The Effect of the Index Card Match Learning Model on the Learning Outcomes of Class V PKn

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Abstrak

Tujuan penelitian ini adalah untuk menentukan apakah hasil belajar siswa di kelas V mata pelajaran PKn di SD IT Permata Medan Labuhan dipengaruhi oleh Model Pembelajaran Aktif Tipe *Index Card Match*. Ada dua hipotesis dalam penelitian ini, yaitu: (1) Ada pengaruh Model Pembelajaran Aktif Tipe *Index Card Match* terhadap hasil belajar siswa di kelas V mata pelajaran PKn di SD IT Permata Medan Labuhan (Ha), dan (2) Tidak ada pengaruh Model Pembelajaran Aktif Tipe *Index Card Match* terhadap hasil belajar siswa di kelas V mata pelajaran PKn di SD IT Permata Medan Labuhan (Ho). Penelitian ini menggunakan metode eksperimen dengan jenis penelitian pre-eksperimen dengan desain "Desain Satu Grup Pretest Posttest". Data diuji menggunakan analisis berbantuan SPSS Versi 26, dan hasil pretest rata-rata (44,00) dan posttest rata-rata (86,50). Menurut analisis data nilai pretest dan posttest, hasil penelitian pada taraf 0,5 menunjukkan bahwa nilai sig (2-tailend) 0,00 < 0,05, yang menunjukkan bahwa Ho ditolak dan Ha diterima. Dengan demikian, dapat disimpulkan bahwa model pembelajaran *Index Card Match* pada mata pelajaran PKn di kelas V SD IT Permata Medan Labuhan memiliki dampak yang signifikan terhadap hasil belajar siswa.

Kata kunci: *Index Card Match*, Hasil Belajar, Pembelajaran Pkn

Abstract

This research aims to determine whether students' learning outcomes in class V in the Civics subject at SD IT Permata Medan Labuhan are influenced by the Active Learning Model of the Index Card Match Type. There are two hypotheses in this research, namely: (1) There is an influence of the Index Card Match Type Active Learning Model on student learning outcomes in class V in Civics subjects at SD IT Permata Medan Labuhan (Ha), and (2) There is no influence of the Learning Model Active Index Card Match Type on student learning outcomes in class V Civics subjects at SD IT Permata Medan Labuhan (Ho). This research uses an experimental method with a pre-experimental research type with a "One Group Pretest Posttest Design." The data was tested using analysis assisted by SPSS Version 26, and the results were the average pretest (44.00) and average posttest (86.50). According to data analysis of pretest and posttest scores, research results at the 0.5 level show that the sig (2-tailed) value is 0.00 <0.05, which indicates that Ho is rejected and Ha is accepted. Thus, it can be concluded that the Index Card Match learning model in Civics subjects in class V of SD IT Permata Medan Labuhan significantly impacts student learning outcomes.

Keywords: *Index Card Match*, *Learning Results*, *Civics Learning*

Introduction

According to Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System, "Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious, spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation, and state." Learning is changing or reinforcing behavior after experiencing experience. Learning, unlike outcomes or goals, is a process and an activity. Remembering is not the only aspect of learning; Learning also includes hands-on experience. Students not only know what they have to learn but also know and can learn it.

The meaning of learning according to experts in Learning Theory According to J. Bruner. Bruner learns not to change one's behavior but to change the school curriculum so that students can learn more and more easily. Therefore, Bruner believes it would be good if schools could provide opportunities for students to progress quickly according to their abilities in certain subjects. Theory from R. Gagne Gagne provides two definitions, namely, learning is a process of obtaining motivation in knowledge, skills, habits, and behaviors. Learning is the mastery of knowledge or skills obtained from instruction. Two factors affect learning, namely, Internal Factors.

