

## The Influence of the Index Card Match Model on Civics Learning Outcomes in Class IV Students at SD Inpres Kuanino 2, Kupang City

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### Info Artikel

#### Riwayat artikel:

Diterima: 11 Oktober 2024

Publish : 21 Oktober 2024

### Kata Kunci:

Index Card Match Model on Student Learning Outcomes

### Abstrak

The research aimed to determine the influence of the Index Card Match model on the learning outcomes of fourth-grade students at SD Inpres Kuanino 2, Kupang City. The study utilized a quasi-experimental design with a nonequivalent control group design type, involving a sample of 28 students. Data collection was done using multiple-choice test questions. Before hypothesis testing, the researcher conducted tests to meet the hypothesis requirements, including normality and homogeneity tests. The results showed that the data was normally distributed ( $0.121 > 0.05$ ) and homogenous ( $0.188 > 0.05$ ). The hypothesis testing used an independent sample t-test. The results of the independent sample t-test showed that the average score in the posttest for the control group was lower than the experimental group, with scores of  $63.46 < 83.00$  and a significance value of  $0.000 < 0.05$ . This indicates a significant difference in the average scores between the control and experimental groups, leading to the rejection of the null hypothesis and acceptance of the alternative hypothesis. Based on these findings, it can be concluded that the Index Card Match model has a significant influence on the learning outcomes of fourth-grade students.

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## 1. INTRODUCTION

Education is one of the primary needs for every human being, because through education you will be able to improve the quality of human life. According to Jayanti (2017:175), education is a very important change and has a positive influence on individual development. In Law Number 20 of 2003, it is stated that education is "a conscious and planned effort that prepares students through guidance, teaching and training activities carried out both formally at school and non-formally outside school". Every human being should have an awareness of the importance of education, considering that there are still many parents who consider education for their children to be less important. Therefore, the participation of the government, surrounding communities and parents is very necessary in providing education for children in developing their potential and achieving success. Astuti (2019:2).

National education according to Law 20 of 2003 Article 3 states that it aims to develop students' potential to become people who are faithful, knowledgeable, capable, creative, independent, and become citizens of a democratic and responsible state. In the world of education, it is also known that there are formal (school), non-formal (community/outside school) and informal (family) education pathways. Ki Hadjar Dewantara called these three paths the Three Centers of Education, because they provide great justice for the process of human development to achieve perfection in various dimensions. School is a formal channel in the education system that has a very big contribution to achieving national education goals.

Basic education is a level of formal education that lasts for 9 years. Elementary school education is one of the formal educational institutions in the national education level structure carrying out a very strategic mission. This mission is related to the development of quality human resources (HR), the learning atmosphere in elementary schools needs to be planned using effective learning. "The learning process is said to be effective if all students are actively involved both mentally, physically and socially". Such learning must occur in all subjects implemented in schools, including PPKn learning Astuti (2019:3).

The Pancasila Citizenship Education (PPKn) subject is one of the subjects that can develop students' thinking abilities by using social problems and can develop knowledge, skills and self-confident attitudes. In the world of education, PPKn is a very important component in improving human resources. PPKn is given at every level of education starting from basic education to prepare students to be able to face changes in life that are always developing through training to act on the basis of thinking logically, rationally, carefully, honestly, effectively and efficiently. The aim of PPKn learning is to equip students with the ability to think logically, analytically, systematically, critically and creatively, as well as the ability to collaborate. Seeing this goal, PPKn has competency standards and basic competencies that serve as a reference for implementing learning. Civics knowledge needs to be taught to students because it is always used in all aspects of Yulia's life (2018:3).

