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The Effectiveness of Educaplay Interactive Media on Mathematics Learning Outcomes of First Grade Students

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ABSTRACT

This study aims to analyze the effectiveness of Educaplay interactive media on the Mathematics learning outcomes of first-grade students at SDN Karanganyar 1. The background of this study is the low understanding of students' mathematical concepts due to conventional learning that is less interesting and has not been integrated with technology. The research method used is a quantitative approach with a pre-experimental one group pretest-posttest design. The research subjects were 27 students who were given a pretest to measure initial abilities, then received treatment in the form of learning using Educaplay media, and then a posttest to measure improvements in learning outcomes. Data were collected through observation, testing, and documentation, then analyzed using a normality test and a paired sample t-test with a significance level of 0.05. The results showed an increase in the average score from 73.9 in the pretest to 82.9 in the posttest. The paired sample t-test produced a Sig. Value (2-tailed) of 0.000 < 0.05 indicating a significant difference between the scores before and after treatment. Thus, Educaplay interactive media has been proven effective in improving students' learning outcomes in mathematical arithmetic operations and is able to encourage active involvement and students' learning motivation.

1. Introduction

Mathematics learning in lower grades, particularly first grade in elementary school, faces unique challenges due to the characteristics of students who are still in the concrete operational stage. At this age, students require concrete, enjoyable, and meaningful learning experiences that involve direct interaction with learning objects to understand basic mathematical concepts such as number recognition, addition, and subtraction. However, in practice, mathematics learning in first grade often remains conventional and teacher-centered, dominated by lecture methods

and written exercises with limited use of learning media. This condition makes students less actively involved in the learning process, easily lose interest, and ultimately results in low mathematics learning outcomes. (Ani Daniyati dkk., 2023)

The rapid development of information and communication technology provides new opportunities to create more innovative and interactive learning environments that are suitable for the characteristics of young learners. Digital-based interactive learning media can present learning content in a more attractive and engaging way, allowing students to learn through play while still achieving learning objectives. One platform that can be utilized is Educaplay, a web-based interactive learning medium that offers various types of activities such as quizzes, puzzles, educational games, and interactive simulations that can be adjusted to the learning needs of first-grade students (Qonita Mujahidah & Elvi Mailani, 2025). The use of Educaplay enables mathematics learning to be more enjoyable and student-centered.

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Educaplay supports a learning-by-play approach that encourages students to actively participate in the learning process. Through interactive activities and immediate feedback, students can practice mathematical skills repeatedly without feeling bored or pressured. This learning experience can increase students' motivation, attention, and enthusiasm for learning mathematics, which are important factors in improving learning outcomes (Purwaningsih, 2023). Interactive media such as Educaplay also helps make abstract mathematical concepts more concrete and easier for students to understand.

Several studies have shown that interactive learning media can positively influence student learning outcomes by creating a fun learning atmosphere, increasing student engagement, and encouraging active participation during the learning process (Widiyati et al., 2025). The use of interactive media also helps students better understand learning materials through visual and game-based activities that are suitable for their developmental characteristics. However, research that specifically examines the effectiveness of Educaplay interactive media on mathematics learning outcomes of first-grade elementary school students is still limited, particularly in the context of early-grade mathematics learning. Therefore, further research is needed to analyze the effectiveness of Educaplay in improving first-grade students' mathematics learning outcomes and to provide practical references for teachers in selecting appropriate and effective learning media for lower-grade mathematics instruction.

2. Methodology

This study uses a quantitative approach with a pre-experimental design of one group pretest-posttest design. In this design, the experimental class was given a pretest to determine the initial abilities of students, then given treatment in the form of learning using Educaplay interactive media, and then a posttest was conducted to determine the improvement in learning outcomes after the treatment. The study was conducted at Karanganyar 1 Public Elementary School in September-October 2025 with research subjects of 27 first-grade students. The sampling technique used total sampling so that all members of the population became research samples. Data collection was carried out through observation, tests (pretest and posttest), and documentation to obtain information regarding the learning process and student learning outcomes. (Waruwu dkk., 2025)

