-Based Learning model assisted by edutainment media was effective in improving student learning outcomes and activities in fraction multiplication material in grade V of SD Negeri 55 Palembang. The average score of students increased from 36.82 on the pretest to 68.73 on the post-test in cycle I, and 76.45 on the post-test in cycle II. The level of learning completeness also increased from 0% to 77%, while student activity increased from the “Good” category to “Very Good.” These findings indicate that the combination of PBL with edutainment media can create more interactive and enjoyable learning, as well as motivate students to understand mathematical concepts in a more contextual way.

However, this study has limitations because it was only conducted in one class with a limited number of subjects, and depended on the availability of school facilities and teachers' skills in managing edutainment media. Reflection on these limitations opens up opportunities for further research with a broader scope, longer intervention duration, and the use of a variety of edutainment media. Future research development prospects can also be directed at examining the impact of applying this model on students' critical thinking skills, creativity, and learning attitudes, so that the research results can make a more comprehensive contribution to innovation in mathematics learning in elementary schools.

BIBLIOGRAPHY

- Adventyana, B. D., Salsabila, H., Sati, L., Galand, P. B. J., & Istiqomah, Y. Y. (2023). Media Pembelajaran Digital sebagai Implementasi Pembelajaran Inovatif untuk Sekolah Dasar. *Jurnal Pendidikan Dan Konseling (JPDK)*, 5(1), 3951–3955. <https://doi.org/10.31004/JPDK.V5I1.11640>
- Agustini, D., & Pujiastuti, H. (2020). Analisis Kesulitan Siswa Berdasarkan Kemampuan Pemahaman Matematis dalam Menyelesaikan Soal Cerita Pada Materi SPLDV. *Media Pendidikan Matematika*, 8(1), 18–27. <https://doi.org/10.33394/MPM.V8I1.2568>
- Alfina, Irmadurisa, A., Zannah, A. R., Ivansyah, A. R., Istiningsih, S., & Widodo, A. (2022). Pentingnya Penggunaan Media Animasi dalam Meningkatkan Kemampuan Belajar Matematika Siswa Sekolah Dasar. *Madako Elementary School*, 1(2), 78–87. <https://doi.org/10.56630/MES.V1I2.49>
- Ardani, R. A., Suwarno, M., Rezky, R., & Utari, T. (2024). Game-based Edutainment Media: How Practical is it As A Medium for Learning Mathematics? *AIP Conference Proceedings*, 3046(1). <https://doi.org/10.1063/5.0194544/3265956>
- Aritonang, P. S. F. Br., Amelia, R., Afianto, R., Amalia, S., & Fitrianna, A. Y. (2024). Penerapan Problem Based Learning (PBL) dalam Meningkatkan Kemampuan Berpikir Kritis Siswa di Sekolah. *Jurnal Profesi Pendidikan*, 3(2), 93–104. <https://doi.org/10.22460/JPP.V3I2.25716>