Based on pre-observations carried out by researchers, especially on fourth grade students at SD Inpres Kuanino 2, it was found that the learning process was classified as less conducive because during learning activities students only looked at notes and listened to explanations given by the teacher so that the majority of students felt less interested in Civics subjects. Apart from that, according to students learning PPKn there is still a lot of memorizations and from the teacher's perspective the use of learning models is still not able to activate students to learn, in addition to the minimal use of learning media in conveying material to students. This results in PPKn learning not providing good results. Based on documentation studies in the form of general test scores for PPKn subjects, it shows that of the 28 students, 57.1% (16) have achieved the criteria for achieving learning objectives (KKTP) while 42.9% (12) students have not reached the KKTP according to the standards used. is 75. This fact shows that the learning outcomes of class IV students at SDI Kuanino 2 are still relatively low.

Based on these problems, to be able to improve and improve PPKn learning, it is necessary to have an effective learning model and classroom conditions that can involve students actively in learning activities. One alternative learning model is a model *card match index*. According to Suprijono (2012:120) *Index Card Match* (Finding pairs of cards) is a model that is quite fun to use to repeat lessons that have been learned. Model *Index Card Match* This relates to ways to recall what they have learned and test their current knowledge and abilities with the technique of looking for pairs of cards which are answers or questions while learning about a concept or topic in a fun atmosphere so that there is active student learning which can have an impact on improving student learning outcomes. Based on the explanation above, the researcher is interested in conducting research with the title "**Model Influence Index Card Match** "On PPKn Learning Outcomes for Class IV Students at SD Inpres Kuanino 2, Kupang City."

## 2. RESEARCH METHOD

This research is quasi-experimental design type experimental research. This research uses type *Nonequivalent Control Group Design*. This design was chosen because it was not possible for the experiment to change existing classes. The research design used is *nonequivalent control group design*, designs that take scores into account *pretest* conducted at the start of the study and scores *posttest* Which done at the end of the research. :Sugiyono (2017:114). Research Design can be described as follows:

**Table 1. Research Design Design**

Group	<i>Pre test</i>	Treatmen t	<i>Post test</i>
AND	THE <sub>1</sub>	X <sub>1</sub>	THE <sub>1</sub>
K	THE <sub>2</sub>	X <sub>2</sub>	THE <sub>2</sub>

*Designnon-equivalent control group*

Information:

AND : Experimental Group

K : Control Group

THE<sub>1</sub> : *Pretest* towards the experimental group

THE<sub>2</sub> : *For the test* control group

- $X_1$  : Treatment using models Index Card Match  
 $X_2$  : Treatment using conventional models  
 $THE_1$  : Post test towards the experimental group  
 $THE_2$  : Post test against the control group

### 3. RESEARCH RESULTS AND DISCUSSION

Description of data from research conducted from 20 May to 28 May 2024 obtained at SD Inpres Kuanino 2, Kupang City. The researcher used one class as the research class, namely class IV which was divided into two groups, where group A was the experimental class and group B as the control class. The sample used was 28 students, namely 15 experimental class students and 13 control class students.

**Table 2. Learning Results Pretest and Posttest Experiment**

Statistics			
		PreTest	PostTest
	Valid	5	5
	Missing		
Mean		57.00	86.00
Std. Error of Mean		1.940	1.902
Median		60.00	85.00
Mode		65	80
Std. Deviation		7.512	7.368
Variance		56.429	54.286
Range		20	25
Minimum		45	75
Maximum		65	100
Sum		855	290

Source: SPSS Analysis Results 24.00 Year 2024

Based on the calculation results in the table above, it shows the number of students pretest and posttest *in* the experimental class there were 15 students. Missing 0 indicates that the missing data is zero, thus there is no unprocessed data.

On pretest the mean or average value obtained is: 57.00. The median or midpoint is 60.00 and the Mode or value that appears most frequently is 65 while the minimum value is 45 and the maximum value is 65.

On posttest the mean or average value obtained was 86.00. The median or midpoint is 85 and the Mode or value that appears most frequently is 80 while the minimum value is 75 and the maximum value is 100.