Data were collected using instruments in the form of teacher observation sheets, student observation sheets, learning outcome test sheets, and documentation sheets. The learning outcome test consisted of 25 multiple-choice, short answer, and descriptive questions with reference to learning achievement indicators. The data obtained were then analyzed using prerequisite tests and statistical tests. Validity and reliability tests were carried out to ensure quality instruments, while normality tests were used to ensure data distribution. Based on the relationship between populations, according to (Fristayana & Kaltsum, t.t.) the t-test, it is divided into independent sample t-test and dependent sample t-test. The type of test used in this study is the dependent sample t-test, which is often referred to as the paired sample t-test. The paired sample t-test is used to compare two means from the same group at two different times, for example, before and after treatment (pre-test and post-test). Furthermore, the effectiveness of the implementation of Educaplay interactive media was analyzed using a paired sample t-test with a significance level of 0.05 to determine the difference in learning outcomes between the pretest and posttest. Decisions were obtained based on the Sig. value. (2-tailed): if < 0.05 then there is a significant increase in learning outcomes after using Educaplay interactive media.

3. Results and Discussion

This research was conducted in the first grade of SDN 1 Karanganyar Elementary School with a total of 27 students consisting of 19 female students (70.4%) and 8 male students (29.6%). This unbalanced gender composition is a natural condition of the class and no special selection was carried out because the research used a total sampling technique. The age range of students ranges from 6-7 years, which is at the concrete operational cognitive development stage according to Piaget's theory, where students need concrete and enjoyable learning experiences to understand abstract concepts such as mathematics. In general, the first grade students of SDN 1 Karanganyar have heterogeneous characteristics in terms of academic ability, with some students showing high enthusiasm for learning, while others still need intensive guidance in understanding basic mathematical concepts. The socio-economic conditions of the students' families are mostly from the lower

middle class, with parental education levels varying from elementary school graduates to college graduates, which also influences learning support.

Mathematics learning in grade I of SDN 1 Karanganyar still uses conventional methods dominated by lectures and practice questions through textbooks and student worksheets (LKS), with learning media limited to the blackboard, textbooks, and sometimes simple concrete media such as pictures or objects around the classroom, even though the school has projector facilities and a multimedia room that is capable but has not been utilized optimally. The monotonous learning method and lack of media variation cause some students to feel bored and less enthusiastic, which is reflected in initial observations that show only about 40% of students actively ask or respond to teacher questions, while other students tend to be passive and only follow instructions without showing a deep understanding of the material being taught. This study uses a quantitative approach with a pre-experimental design type *one group pretest-posttest design* at home. The research procedure includes giving a pretest to determine initial abilities, treatment in the form of learning using *interactive media educaplay* for six meetings, and a *posttest* to see improvements in learning outcomes. The research sample used a total sampling technique where all class students were made research subjects, with data collected through observation, tests (*pretest* and *posttest*), and documentation using instruments in the form of teacher and student observation sheets, learning outcome test sheets consisting of 25 validated multiple-choice questions, and documentation sheets in the form of photos and videos of learning activities (Figure 1).



Figure 1. Learning Activities with *Educaplay Interactive Media*

The pretest and posttest results were used to measure the effectiveness of *Educaplay's* interactive media on improving the learning outcomes of the participants. The range of scores for first-grade students is as in Figure 2.

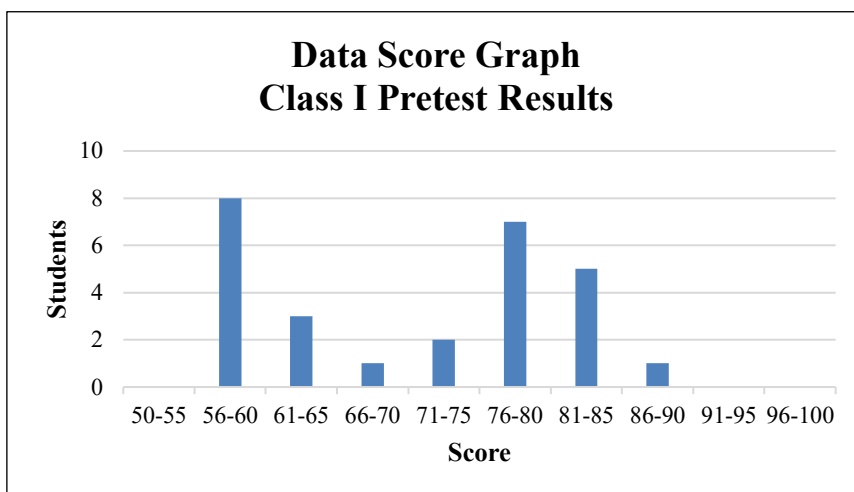


Figure 2. Graph of Class I Pretest Results Data

Preliminary-Final Data Analysis

a. Normality Test

According to (Sari dkk., t.t.), the normality test is carried out to ensure that the data used in statistical analysis meets the basic assumptions of normal distribution, so that the results of the analysis can be interpreted validly.

