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The Effectiveness of Problem Based Learning assisted by Educaplay on Pancasila Education Learning Outcomes of Elementary School Students

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Abstract

Learning models that do not actively involve students in the learning process are one of the factors causing low learning outcomes. This research aims to test and analyze how effective the problem-based learning model, which utilizes Educaplay media, is on student learning outcomes. The method used by researchers is a quasi-experimental design with a nonequivalent control group. The subjects of this study were 85 fifth-grade students of Jatisari state elementary School, Semarang City, Indonesia i.e. 28 students of class VB as the experimental class, and 28 students of class VC as the control class. Learning outcomes data were obtained from test techniques and non-test techniques. Data analysis used SPSS 25, consisting of normality, homogeneity, t-test, and N-Gain tests. The results indicated that the significant value in the independent t-test was 0.000 < 0.05, so Ha was accepted and H0 was rejected. This data indicates a significant difference in the learning outcomes between the students in the experimental and control classes. N-Gain percent was 66% (moderately effective) in the experimental class and 39% (ineffective) in the control class. This study indicates that the application of the PBL model based on Educaplay media is effective in improving student learning outcomes.

Keywords: *educaplay, effectiveness, learning outcomes, PBL, pancasila education.*

Abstrak

Model pembelajaran yang kurang melibatkan siswa secara aktif dalam proses pembelajaran menjadi salah satu faktor penyebab rendahnya hasil belajar. Penelitian ini bertujuan untuk menguji dan menganalisis seberapa efektif model pembelajaran berbasis masalah yang memanfaatkan media Educaplay terhadap hasil belajar siswa. Metode yang digunakan peneliti adalah quasi eksperimen dengan desain nonequivalent control group design. Subjek penelitian ini adalah siswa kelas V SD Negeri Jatisari sebanyak 85 orang, yaitu kelas VB sebanyak 28 orang sebagai kelas eksperimen, dan kelas VC sebanyak 28 orang sebagai kelas kontrol. Data hasil belajar diperoleh dari teknik tes dan teknik non tes. Analisis data menggunakan SPSS 25 yang terdiri dari uji normalitas, homogenitas, uji t, dan uji N-Gain. Hasil penelitian menunjukkan bahwa nilai signifikansi pada uji t independen sebesar 0,000 < 0,05, sehingga Ha diterima dan H_0 ditolak. Data ini menunjukkan adanya perbedaan hasil belajar yang signifikan antara siswa kelas eksperimen dan kelas kontrol. Persentase N-Gain adalah 66% (cukup efektif) di kelas eksperimen dan 39% (tidak efektif) di kelas kontrol. Penelitian ini menunjukkan bahwa penerapan model PBL berbasis media Educaplay efektif dalam meningkatkan hasil belajar siswa.

Kata kunci: *educaplay, keefektivan, hasil belajar, PBL, pendidikan pancasila.*

INTRODUCTION

Education is a process of developing student behavior so that in the future they will become mature and independent (Anggraeny et al., 2023). In this century, education requires each individual to master technology in accordance with developments in the 21st century. Educators in the 21st century must have skills in education, including skills in creativity, critical thinking, collaboration and communication. The need for skills in the 21st century in the education sector must be able to produce various quality and competitive skills (Sholika & Fitrayati dalam Irawan & Mukhlis, 2023). Qualified human resources, acting according to prevailing morals, can be obtained through education. The educational solution to the subject of 21st-century Pancasila Education is the implementation of civics knowledge with student learning and practice in schools that are observed and assessed as a form of moral and behavioral evaluation of students (Santoso & Murod, 2021). The application of Pancasila education in elementary school is one of the alternatives for implementing the values of Pancasila in education by implementing learning (Putri et al., 2024). Pancasila education in elementary school is one of the important lessons to be implemented, because the Pancasila education material contains various rules that students can apply from basic to future life.