Frequency distribution of learning outcome scores pretest and posttest in the experimental class can be seen in the following table:

**Table 3. Frequency Distribution Pretest Experiment Class Pretest Experiment**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
45	2	13.3	13.3	13.3
50	3	20.0	20.0	33.3
55	2	3.3	13.3	46.7
60	3	0.0	20.0	66.7
65	5	3.3	33.3	100.0
Total	15	100.0	100.0	

Source: SPSS Analysis Results 24.00 Year 2024

Assess the result pretest in the experimental class in the table above, it is known that 5 students (20.0%) got a score of 45-50, 2 students (13.3%) got a score of 51-55, 3 students got a score of 56-60. (20.0%), there were 5 students (33.3%) who got a score of 61-65 and there were no students who got a score between 70-75. Meanwhile, the KKTP for PPKn subjects at SD Inpres Kuanino 2 Kupang City is 70, so it can be concluded that 15 students in the experimental class have not met the PPKn KKTP score.

**Table 4. Frequency Distribution Posttest Experimental Class PostTest Experiment**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
VvValid 75	1	6.7	6.7	6.7
80	5	33.3	33.3	40.0
85	3	20.0	20.0	60.0
90	4	6.7	26.7	86.7
100	2	3.3	13.3	100.0
Total	15	100.0	100.0	

Source: SPSS Analysis Results 24.00 Year 2024

Assess the result posttest in the experimental class in the table above, it is known that 1 student (6.7%) got a score of 75-79, 5 students (33.3%) got a score of 80-84, 5 students got a score of 85- 90 as many as 4 students (26.7%) and students who received marks from

91-94 as many as 2 students (13.3%). So, it can be concluded that all students have met the KKTP PPKn standards.

**Table 5. Learning Results Pretest and Posttest Control:**

Statistics			
		Pretest	Posttest
	Valid	13	13
	Missing		
Mean		58.46	63.46
Std. Error of Mean		1.639	1.431
Median		60.00	65.00
Mode		60 <sup>a</sup>	60 <sup>a</sup>
Std. Deviation		5.911	5.158
Variance		4.936	6.603
Range		15	20
Minimum		50	55
Maximum		65	75
Sum		760	825

Source: SPSS Analysis Results 24.00 Year 2024

Based on the calculation results in the table above, it shows that the number of pretest and posttest students in the control class was 13 students. Missing 0 indicates that the missing data is zero, thus there is no unprocessed data.

In the pretest, the mean value or average value was 58.46. The median or midpoint is 60 and the Mode or value that appears most often is 55 while the minimum value is 50 and the maximum value is 65.

In the posttest, the mean or average value was 63.46. The median or middle point is 65 and the Mode or value that appears most frequently is 60 while the minimum value is 55 and the maximum score is 75.

Distribution frequency value of learning outcomes pretest and posttest in the control class the class can be seen in the table as follows:

**Table 6. Frequency Distribution Pretest Control Class**  
**Pretest Control**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	3	20.0	23.1	23.1
	55	2	13.3	15.4	38.5
	60	4	26.7	30.8	69.2
	65	4	26.7	30.8	100.0
Total		13	86.7	100.0	
Missing System			13.3		
Total		15	100.0		

Source: SPSS Analysis Results 24.00 Year 2024

Assess the result from *the priest control* class in the table above, it is known that 3 students (20.0%) got a score of 50-54, 2 students got a score of 55-59 (13.3%), students got a score of 60- 64 as many as 4 students (26.7%), students who got a score from 65-69 as many as 4 students (26.7%). So, it can be concluded that all students do not meet the KKTP PPKn standards.