Table 2. Normality Test Results

Normality Test						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistics	df	Signat ure.	Statistics	df	Signat ure.
Pre-exam	.180	27	.024	.925	27	.052
Post-test	.191	27	.013	.934	27	.086

a. Lilliefors Significance Correction

Based on data using the *Shapiro-Wilk technique* with a sig value > 0.05, it can be concluded that both data are normally distributed.

b. Description of Posttest Value Data

Based on the research data as shown in Figure 4, there was an increase in students' abilities after being given treatment in the form of learning using the interactive media Educaplay. The average pre-test score of first-grade students at SD Negeri 1 Karanganyar was 73.9, while the average post-test score increased to 82.9. This shows that after being given the treatment, there was a significant increase in learning outcomes. Thus, it can be concluded that the application of interactive media Interactive Educaplay has a positive effect on improving the results of the Study of participants teaching Mathematics subjects on the material of arithmetic operations (Figure 3).



Figure 3. Distribution of *Posttest Sheets*

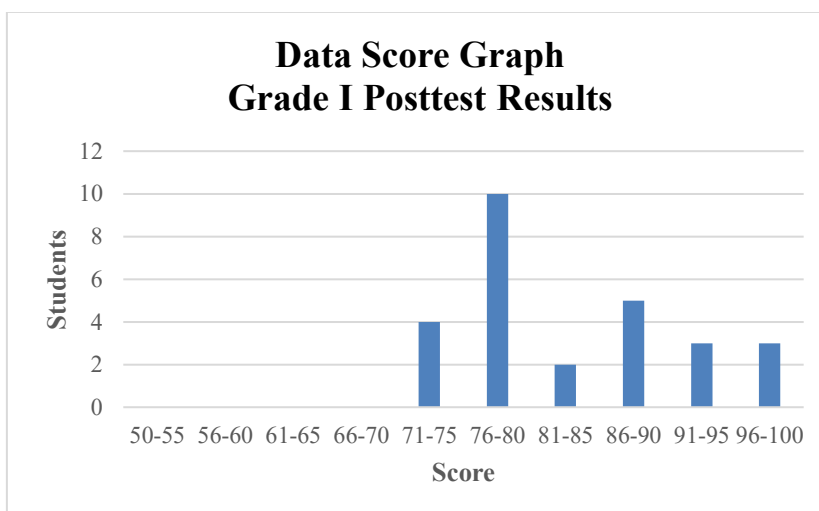


Figure 4. Graph of Grade I Posttest Results Data

c. Paired sample t-test

The Paired Samples t-test is a parametric statistical test used to determine the difference in mean between two paired data sets, namely data obtained from the same subject but under two different conditions or times . This test aims to determine whether there is a significant change after a particular treatment. In this study, Paired Sample t-test was used to compare the pretest and posttest results. on the same group of educational participants to determine the level of effectiveness of learning using interactive media Educaplay for Mathematics Study results. Data analysis was carried out using SPSS (Statistical Package for Social Sciences). The decision-making criteria in this test are as follows: if the significance value (Sig. 2-tailed) is <0.05 , then there is a significant difference between the pretest and posttest scores; conversely, if the significance value is >0.05 , then there is no significant difference between the two results.

Table 4. Paired Sample t-Test Results

Paired Sample Test		Paired Differences					T	df	Signa ture (2- tails)
		Mean s	Standard Deviation	Mean Standard Error	95% Confidence Interval of the Difference				
					Lower	Upper			
Couple 1	Pre-Test and Post-Test	- 12,98 7	10,192	2,224	- 17,62 6	- 8,348	- 5,8 39	2 0	.000

Based on the results of the sample t-test using SPSS, the average pre-test score was 64.06 and the average post-test score was 77.05. The analysis showed a t-value of -5.839 with a degree of freedom (df) of 20 and a significance level (Sig. 2-tailed) of 0.000, which is smaller than 0.05. This indicates a significant difference between the pre-test and post-test results. This means that there was a significant increase after the intervention, indicating that the program was quite effective in improving the learning outcomes of the study participants.