Education in this century uses an independent curriculum in the learning process. The independent curriculum is a process of improvement from the 2013 curriculum. The difference between the independent curriculum and the 2013 curriculum is the change in the name of the Civics subject to Pancasila Education. Educators have a role in teaching activities that must be able to implement the current curriculum, while the curriculum is a plan and a set of learning materials that will be implemented in learning activities with students (Yulianti et al., 2022). The teaching tools used by teachers vary and can be technology-based. The independent curriculum, teachers have the freedom to use a set for teaching activities to suit the needs of students (Hasibuan et al., 2023). Learning that is carried out is not far from the obstacles that arise from both internal and external obstacles, students have difficulty in learning, for example in the lack of student concentration in the material provided by

educators, already in conveying opinions and ideas that students have to others, difficulty in solving problems, and other obstacles (Sunarsih, 2020; Tusturi et al., 2017). Based on the results of an interview with a fifth grade teacher at Jatisari State Elementary School, one of the obstacles faced by students is that they find it difficult to understand the material because it is too broad and difficult for elementary school students. The obstacles that occur in the implementation of Pancasila education learning are that students are less active and their learning outcomes do not reach the predetermined minimum competency standard. Educators must be able to overcome various obstacles that occur in the learning process. Educators are accustomed to applying conventional models which result in students being inactive in learning because learning is dominated by educators. This indicates that students' curiosity is still low in the subject of Pancasila Education (Dewi et al., 2020). Learning in Pancasila Education teachers rarely use media to support teaching and learning activities (Nurgiansah, 2022). Previous research shows that the conventional lecture model is ineffective, this is because students are not involved in learning activities and only listen to explanations from educators (Aisah et al., 2022; Andiniati et al., 2023).

Student learning outcomes are still below the criteria for achieving learning objectives (KKTP) is the conclusion of the results of interviews conducted with the principal and fifth grade teacher of SD Negeri Jatisari which was held on November 19, 2024 and observations that have been made by researchers at SD Negeri Jatisari. Student learning outcomes in Pancasila Education are low because the learning models and media applied by educators are not interactive and do not vary. Educators do not use media to support learning, and the model used is only lecture. Students have difficulty in solving the problems faced in the Pancasila Education learning process.

Applying appropriate models and media to the needs of students can overcome these problems. The theoretical framework that is systematically arranged so that learning objectives are achieved and can be used as a guide for educators is called a learning model (Kadarwati & Malawi, 2017). The 21st century learning model follows the development of world globalization technology. 21st century learning models include PjBL, blended learning, PBL, discovery learning, picture and picture, example non example, and contextual teaching and learning (Sidiq et al., 2021). The problem-based learning model was used by researchers to solve the obstacles that exist in class V. The problem-based learning model is applied contextually, students are presented with real-life problems, and is expected to motivate students to learn (Dahlia, 2022). Problem-based learning model is a learning model that presents authentic and meaningful problems where students can deepen their knowledge through the stages of the scientific method. In addition, this learning model encourages students to solve real-world problems and find solutions (Parmini et al., 2024). Students are involved in solving problems in the application of this model with various scientific stages that make students learn material related to real-life problems (Oktavia et al., 2024). Students who have an environmentally conscious attitude have knowledge about the environment, have a responsible attitude and can provide solutions to environmental problems and students who are prepared as the next generation and as agents of change in society must be equipped with environmental education skills that are environmentally literate (Binasdevi et al., 2022).

Increased learning achievement occurs when applied with a problem-based learning model. It is shown in the improvement of student results in learning history (Sela, 2023).

Reinforced by other research which revealed that there was an increase in science learning outcomes for grade IV students (Andiniati et al., 2023). Problem-based learning encourages inquiry, critical thinking, knowledge seeking and self-directed learning where students can complete tasks independently, which increases motivation and creativity (Sáez López, 2023). Based on the explanation above, the researcher uses a problem-based learning model because this model combines learning material with problems that occur in the real environment so that it adds insight to students.

Not only does the learning model affect student outcomes, another influence can be from the application of media that is in accordance with 21st century developments and provides good facilities and according to the needs of students and technology-based. Digital learning makes students know the limits of knowledge in asking questions (Savin-Baden & Fraser, 2024). The use of digital can be applied to the learning media used. Choosing the right learning media can maximize the achievement of learning objectives (Nurul Audie, 2019). Technology-based media will facilitate the delivery of material to students. Technology facilitates the learning process from various sources with various digital-based educational innovations (Ambarwati et al., 2022). Educators must determine the media that suits the needs of each individual. Educators must be able to change conventional learning into efficient learning by utilizing technology (Ruslan et al., 2024).