Internal factors are factors that affect the individual who is learning. Internal factors include Physical Factors health, and physical disabilities. Psychological factors include intelligence (proficiency), attention, interest, talent, motivation for maturity, and fatigue. External Factors External factors are outside the individual who is learning. External factors include family factors, such as how parents educate, relationships between family members, home atmosphere, family economic situation, parents' understanding, and cultural background. School Factors Include teaching methods, curriculum, student relationships, discipline, lessons, time, lesson standards, building conditions, learning methods, and homework. Community factors include student activities in the community, friends, life forms in the community, and mass media.

According to Nugraha et al. (Anggita et al., 2021), learning outcomes are students' abilities after completing learning tasks. Changes that occur in students include cognitive, affective, and psychomotor aspects. Teachers and students can use measurable behavior changes to determine student achievement (Anggita et al., 2021).

Susanto (in Saragih et al., 2021) and Sudjana (in Sulastri et al., 2015) said that learning outcomes are students' abilities after experiencing the learning process. According to some experts' definitions above, learning outcomes are children's abilities after learning.

Learning outcomes lead to behavioral changes. Learning outcomes are defined as the level of assignment students achieve during learning per the educational goals set. Changes in student behavior and the grades they acquire are known as learning outcomes. Cognitive learning outcomes, one of the learning objectives achieved, are defined as students' understanding of the material taught by the teacher. One of the indicators of good learning outcomes is that students can understand the material taught by the teacher by the criteria for reference learning objectives set.

The selection of the right learning model is very important in the teaching and learning process because teachers are responsible for improving student learning outcomes. Teachers must be able to think about and choose different learning models and use those models to achieve learning goals. This ensures that students are physically, mentally, intellectually, and emotionally involved in learning activities. In addition, to improve student learning outcomes, teachers can change the subject matter from teacher-centered to student-centered.

The right learning model is needed to improve Civic Education (PKn) student learning outcomes. Such a model should allow students to actively participate in learning, discover new knowledge, and build their knowledge.

Considering this, researchers are trying to find the most suitable learning model to apply because the learning model that has been used so

far has not achieved optimal results. The researcher uses an Active Learning Model of the Index Card Match type for students to make the learning process more meaningful. Hopefully, students will be more active in learning with this model. Researchers believe this learning model will help solve the problem of PKn lessons.

Active learning is a type of learning in which students can do more learning activities and interact with the subject matter, encouraging them to understand more than just receiving lessons from teachers or facilitators. In active learning, students actively use their brains to search and solve problems and discover the basic concepts of the subject matter, or they apply what they have just learned or gained to a problem they are facing in the real world.

Index Card Match learning is a type of learning that involves matching pairs of cards with questions and answers to solve problems.

The active learning "find a card pair" method of Index Card Match is quite fun and is used to repeat the material previously taught. However, the note that students are given the task of learning the material that will be taught first so that they know when they enter the classroom.

Civic education instills the values of rights and obligations as citizens. Every action must be in accordance with the goals and principles of the state and not deviate from expectations.

Often, when teachers only use the mentioned method to teach, they only provide material through lectures, assignments, and free discussions. As a result, teachers are unable to develop engaging learning. Teachers seem to be afraid to design their learning, so the learning materials and evaluation methods are almost the same.

Looking at the situation in the field, most of the teaching approaches and atmospheres used by our teachers seem to lack encouragement for the cognitive potential of students. This is due to the fact that students are educated only as students who have to listen, receive all information, and follow all the teacher's instructions. What's even worse is that everything learned in school cannot be applied in daily life. Not infrequently, the lessons they learn at school contradict their daily lives. This study aims to determine whether the Index Card Match Learning Model influences student learning outcomes in Civic Education (Pkn) in grade V SD IT Permata Medan Labuhan. The Index Card Match Learning Model is a fun learning model that is suitable for repeating previously taught material. The index card match learning model can make students play an active role in the learning process so that they can better understand the material that has been taught previously. The application of the Index Card Match model can be said to be influential if student learning outcomes increase statistically and significantly.