3.2 Discussion

Based on the analysis of processed data using the SPSS program, it can be concluded that the application of Educaplay interactive media has a significant influence on improving the learning outcomes of grade 1 students of SDN Karanganyar 1 in Mathematics. The analysis began with a research on instrument quality testing, including validity and reliability tests. The results of the validity test showed that all 25 questions were declared valid, with a calculated r value higher than the r table value at a significance level of 5%, which indicates that the test instrument is fit to measure student learning outcomes. In addition, the results of the reliability test showed a Cronbach's Alpha value of 0.852 which is included in the very high category, which indicates that all questions have good internal consistency and can be reliably used in learning.

Data normality was tested using the Shapiro–Wilk method. The significance values obtained were 0.052 for the pre-test data and 0.086 for the post-test data, both greater than 0.05. This indicates that student learning outcomes are normally distributed, allowing the use of parametric tests, particularly the t-test. The normal distribution indicates that the improvement in learning outcomes after the intervention was not caused by extreme values, but rather by consistent improvement across the majority of students.

Furthermore, the t-test results showed a significant difference between the pre-test and post-test scores. The average pre-test score of students was 64.06, while the average post-test score increased to 77.05, with a mean difference of 12.99 points. The calculated t-value was -5.839, with 20 degrees of freedom and a significance

level (Sig. 2-tailed) of 0.000, which is smaller than 0.05. This indicates that the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected, meaning there is a significant difference in learning outcomes before and after using Educaplay interactive media. In addition, the correlation value of 0.772 with a significance level of 0.000, indicates a strong and positive relationship between pre-test and post-test scores. Therefore, it can be concluded that the improvement in learning outcomes is a direct consequence of the use of the media. Educators prepare learning materials in advance, then create interactive games on the Educaplay platform. During the learning process, students are encouraged to actively participate in the games as part of the learning process. This media is also used as an evaluation tool to measure student understanding of the material (Alika et al., 2024).

Empirically, the study results show that Educaplay interactive media is effective in improving mathematics learning outcomes, especially in arithmetic operations. Students appear more enthusiastic, active, and engaged in the learning process. Features available in Educaplay, such as quizzes, memory challenges, and matching columns, help students learn while playing, thus strengthening their understanding of basic concepts in a fun way. These findings support the view (Sari, M., & Rosidah, A. (2023) that optimal learning outcomes are achieved when students are directly involved in a meaningful and interactive learning process.

The results of this study are also supported by previous research which stated (Aisyah Falah Agdiyah dkk., 2024) that the use of Educaplay can improve students' mathematical problem-solving abilities because it combines audio-visual elements with active interaction. (Sepriyanti dkk., 2024) Basic research (Rahmawati & Perdana, t.t.) shows that Educaplay can foster learning activities due to its flexible and easily accessible nature, while (Hanifah, 2024) adding that this medium creates a challenging learning environment and stimulates students to think critically. (Lestari dkk., 2020) We believe that developments in the millennial era require the world of education, especially teachers and students, to keep pace with ever-changing technological developments. Therefore, integrating learning tools with modern technology is necessary to ensure that students' learning experiences remain relevant to the needs and characteristics of their time.

Teachers need to use learning media that is easy for students to understand. Developing engaging educational media will help students stay focused and enthusiastic in their learning activities, and prevent boredom during the learning process (Adhiana dkk., 2022). Although various studies show that interactive media based on digital games can improve student motivation and learning outcomes, findings from a number of national journals indicate limitations in important things that need to be considered. (Risqi dkk., t.t.) It is stated that the effectiveness of digital games in honing students' numeracy skills is highly dependent on the quality of the interactive menu design; if the entertainment element is more dominant than the educational function, the potential for distraction can increase and even reduce the understanding of basic concepts. In addition, research by (I Dewa Ayu Nyoman Artanti dkk., 2023) *Undiksha Ejournal* shows that non-digital game media such as

board games based on Learning Based Phenomenon can be more effective in maintaining student focus and engagement, thus providing an alternative that learning media does not always have to be digital-based to achieve optimal results. In addition, (Novela dkk., 2024) Through Digital Press, GAES emphasized that the implementation of digital media in elementary schools often faces obstacles in terms of facilities, infrastructure, and teacher readiness. If these supporting factors are not met, the effectiveness of digital media can be reduced and have no significant impact on student learning processes and outcomes.