Improved student learning outcomes occur with the help of technology-based learning models and media. The achievement of student capacity in the learning process is the definition of learning outcomes (Samaratungga et al., 2021). The teacher's alternative as a support for students in mastering the material is called a learning model (Mansir et al., 2021). Innovations that can be applied to the Pancasila Education learning process apply the Problem Based Learning model based on digital educational game media. The application of Problem-based learning based on educational game media has never been used by educators. Digital educational games are closely related to student activities to make them more interactive by utilizing technology in accordance with educational goals (Li et al., 2024). With this, learners are directly involved in problem solving by completing existing challenges. Existing educational game platforms can be Wordwall, Quizizz, Educaplay, and so on. Educaplay learning media is still rarely used, especially in learning Pancasila Education (Sukmawati & Pujiani, 2023). Educaplay can improve student learning outcomes using Educaplay which makes learning activities more interactive in activities carried out in learning in a fun and interesting way. Evidenced by the increase in learning outcomes of grade II students in the application of educaplay learning media (Tarigan et al., 2025). In addition, this platform can be used as a medium that can improve students' reading, writing, and comprehension skills (Ojeda & Ensisco, 2023). Another opinion revealed that there was an increase in math learning outcomes due to the influence of educplay-based interactive quizzes (Rahmayanti et al., 2024).

Many studies have revealed that there is an increase in learning outcomes by applying the problem based learning model. However, no researcher has conducted an investigation of the problem based learning model based on educaplay media. The novelty of this investigation lies in the application of the problem based learning model based on educaplay media, besides that another novelty is in the research subject and research location, namely this research was carried out on grade V students of Jatisari State Elementary School. The

focus of this research is to test and analyze the differences and effectiveness of learning outcomes by applying the problem-based learning model based on educaplay media compared to conventional models based on visual media.

METHODS

Researchers apply experimental research. The method is carried out with an experiment to understand the relationship between the independent factor and the dependent factor in a situation that can be directed (Sugiyono, 2019). Researchers use the quasi-exerimental design method. Research carried out due to an obstacle in determining the research class to control variables that can affect a treatment (Rukminingsih et al., 2020). While the design pattern used nonequivalent control group design. Research that applied pretest-posttest to the research group without random assignment (Rukminingsih et al., 2020). Illustration of the research design (Sugiyono, 2019). The experimental design used in this study is shown in Table 1.

Table 1. Nonequivalent Control Group Design

Group	Pretest	Treatment	Posttest
Experiment	O_1	X_1	O_2
Control	O_3	X_2	O_4

Noted:
O_1 : pre-test of experimental O_2 : post-test of experimental
O_3 : pre-test of control class O_4 : post-test control class
X : action

The data in Table 1 indicates that this research utilized a quasi-experimental design with a nonequivalent control group design. Problem-based learning based on educaplay media was applied to the experimental class and conventional model of lecture based on visual media was applied to the control class. 85 fifth grade students of SD Negeri Jatisari Semarang City became the subjects of this study.

The population consists of objects and subjects obtained from the generalization area with the level and character in a study to be understood and then a conclusion can be drawn (Rahim et al., 2021). Population is the whole element to be studied. Population does not only consist of quantity, but can consist of all the characteristics of the object or subject to be studied (Sugiyono, 2019). Nonprobability sampling is used by researchers as a research technique by determining the sample using purposive sampling, namely determining the sample due to definite judgment in a study (Sugiyono, 2019). 28 VB class students as the experimental class and 28 VC class students as the control class.

Test techniques and non-test techniques were chosen by researchers as data collectors for this investigation. The test technique uses instruments in the form of multiple choice questions to obtain data on student learning outcomes before treatment and after treatment. As well as observation research sheets, interview research sheets, and documentation are instruments used in non-tests.

Test the validity and reliability of the items, carried out with 30 multiple choice test items. A measurement to show the validity of an instrument in research is carried out with a validity test (Widodo et al., 2023). The question was tested on students in the trial class and

obtained 25 valid and reliable items from the results of the SPSS test that had been carried out.

Table 2. Validity Of Question Items

	Validity of Questions Items
Valid questions	1, 2, 3, 4, 5, 6, 8, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28
Invalid questions	7, 9, 14, 29, 30

Researchers applied descriptive techniques with SPSS version 25 as a data analysis technique. The normality test, homogeneity test, T test, and N-Gain as statistical analysis tests conducted by researchers.