**Table 7. Frequency Distribution Posttest Control Class**

Posttest Control					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	55	1	6.7	7.7	7.7
	60	5	33.3	38.5	46.2
	65	5	33.3	38.5	84.6
	70	1	6.7	7.7	92.3
	75	1	6.7	7.7	100.0
Total		13	86.7	100.0	
Missing	System	2	13.3		
	Total	15	100.0		

Source: SPSS Analysis Results 24.00 Year 2024

Results posttest *in* the control class in the table above, it is known that 1 student (6.7%) got a score of 55-59, 10 students (33.3%) got a score of 60-65, 1 student scored 66-70. (6.7%), 1 student (6.7%) got a score from 71-75. So it can be concluded that of the 13 students, 2 students or 65% did not meet the KKTP.

**Table 8. Normality Test Results**

Tests of Normality							
Class		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Stand up c	Df	Say.	Stand up c	Df	Say.
Student Learning Outcomes	Pretest Experiment	.211	15	.117	863	15	.142
	The PostTest Experiment	.231	15	.055	897	15	.121
	PreTestControl	.121	13	.200	952	13	.628
	PostTestControl	.229	13	.061	897	13	.122

a.Lilliefors Significance Correction

Source: SPSS Analysis Results 24.00 Year 2024

Normality test results in table *Test of Normality* above, learning outcome data posttest *the* experimental class shows a significant test value Shapiro-Wilk is 0.121, then the test has a significance value greater than 0.05 so that the learning outcomes data posttest the experimental class is normally distributed. Learning outcome data posttest, the control class shows the significance value of the test Shapiro-Wilk is 0.122, then the test has a significance value greater than 0.05 so that the learning outcomes data posttest *the* control class also had a normal distribution.

**Table 9. Homogeneity Test Results**

Test of Homogeneity of Variance

			Levene Statistic	df1	df2	Sig.
Student Learning Outcomes	Based on Mean		1.827	1	26	188
	Based on Median		1.331	1	26	259
	Based on Median and with adjusted df		1.331	1	24.753	260
	Based on trimmed mean		1.713	1	26	202

Source: SPSS Analysis Results 24.00 Year 2024

Based on the homogeneity test results in table *Test of Homogeneity of Variance* above, then the result data *Study posttest* the experimental class and control class show the significance value of the test *Levene (levene test)* is 0.188, so the significance value is greater than 0.05, so the learning outcomes data *posttest* the experimental class and the control class are homogeneous.

Table 11. Average Posttest Score for Experimental Class and Control Class

		Group Statistics			
Learning model		N	Mean	Std. Deviation	Std. Error Mean
Student Learning Outcomes	Model Index Card Match	15	86.00	7.368	1.902
	Conventional Model	13	63.46	5.158	1.431

Source: SPSS Analysis Results 20.00 Year 2024

Table 12. Test T-Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
				F	Say.	T	Df	Say (2-tailed)	Mean Difference	Std. Error Difference
		Lower	Upper							
Student Learning Outcomes	what variances assumed	1.827	188	9.232	26	000	22.538	2.441	7.520	27.557
	Equal variances not assumed			9.469	24.988	000	22.538	2.380	7.636	27.441

Source: SPSS Analysis Results 24.00 Year 2024

Based on the calculation results in table 4.10 above, the value of learning outcomes *posttest* experimental class have an average of 86.00 and the control class has an average of 63.46, so the difference in the average value *posttest* experiments and average values *posttest* the control class is 22.17 so it can be said that the average value of the experimental class is higher than the average value of the control class. After calculating the average value *posttest* experimental class and control class (*Statistical Group*), Next, hypothesis testing is carried out with *Independent Samples Tests* to find out whether there is a significant influence on learning outcomes using the model *Index Card Match*. From the results of the hypothesis test in table 4.11 T-Tests (*Independent Samples Tests*) above, at the sig value. (2-tailed) test *t-test for Equality of Means* is 0.000, then the significance value is  $<0.05$ , meaning  $H_0$  is rejected or  $H_a$  is accepted so it can be concluded that there is a significant influence on the model *Index Card Match* on PPKn learning outcomes for fourth grade students at SD Inpres Kuanino 2, Kupang City.