Based on the results of instrument analysis, normality test, and t-test using SPSS, it can be concluded that the interactive media educaplay is proven effective in improving mathematics learning outcomes of grade I students of SDN Karanganyar 1, indicated by high instrument validity and reliability, normal data distribution, and a significant increase in average scores from 64.06 to 77.05 after the intervention. Learning through the interactive features of Educaplay is able to make students more active, enthusiastic, and able to understand the concept of arithmetic operations in a more fun and meaningful way, in line with previous studies showing that Educaplay can increase motivation, problem solving, and conceptual understanding. However, several findings from national journals provide important notes that the effectiveness of digital media is not always absolute, because it can be influenced by game design, potential distractions, readiness of infrastructure, and the role of teachers in managing learning. Nevertheless, Educaplay is proven to provide a significant positive impact in this study, the success of its implementation still requires adequate equipment support, optimal teacher support, and the selection of appropriate media designs so that its benefits can be maximized in learning in elementary schools.

Thus, the results of this study answer the problem formulation that the interactive media Educaplay is effective for the learning outcomes of first-grade students of SDN Karanganyar 1 in Mathematics. The improvement in learning outcomes is not only indicated by an increase in the average test score, but also by changes in learning behavior to be more active, enthusiastic, and reflective. The use of Educaplay has proven to be a relevant learning innovation in the digital era because it is able to integrate aspects of technology, concept visualization, and active participation in a complete and meaningful learning process.

4. Conclusion

Based on the research results, the application of Educaplay interactive media has been proven to be effective in improving the learning outcomes of first-grade students of SDN Karanganyar 1 in Mathematics, as evidenced by the results of statistical tests using SPSS which show a significant difference between pretest and posttest scores with a significance value of $0.000 < 0.05$ and an increase in the average value from 64.06 to 77.05 after the use of the media; this effectiveness is also supported by the results of validity and reliability tests which show that the instrument is suitable for use and normality tests which show normal data distribution, so that the increase that occurs truly reflects the success of using

Educaplay in helping students understand the concept of number arithmetic operations in an active and fun way. In general, this study confirms that technology-based learning media such as Educaplay are able to create an interactive and learning atmosphere that suits the characteristics of elementary school students because it not only improves learning outcomes but also the motivation, participation, and self-confidence of students, so that it can be an alternative innovative media that supports an independent and appropriate curriculum that is recommended for teachers and students of educational institutions to improve the quality of learning in elementary schools.