RESULTS AND DISCUSSION

The research was carried out with four meetings in the experimental class and the control class. The application of the educaplay media-based problem-based learning model in the experimental class and the application of the conventional visual media-based lecture model in the control class. In the first meeting of the experimental class, the students were still unable to use the educaplay media because they had never used it and rarely operated computers. In the second meeting of the experimental class, the students had begun to understand how to use educaplay media. In the third and fourth meetings, the students were proficient and accustomed to using educaplay media. In the experimental class, they were grouped in the learning process by being given problems of varying difficulty. The problems and materials were presented on video so that the students could get an idea of solving the problems with a strategy determined together with their group partners. The researcher guides and directs students and explains anything that has not been understood. In the final stage of learning, representatives of the group present the results of their group work and a question and answer session and evaluation are carried out together, which will maximize students' understanding of the material. The results of the study were carried out using the SPSS 25 test.

Descriptive techniques used by researchers with the SPSS version 25 program. The description of the data on the results that have been obtained consists of data obtained in experimental classes with educaplay-based problem-based learning models and control classes using conventional learning models of lectures based on visual media by including pretest data obtained from the class before getting treatment and posttest. Descriptive analysis aims to describe the maximum, minimum value, average value, amount of data, and other data used in this study.

Table 3. Descriptive Analysis of Student Learning Results

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Experiment Pretest	28	36	44	80	64.00	9.428
Experiment Posttest	28	32	68	100	87.28	9.241
Control Pretest	28	40	40	80	56.35	12.485
Control Posttest	28	36	56	92	73.85	8.182
Valid N (listwise)	28					

The data in Table 3 shows that the experimental class has 28 valid samples, with a pretest score of 44 to the highest score of 80, with an average value of 64 and a standard deviation of 9,428, this shows that there is considerable fluctuation around the average value, but within reasonable limits. The experimental class posttest has increased with a minimum value of 68 and a maximum value of 100, an average value of 87,28 and a standard deviation of 9,241, so there is a variation in the data but within reasonable limits. The value obtained in the control class on the pretest is between 40 to the maximum value of 80, as well as the average value of 56.35 and the standard deviation is 12,485, meaning that there is a considerable variation in the data which shows that the data values are scattered. While the posttest results of the control class obtained a minimum value of 56 and a maximum value of 92, an average of 73,85 and the standard deviation is 8,182 indicating a moderate level of variation in the data.

Significant differences and effectiveness in terms of student learning outcomes by applying the problem-based learning model based on educaplay media, then the research hypothesis test was conducted. Prerequisite tests were carried out by researchers before hypothesis testing. The prerequisite tests carried out by researchers include normality test and homogeneity test. To obtain data with normal distribution or not, researchers conducted a normality test. Parametric statistics are used by researchers if the data obtained is normally distributed, whereas if the data is not normal, researchers use non-parametric statistics. Data on the pretest posttest learning outcomes of the two classes were assessed by the normality test with the SPSS version 25 program.

Table 4. Normality Test

Tests Of Normality							
		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Class	Statistic	Df	Sig.	Statistic	Df	Sig.
Learning Outcomes	Experiment Pretest	,129	28	,200*	,967	28	,513
	Experiment Posttest	,123	28	,200*	,942	28	,121
	Control Pretest	,152	28	,096	,929	28	,060
	Control Posttest	,118	28	,200*	,970	28	,574

Data Table 4. in the Kolmogorov-Smirnov column, the pretest value obtained a significant value of 0,200 in the experimental class and a significant 0,096 in the control class. The posttest value obtained a significant 0,200 experimental class and a significant 0,200 control class. The learning outcome data shows that the pretest and posttest values of both classes are normally distributed because the significant value > 0,05. The applicable hypothesis is H_0 accepted and H_a rejected. Parametric statistics are used based on the results of the hypothesis conclusion.

Both research groups are homogeneous or not carried out homogeneity test. The basis for choosing a decision on the homogeneity test is based on a significance value < 0,05 then H_0 is rejected and H_a is accepted which means the variance in each group is not homogeneous. If the significance value > 0.05 then H_a is rejected and H_0 is accepted which means the variance in each group is the same. This study examines the homogeneity of the pretest and posttest. The homogeneity test carried out with SPSS version 25 can be seen in the following table.

Table 5. Initial Data Homogeneity Test Result

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Learning Outcomes	Based on Mean	3,758	1	54	,058
	Based on Median	3,366	1	54	,072
	Based on Median and with adjusted df	3,366	1	51,102	,072
	Based on trimmed mean	3,615	1	54	,063

The significant value found in the Based on Mean column is 0,058. The significance value of 0,058 > 0.05, indicating that the learning outcomes data on the pretest scores are homogeneous. The conclusion of this study is that H_a is rejected and H_0 is accepted. Posttest data was studied by researchers to identify learning outcomes after getting treatment for 4 meetings homogeneous or not. The final data homogeneity test is shown in the following table.