Based on research conducted at SD Inpres Kuanino 2 Kupang City using classes IV as the experimental class and control class. The learning outcomes of the two classes are different due to differences in treatment. The experimental class was given treatment using the *Index Card Match* model, while the control class used the conventional learning model.

This research shows that the control class got an average pretest score of 56.46 with the highest score being 65 and the lowest score being 50 while the average posttest score was 63.46 with The highest score was 75 and the lowest was 55. Meanwhile, the experimental class got an average score pretest amounting to 57.00 with the highest value being 65 and the lowest being 45, while the average value posttest amounting to 86.00 with the highest value of 100 and the lowest value of 75.

Based on the results of calculations that have been tested using SPSS Version 24.0. This research can answer the problem formulation and accept hypotheses, this can be seen from several data analysis in research on test validity, test reliability, level of difficulty of questions, distinguishing power of questions, and several statistical analysis tests, namely normality test, homogeneity test, hypothesis test, results Hypothesis testing in the Independent Samples Test table shows a sig value. (2-tailed) *t-test for Equality of Means* is 0.000, so the significant value is  $<0.05$ , meaning that  $H_0$  is rejected or  $H_a$  is accepted.

Based on previous research (2023) The influence of the Card Match Index model on learning outcomes for Class IV students at SDN 171 Kaluku, Cenrana District, Maros Regency, that based on tests (pretest and posttest) there are significant differences in PPKn learning outcomes between students who take part in learning using the Card Match Index model in class. experiment and students who did not use the Index Card Match model in the control class.

This can be seen from the results of data analysis which obtained an average pretest score for the experimental class of 47.39 after being given treatment. The average posttest score increased to 80. This data is supported by analysis using simple linear regression analysis, so it can be concluded that there is an influence of the Index Card Match model on PPKn learning outcomes in fourth grade elementary school students.

Based on the explanation above, it is evident that the Index Card Match model has an effect on improving student learning outcomes, learning outcomes in the experimental class are better than learning outcomes in the control class. The results of this research provide the implication that the Index Card Match model has been able to make a positive contribution in improving PPKn learning outcomes for class IV students at SD Inpres Kuanino 2, Kupang City. Therefore, the Index Card Match model can be used as a creative and innovative learning alternative in an effort to improve the quality of education, especially in Civics subjects.

#### 4. CONCLUSION



Based on the research results from the data obtained, it was concluded that there were significant differences in Civics learning outcomes between groups of students who used the model *Index Card Match* assisted and student groups that use conventional learning models for class IV students at SD Inpres Kuanino 2, Kupang City, academic year 2023/2024. This can be proven from the results of data analysis which shows that the average value of PPKn learning outcomes for experimental class students taught using the model *Index Card Match* is 86.00 higher than the average value of PPKn learning outcomes for control class students who were treated using conventional learning models 63.46.

These results are further strengthened based on the results of hypothesis testing and t-tests carried out on the values *post test* both classes, namely the experimental class and the control class, using assistance *SPSS 24.00* which produce *Independent Samples Tests* obtained sig value. (2-tailed) test *t-test for Equality of Means* is 0.000, then the significance value is  $<0.05$ , meaning  $H_0$  rejected while  $H_a$  accepted, so it can be concluded that there is a significant influence of the model *Index Card Match* on PPKn learning outcomes for class IV SD Inpres Kuanino 2 Kupang City.

## 5. ACKNOWLEDGEMENT

The author would like to express his gratitude to Jesus Christ Almighty, who has bestowed His grace and blessings on the researcher so that he can complete the preparation of the thesis entitled "The Influence of the Index Card Match Model on Civics Learning Outcomes in Class IV of SD Inpres Kuanino 2, Kupang City". This thesis was prepared as one of the requirements for completing the final assignment in the Strata-1 program in the elementary school teacher education study program, faculty of teaching and education, Citra Bangsa University.