Reference

- Adhiana, V. I., Yuniawatika, Y., Ahdhianto, E., & Wantoro, J. (2022). Interactive Media Development Using Articulate Storyline-Based Instructional Games for Teaching Fractions. *Profesi Pendidikan Dasar*, 9(1), 15–27. <https://doi.org/10.23917/ppd.v9i1.16927>
- Afifah, N., Kurniaman, O., & Noviana, E. (2022). Pengembangan Media Pembelajaran Interaktif Pada Pembelajaran Bahasa Indonesia Kelas Iii Sekolah Dasar. *Jurnal Kiprah Pendidikan*, 1(1), 33–42. <https://doi.org/10.33578/kpd.v1i1.24>
- Aisyah Falah Agdiyah, Syukriyah Mustopa, & Kowiyah Kowiyah. (2024). Pengaruh Media Interaktif Educaplay pada Pembelajaran Matematika di Kelas III SD. *Jurnal Arjuna : Publikasi Ilmu Pendidikan, Bahasa Dan Matematika*, 2(6), 385–390. <https://doi.org/10.61132/arjuna.v2i6.1367>
- Batitusta, F. O., & Hardinata, V. (2024). Pengaruh Implementasi Media Permainan Edukasi Educaplay Berbasis Gadget terhadap Hasil Belajar Menulis Esai (Vol. 7, Issue 3). <http://Jiip.stkipyapisdmpu.ac.id>
- Devita, S., Putri, J., Ayu, D., Putri, A., & Rini, N. O. (2025). Pengaruh Media Pembelajaran Interaktif Berbantuan Website Educaplay Terhadap Hasil Belajar Siswa Kelas IV SD (Vol. 4, Issue 1).
- Dhianti Putri, A., Sayyida Hilmia, R., Almaliyah, S., Permana, S., & Studi Bimbingan dan Konseling, P. (2023). Pengaplikasian Uji T Dalam Penelitian Eksperimen. 4(3). <https://doi.org/10.46306/lb.v4i3>
- Fristayana, L., & Kaltsum, H. U. (n.d.). *The Effectiveness of the Read Aloud Method assisted by the Let's Read Digital Application on Reading Comprehension Skills*.
- Hanifah, N. (2024). Upaya Meningkatkan Motivasi Belajar Siswa melalui Media Educaplay pada Mata Pelajaran IPS. *Indonesian Journal of Teaching and Learning (INTEL)*, 3(2), 100–107. <https://doi.org/10.56855/intel.v3i2.984>
- Hidayati, Y. M., Kusuma, A. A. S., Wibosono, M. E. W., & Safitri, S. I. (2023). Unlocking Math Skills: The Argeo Math App for Enhanced Mathematical Problem-Solving. *Profesi Pendidikan Dasar*, 82–97. <https://doi.org/10.23917/ppd.v10i2.2837>
- Hidayati, Y. M., Safitri, S. I., Arifin, A. J., Rahmawati, S. S., & Rusnilawati. (2024). Exploring Students' Responses: The Feasibility of Pizza Slice Math

-
- Learning Media. *Jurnal Pedagogi Dan Pembelajaran*, 7(3), 542–549. <https://doi.org/10.23887/jp2.v7i3.81952>
- I Dewa Ayu Nyoman Artanti, I. D. A. N. A., I Wayan Widiana, & Tegeh, I. M. (2023). Media Interactive Board Game Berbasis Fenomena Berbasis Pembelajaran Untuk Mengatasi Learning Loss Siswa Kelas IV Sekolah Dasar. *Jurnal Media Dan Teknologi Pendidikan*, 3(2), 94–101. <https://doi.org/10.23887/jmt.v3i2.57860>
- Hutabarat, I. P. (2024). Pengaruh Latihan Obstacle Run Terhadap Peningkatan Daya Tahan Kardiovaskular Atlet Depok Trail Running Academy. In *SportIndo Jurnal® (SIJ)* (Vol. 3).
- Lestari, I. P., Dewi, R. F. K., & Uliya, N. (2020). Pengembangan You-Mathbook Untuk Meningkatkan Pemahaman Konsep Perkalian Pada Siswa Sd Islam Darul Huda Kota Semarang. *Profesi Pendidikan Dasar*, 1(1), 105–120. <https://doi.org/10.23917/ppd.v1i1.10969>
- Novela, D., Ari Suriani, & Sahrun Nisa. (2024). Implementasi Pembelajaran Inovatif melalui Media Digital di Sekolah Dasar. *Journal of Practice Learning and Educational Development*, 4(2), 100–105. <https://doi.org/10.58737/jpled.v4i2.283>
- Novita Barokah, & Umi Mahmudah. (2025). Transformasi Pembelajaran Matematika SD Melalui Deep Learning: Strategi untuk Meningkatkan Motivasi dan Prestasi. *Bilangan : Jurnal Ilmiah Matematika, Kebumihan Dan Angkasa*, 3(3), 48–61. <https://doi.org/10.62383/bilangan.v3i3.521>
- Pendidikan, J., & Konseling, D. (n.d.). *Pengertian Pendidikan* (Vol. 4). [http://repo.iain-Penerimaan Diri Dan Sikap Percaya Diri Pada Anak Sekolah Dasar . Didaktik : Jurnal Ilmiah PGSD STKIP Subang, 10\(1\), 607 - 618. <https://doi.org/10.36989/didaktik.v10i1.2664>. \(n.d.\)](http://repo.iain-Penerimaan Diri Dan Sikap Percaya Diri Pada Anak Sekolah Dasar . Didaktik : Jurnal Ilmiah PGSD STKIP Subang, 10(1), 607 - 618. https://doi.org/10.36989/didaktik.v10i1.2664. (n.d.))
- Rachmawati, M., & Liza, F. (2024). *Arabic Speaking Skill Using the Educaplay “Froggy Jumps” Application*. 7(1). <https://doi.org/10.17509/alsuniat.v7i1.67521>
- Rahmawati, V., & Perdana, P. I. (n.d.). *Implementasi Media Pembelajaran Interaktif Game Educaplay untuk Meningkatkan Motivasi Belajar Siswa SD Negeri Polagan I*.
- Risqi, N. S., Harijanja, I., Fkip, P., & Jambi, U. (n.d.). *Stimulasi Penggunaan Media Game Digital Dalam Mengasah Kemampuan Berhitung Siswa Kelas I Sdn 38/Ix Jambi Kecil*.
- Safitri, W., Khayroiyah, S., Sandra Dewi, I., Harahap, Z., Profesi Guru, P., & Muslim Nusantara Al-Washliyah Medan, U. (n.d.). *Penerapan Media Interaktif Educaplay untuk Meningkatkan Hasil Belajar Siswa Kelas III UPT SD Negeri 060925 Medan Amplas*.
- Salsabila, A. (2020). Faktor-Faktor Yang Mempengaruhi Prestasi Belajar Siswa Sekolah Dasar. In *Jurnal Pendidikan dan Dakwah* (Vol. 2). <https://ejournal.stitpn.ac.id/index.php/pandawa>
- Sari, A. P., Hasanah, S., & Nursalman, M. (n.d.). *Uji Normalitas dan Homogenitas dalam Analisis Statistik*.
- Sari, M., & Rosidah, A. (2023). *Implementasi Model Pembelajaran Problem Based Learning (PBL) Terhadap Hasil Belajar IPS SD*. *Jurnal Ilmiah Pendidik Indonesia*, 2(1), 8-17. (n.d.).
-