Table 6. Final Data Homegeneity Test Result

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Learning Outcomes	Based on Mean	,548	1	54	,462
	Based on Median	,374	1	54	,543
	Based on Median and with adjusted df	,374	1	53,193	,543
	Based on trimmed mean	,455	1	54	,503

Table 6. shows that the posttest score data is homogeneous. This is evidenced by the significance value in the based on mean column 0.462, where the significance value is 0.462 > 0.05. It is concluded that H_a is rejected and H_0 is accepted. Based on the research data, the data has met the prerequisite test. After that, an independent sample t-test was carried out to examine the hypothesis test, which aims to determine whether there are significant differences in student learning outcomes and test different treatments in each class which were tested with SPSS version 25 shown in the following table.

Tabel 7. Independet T-Test Results

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
						Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	T	Df				Lower	Upper
Value	Equal variances assumed	,548	,462	5,757	4	,000	13,429	2,333	8,752	18,105
	Equal variances not assumed			5,757	53,219	,000	13,429	2,333	8,751	18,107

The sig value. (2-tailed) < 0.05 then H_a is accepted and H_0 is rejected, meaning that there is a significant difference and vice versa, this is used as a basis for decision making. The data in table 7. shows the equal variances assumed column sig value (2-tailed) of 0,000 < 0,05. Then H_a is accepted and H_0 is rejected. This shows that there is a significant difference in learning outcomes between the two classes. This is also evidenced by the average value of the experimental class posttest results of 87,28 and the control class of only 73,85.

The next data analysis carried out by researchers is the Normalized test carried out by researchers with the aim of knowing the effectiveness of a significant increase in the average learning outcomes of students before and after being given treatment and then divided by the ideal maximum score and minus the pretest value. The difference between the values obtained in the data is used to assess the normalized gain. The interpretation of the N-gain score is if the value of g > 0,7 is a high category, 0,3 ≤ g ≤ 0,7 is a medium category, and g < 0,3 is a low category it is based on decision making on the N-Gain score. Decision making based on N-Gain percent is a value < 40% in the ineffective category, 40% - 55% in the less effective category, while 56% - 75% in the moderately effective category, and results > 76% in the effective category.

Table 8. N-Gain Results of Student Learning Outcomes

Class	Mean	N-Gain Score	Interpretation	N-Gain Persen	Category
Experiment Pre-Test	64	0,6633	Medium	66%	Simply Effective
Experiment Post-Test	87,28				
Control Pre-Test	56,35	0,3913	Medium	39%	Not Effective
Control Post-Test	73,85				

Table 8. shows that the experiment pretest average is 64, the posttest average is 87,28. The control class pretest average was 56,35 and posttest was 73,85. Based on these two data, the N- Gain score is 0.6633 in the experimental class and 0,3913 in the control class which means that both are included in the moderate category which is seen from the value of 0,3 ≤ g ≤ 0,7. N-Gain percent 66% obtained by the experimental class is quite effective category and 39% of the control class is ineffective category. Observations on student learning outcomes prove the application of problem-based learning models based on educaplay media is more effective than conventional models of lectures based on visual media.

This study examines the effectiveness and analyzes and describes significant differences in terms of learning outcomes of students of Pancasila Education in the subject Norms in My Life in grade V by applying the educapay media-based problem-based learning model compared to the conventional visual media-based lecture model. The problem-based learning model that is implemented makes students think more than memorize. The learning is carried out through group discussions with group members to make decisions related to the problem-solving strategy that will be used. This model encourages students to be active and think critically because it involves students in the learning process from start to finish. The implementation that students can apply in their daily lives is problem solving in real life where they can work together and live independently (Khakim et al., 2022). Inactive involvement of students in the learning process is the main obstacle to the research subject,

which means that students' learning outcomes do not meet the standards. The subjects of this study were fifth grade students at Jatisari State Elementary School. Learning outcome data was collected using test and non-test techniques. The tests were carried out with pretest and posttest results, and the non-test techniques were carried out with interviews and observations.