Preparation, planning, and completion of this thesis cannot be separated from the support and assistance from various parties. On this occasion the author would like to thank:

1. Prof. Dr. Frans Salesman, SE., M.Kes as Chancellor of Citra Bangsa University and Deputy Chancellor who has given researchers the opportunity to study at Citra Bangsa University.
2. Heryon Bernard Mbuik, S.PAK., M.Pd as Dean of the Faculty of Teacher Training and Education who has given researchers the opportunity to study at Citra Bangsa University.
3. Yulsy Marselina Nitte, SH., M.Pd as Chair of the Primary School Teacher Education Study Program who has provided provisions to researchers so that researchers are able to compose their theses well.
4. Fembrianus S. Tanggur, S.Pd., M.Pd as academic research advisor lecturer in the Elementary School Education study program.
5. Roswita Lioba Nahak, S.Pd., M.Pd as Supervisor I who has provided provisions and taken the time to guide and direct the preparation of the thesis.
6. Kristina E. Noya Nahak, S.Pd., M.Pd as Supervisor II who always guides the author in preparing the thesis and provides motivation to the researcher.
7. The extended family of the 2020 PGSD Undergraduate Study Program, especially class A, thank you for your togetherness while the researchers were writing their thesis.
8. Mr. Mrs. Teacher at SD Inpres Kuanino 2, who also provided information and assistance in facilitating researchers in preparing their thesis.
9. Both parents (Mr. Nazari Leltakaeb and Mama Abjona Bani), sister Wasti, sister Eli and sister Siska, who have provided motivational support and prayers while the researcher was writing her thesis.
10. All parties who cannot be mentioned one by one, thank you for all the help, advice, criticism and suggestions as well as motivation in preparing this thesis.

## 6. BIBLIOGRAPHY

Aliyah, Naila Himmatal. 2023. Pengaruh Model *Index Card Match* terhadap Hasil Belajar

- peserta didik Kelas X SMA Muhammadiyah Babat. *Jurnal Pendidikan Sejarah*
- Astuti, S. Y., Muhali, M., & Mashami, R. A. (2018, September). PENGARUH MODEL PEMBELAJARAN PROBLEM SOLVING BERBANTUAN ARTIKEL KIMIA TERHADAP KETERAMPILAN BERPIKIR KRITIS SISWA PADA MATERI SISTEM KOLOID. In Prosiding Seminar Nasional Lembaga Penelitian Dan Pendidikan (LPP) Mandala.
- Astuti., (2019). Pengaruh Model Pembelajaran Index Card Match Terhadap Kompetensi Pengetahuan Ipa.2(3).
- Jayanti, D. D. (2017). Pembelajaran Index Card Match: Sebuah Solusi Memperbaiki Prestasi Belajar PPKn Siswa. *Jurnal Edukasi*, 3(2).
- Rizkiyansyah, N., Khery, Y., & Dewi, C. A. (2018, September). pengaruh model pembelajaran CTL berbantuan media aplikasi android terhadap motivasi dan hasil belajar siswa pada materi sistem periodik unsur. In Prosiding Seminar Nasional Lembaga Penelitian Dan Pendidikan (LPP) Mandala.
- Sarnita, F., & Eddy, A. (2018, September). Peningkatan Model Pembelajaran Langsung berbantuan Prototype Benda Langit Terhadap Hasil Belajar Siswa Tuna Netra. In Prosiding Seminar Nasional Lembaga Penelitian Dan Pendidikan (LPP) Mandala (pp. 485-490).
- Sugiyono.2017.Metode Penelitian Kuantitatif,Kualitatifdan R dan D.Bandung:Alfabeta.
- Sugiyono.2017.Metode penelitian Pendidikan (Pendekatan Kuantitatif,Kualitatif dan R dan D)
- Sugiyono.2017.Metode Penelitian Pendidikan.Bandung:Alfabeta
- Yulia A. Juwandani E., Maulidya D. (2018). Model Pembelajaran Kooperatif Learning.