- Ariyani, O. W., & Prasetyo, T. (2021). Efektivitas Model Pembelajaran Problem Based Learning dan Problem Solving terhadap Kemampuan Berpikir Kritis Siswa Sekolah Dasar. *Jurnal Basicedu*, 5(3), 1149–1160. <https://doi.org/10.31004/BASICEDU.V5I3.892>
- Dewi, P. S., & Sintaro, S. (2019). Mathematics Edutainment dalam Bentuk Aplikasi Android. *Triple S (Journals of Mathematics Education)*, 2(1), 1–11. <https://doi.org/10.35194/TS.V2I1.651>
- Enstein, J., Bulu, V. R., & Nahak, R. L. (2022). Pengembangan Media Pembelajaran Game Edukasi Bilangan Pangkat dan Akar menggunakan Genially. *JURNAL JENDELA PENDIDIKAN*, 2(01), 101–109. <https://doi.org/10.57008/JJP.V2I01.150>
- Fahrozy, F. P. N. (2023). Pemahaman Membaca Dan Siswa Kesulitan Memahami Soal Cerita Matematika di Sekolah Dasar. *Jurnal Elementaria Edukasia*, 6(2), 430–441. <https://doi.org/10.31949/JEE.V6I2.5296>
- Hamid, Moh. S. (2012). *Metode edutainment* (6th ed.). DIVA Press.
- Harlinda, A., Nurani, D. C., & Safitri, M. O. L. (2023). Media Edutainment sebagai Solusi Permasalahan Hasil Belajar Matematika Siswa Sekolah Dasar. *Dawuh Guru: Jurnal Pendidikan MI/SD*, 3(2), 123–132. <https://doi.org/10.35878/GURU.V3I2.739>
- Huda, A. I. N., & Abduh, M. (2021). Peningkatan Keterampilan Berpikir Kritis Siswa melalui Model Problem Based Learning pada Siswa Sekolah Dasar. *Jurnal Basicedu*, 5(3), 1547–1554. <https://doi.org/10.31004/BASICEDU.V5I3.973>
- Indiyanti, C. E., Ardianti, S. D., & Masfuah, S. (2023). Impelmentasi Model Problem Based Learning Berbasis Edutainment untuk meningkatkan pemahaman konsep siswa SD. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 8(2), 134–143. <https://doi.org/10.23969/JP.V8I2.9690>
- Kurniati, R., Dahlan, T., Madubun, F. M., Afifa, R. N., Dahoklory, F. M., Dahliani, S., Bayu, E. P. S., Putra, Y., Mutmainna, D., Yuasriati, Ainun, N., & Lubis, H. (2025). *Pendidikan Matematika* (Fatimah, Ed.). Yayasan Tri Edukasi Ilmiah. https://books.google.co.id/books?hl=id&lr=&id=rB1SEQAAQBAJ&oi=fnd&pg=PP1&dq=pe mbelajaran+matematika+tidak+hanya+bertujuan+untuk+mengenalkan+konsep-konsep+abstrak,+tetapi+juga+untuk+membekali+siswa+dengan+keterampilan+numerik&ots=FzlanFTriz&sig=uh3EHBcMf61cyRtgDNH314uApvc&redir_esc=y#v=onepage&q&f=false
- Kurniati, R., Lestari, L., Sugiarto, S., Alam, A., Inuhan, M., Sony, E., Kamaruddin, S. F., & Suherman, D. R. (2024). Pemanfaatan Sampah sebagai Media Pembelajaran di Pulau Kecil Perbatasan. *Jurnal Masyarakat Madani Indonesia*, 3(3), 229–237. <https://doi.org/10.59025/JS.V3I3.229>
- Laswadi, L., Handican, R., & Nasution, E. Y. P. (2023). Instructional Edutainment Media “Number Game” Based on Mobile Technology to Improve Mathematical Conceptual Understanding. *Jurnal Edutech Undiksha*, 11(1), 119–127. <https://doi.org/10.23887/JEU.V11I1.53913>
- Martiasari, A., & Kelana, J. B. (2022). Peningkatan Pemahaman Konsep Matematika Menggunakan Model Pembelajaran Problem Based Learning Berbantuan Media Manipulatif Untuk Siswa Sekolah Dasar. *Jurnal Profesi Pendidikan*, 1(1), 1–10. <https://doi.org/10.22460/JPP.V1I1.10356>
- Muqtafia, A. C., Kurniawati, A. I., Amanda, F. M., & Setiawaty, R. (2022). Analisis Kesulitan Belajar Matematika dan Cara Mengatasinya Pada Siswa Sekolah Dasar : Tinjauan Literature Review. *Seminar Nasional LPPM UMMAT*, 1(0), 296–309. <http://journal.ummat.ac.id/index.php/semnaslppm/article/view/9660>
- Nur'Aini, I. (2022). Penerapan Edutainment dalam Pembelajaran Ilmu Pengetahuan Sosial. *Jurnal Tawadhu*, 6(1), 22–35. <https://doi.org/10.52802/TWD.V6I1.252>
- Nurchaya, M. A., & Rakhmayanti, F. (2023). Pembelajaran Matematika Berbasis Math Edutainment dalam Meningkatkan Kemampuan Pemecahan Masalah Matematis bagi Peserta Didik Kelas V di SDN Cicalengka 08. *Primary : Jurnal Keilmuan Dan Kependidikan Dasar*, 15(2), 182–194. <https://doi.org/10.32678/PRIMARY.V15I2.9449>
- Nurmawati, E. (2024). Meningkatkan Motivasi dan Hasil Belajar Matematika Peserta Didik Kelas VII Melalui Penerapan Model Pembelajaran Problem Based Learning. *Jurnal Profesi Pendidikan*, 3(1), 1–11. <https://doi.org/10.22460/JPP.V3I1.22524>

- Rahmadhani, R., & Hidayati, A. (2020). Pengembangan Multimedia Pembelajaran Berbasis Edutainment pada mata Pelajaran IPS Terpadu Kelas VII SMP/Sederajat. *Inovtech*, 2(01). <https://doi.org/10.24036/INOVTECH.V2I01.104>
- Ruswan, A., Rosmana, P. S., Fazrin, D. N., Maulidawanti, D., Nurlaela, I., Pebriyanti, P., Febriyanti, R., & Amelia, S. (2024). Penerapan Video Animasi Sebagai Media Pembelajaran Interaktif Untuk Siswa Sekolah Dasar (Studi Literatur). *Innovative: Journal Of Social Science Research*, 4(1), 1468–1476. <https://doi.org/10.31004/INNOVATIVE.V4I1.8021>
- Sari, R. K., Mudjiran, Fitria, Y., & Irsyad. (2021). Meningkatkan Motivasi dan Hasil Belajar Siswa dalam Pembelajaran Tematik Berbantuan Permainan Edukatif di Sekolah Dasar. *Jurnal Basicedu*, 5(6), 5593–5600. <https://doi.org/10.31004/BASICEDU.V5I6.1735>
- Sari, R. N. K., & Ahmad, H. A. (2022). Game Based Learning: Media Edutainment Matematika untuk Pembelajaran Mandiri bagi Siswa Sekolah Dasar. *SENADA (Seminar Nasional Manajemen, Desain Dan Aplikasi Bisnis Teknologi)*, 5(2), 99–106. <https://doi.org/10.26486/JM.V2I2.369>.

- Utomo, I. S., & Hardini, A. T. A. (2023). Penerapan Model Pembelajaran Problem Based Learning untuk Meningkatkan Hasil Belajar dan Kemampuan Berpikir Kritis Matematika pada Siswa Kelas IV Sekolah Dasar. *JlIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(12), 9978–9985. <https://doi.org/10.54371/JIIP.V6I12.2495>