The experimental class learning was carried out using the problem-based learning model with the help of educaplay media. Educaplay media makes students active in the learning process so that the material delivered to students can be accepted and understood by students in a fun way. The problem-based learning model is implemented by presenting real problems that occur in the surrounding environment. This learning model has characteristics where students become the center of learning and collaboration which makes students think more critically and improve their thinking abilities (Sáez López, 2023).

This study shows that there is an improvement in learning outcomes between the experimental class and the control class, besides that there is a significant difference between the learning outcomes of the two classes. This is proven by the results of the independent t-test 0.000 < 0.05, then $H_{a\ is}$ accepted and H_0 is rejected, meaning that there is a significant difference and vice versa, this is used as a basis for decision making. Meanwhile, in the Normalized test, this study obtained an N-Gain score of 0.6633 (experimental class) and 0.3913 (control class), which means that both are in the moderate category where it is seen from the value of $0.3 \leq g \leq 0.7$. N-Gain percent 66% obtained by the experimental class in the category of quite effective and 39% by the control class in the category of not effective. Based on these results, the N-Gain results show that the results obtained by the experimental class have improved compared to the control class. The difference in the improvement of the two classes shows that the problem based learning model assisted by educaplay media is more effective in improving the learning outcomes of fifth grade students in the subject of Pancasila Education.

The learning activities in the experimental class were more conducive where students were very enthusiastic about participating in the learning process. Students were active in conducting question and answer activities, expressing opinions both during learning and during discussions. Problem solving was well done by students with various strategies. Overall, the learning process in the experimental class went well, with students actively contributing from the beginning until the end of the lesson.

The research that has been carried out proves that there are significant differences in terms of student learning outcomes in the average posttest scores of the experimental class and the control class, as can be seen from the difference of 13.43. The student learning outcomes obtained prove the hypothesis that the educaplay media-based problem-based learning model in the experimental class is more effective than the conventional visual image media-based lecture model applied in the control class.

This is in accordance with research on the implementation of the educaplay educational game, students become more immersed in the material provided by educators as observed from the results of essay writing (Batitusta & Hardinata, 2024). The problem-based learning model also stimulates students to solve real-world problems and find solutions (Parmini et al., 2024). In addition, the research conducted is also in accordance with research on improving learning outcomes in Indonesian in grade 1, which occurred by implementing a problem-based learning model (Ardi et al., 2023). Research that is in line with the results of

this study is research on the effect of implementing the Problem Based Learning (PBL) model, which resulted in an increase in learning outcomes for grade VIII A students (Rahmatillah & Surur, 2020).

The research carried out by the researcher strongly supports previous research that has been carried out. Another study that is in line is the application of the problem-based learning model which is effective in improving the learning outcomes of grade VIII students (Zaidah & Hidayatulloh, 2023). After verifying the data obtained from the quantitative research, it was concluded that the educaplay media-based problem-based learning model has significant differences and better effectiveness in terms of student learning outcomes. The learning outcomes obtained by the experimental class were higher. In addition, it is easier for students to understand the material provided by the educator and to solve problems properly. The improvement in students' understanding of the application of interactive media such as educaplay is very influential. This proves that there has been an improvement in learning outcomes and effectiveness in the application of the educaplay media-based problem-based learning model.

The application of the problem-based learning model with the help of educaplay media has been proven effective in significantly improving student learning outcomes. The problem-based learning model links problems in real life and students can solve them in groups. The application of the problem-based learning model enables students to understand every problem related to the environment and is expected to be able to solve these problems (Binasdevi et al., 2022). The application of the problem-based learning model with the help of educaplay media makes students independent and creative and able to think critically in the learning process. Educaplay media itself contains games about the material that make students understand the material faster. This means that students' learning outcomes can improve if students can understand the material provided by educators.

CONCLUSION

The final result of this study is a significant difference in the application of the problem- based learning model based on educaplay media and this model is more effective in improving student learning outcomes. The learning model and media used by educators in carrying out learning will affect the achievement of learning objectives, especially on the learning outcomes obtained by students. The application of this model can not only improve student understanding, but also make students active in participating and better at problem solving. Based on this research, it is recommended that educators in elementary schools can consider using the problem- based learing model based on educaplay media in other general subjects. In order to obtain more accurate research results, future research is expected to expand the research dimension. Comparison of whether or not the results in this study can be done outside the city of Semarang. The main focus of the research is on the novelty of the model and more interactive media

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