- Sepriyanti, D., Supriatna, D., & Hartono, R. (2024). *Pengaruh Game Edukasi Educaplay untuk Meningkatkan Hasil Belajar Siswa Kelas 5 di SDN Neglasari 02* (Vol. 13, Issue 2). <http://ejournal.uika-bogor.ac.id/index.php/>
- Sugesti, I. (2025). *Peningkatan Hasil Belajar Melalui Pembelajaran Berdiferensiasi dengan Game Interaktif Educaplay pada Materi Pecahan Kelas II SDN Sunyaragi 1: Penelitian Tindakan Kelas*. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(02), 214-222.
- Sugiyono, D. *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif, dan R&D*. (n.d.).
- Sukmawati, A. S. (2024). *Metodologi Penelitian*. Media Sains Indonesia.
- Syarmadana, Aisyah, N., & A, R. (2024). Penerapan Media Educaplay Dalam Meningkatkan Minat Belajar Peserta Didik Pada Mata Pelajaran IPAS. *Jurnal Pendidikan Dasar Dan Keguruan*, 9(02), 51–56. <https://doi.org/10.47435/jpdk.v9i02.3201>
- Waruwu, M., Pu'At, SN, Utami, PR, Yanti, E., & Rusydiana, M. (2025). Quantitative Research Methods: Concepts, Types, Stages, and Advantages. *Scientific Journal of Educational Professions* , 10 (1), 917–932. <https://Doi.Org/10.29303/Jipp.V10i1.3057>
- Widiyati, AM, Anggraini, L., Istiqomaturrobiah, A., Utami, PP, Rosi, F., Hidayat, MN, Putra, DP, & Rahmawati, ID (2025). The Effect of Educaplay Interactive Media on Mathematics Learning Outcomes of Fifth Grade Students of SDN Lawangan Daya II. *Jagomipa: Journal of Mathematics and Science Education* , 5 (3), 1084–1093. <https://Doi.Org/10.53299/Jagomipa.V5i3.2110>
- Yogi Fernando, Popi Andriani, & Hidayani Syam. (2024). Pentingnya Motivasi Belajar Dalam Meningkatkan Hasil Belajar Siswa. *ALFIHRIS: Jurnal Inspirasi Pendidikan*, 2(3), 61–68. <https://doi.org/10.59246/alfihris.v2i3.843>

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