The previous research that is relevant to this study is a study conducted by Tessalonika Pane (2022) entitled The Effect of the Use of the Index Card Match Learning Model on the Learning Outcomes of Class V Students on the Learning Subtheme of How the Body Manages Clean Air in Elementary School. This study aims to determine whether the learning outcomes of Class V students in the Subtheme of How the Body Manages Clean Air at SD Negeri 122350 Pematang Siantar are influenced by the Index Card Match Learning Model. There are two hypotheses in this study. The first is that student learning outcomes are influenced by the Index Card Match (Ha) learning model, and (2) student learning outcomes are not influenced by the use of the Index Card Match (Ho) learning model. This experimental method is a type of pre-experimental research with the design of a "One Group Design Pretest Posttest." Grade V students of SD Negeri 122350 Pematang Siantar, a total of 35 people, were chosen as the research sample because the number of students was less than 50. This study used 25 multiple-choice questions. The researcher conducted a hypothesis test with a significance level of 0.05 or ttable = 169 to find out whether the Index Card Match learning model had an impact on the learning outcomes of grade V students about the subtheme of how the body manages clean air at SD Negeri 122350 Pematang Siantar. The results of the hypothesis test show that tcount = 9.966, which means that tcount is greater than ttable. Therefore, it can be hypothesized that the learning model has a significant influence. It shows that Ha is accepted and Ho is rejected. (Junior High School).

Method

Research This research was carried out at SD IT Permata Medan Labuhan on Jalan

Masjid Pajak Rambe Lingkungan VI, Martubung, Kec, Medan Labuhan, Medan City.

The research in the experimental class at SD IT Permata Medan Labuhan was carried out from June 11 to 14, 2024, for four meetings. With details, the researcher only used one class. Four meetings in the experimental class. The time allocation for one meeting is 1 x 35 minutes. The material taught in this study is the Freedom of Organisation material with details of 10 *Pretest* questions and 10 *Posttest questions* that have been tested for validity.

Experimental research is a way to determine a certain influence on others under controlled conditions, according to Sugiyono (2019:72). This study will use a quantitative type of *pre-experimental* experiment with *One Group Pretest Posttest* because the researcher only uses one class and will compare *Pretest* (before using the *Index Card Match model*) and *Posttest* (after using the *Index Card Match*). With this study, the results of the treatment can be known to be more accurate because they can be compared with the situation before the treatment.

Table 1. Research Design (*One Group Pretest – Posttest Design*)

Pretest	*Treatment* (Perlakuan)	*Posttest*
O_1	**X**	**O_2**

Description:
O1 = Observations made before the experiment.
X   = Treatment
O2 = Observations made after the experiment.

Based on the research design, it can be explained that this research was carried out by giving an initial test to the class and then carrying out learning activities. Then, to compare the conditions of the classroom before and after the treatment, the *Index Card Match learning model* was applied.

The population is a generalization area consisting of an object/subject that has certain qualities and characteristics that are determined by the author to be studied and then drawn conclusions. The population of this study is the total number of students in grades I-VI SD IT Permata Medan Labuhan. At the same time, the sample is part of the number and characteristics possessed by the population. The class selected as a sample is all students of class V-A, totaling 20 students. To make the research easier, the researcher took samples using simple random sampling.

The technique used in sampling in this study is the simple random sampling type probability sampling technique, which is said to be simple because the sampling of sample members from the population is carried out randomly without paying attention to the strata of the population. The classes that were used as samples in this study were all students of class V Makkah (V-A), totaling 20 students.

This study uses a test instrument to measure the learning outcomes of students in class V-A in PKn subjects with Freedom of Organization material at SD IT Permata Medan Labuhan. This test is in the form of a multiple-choice question sheet. Pretest and *posttest tests are given. The pretest* was carried out before using *the Index Card Match* model, and *the posttest* was carried out after using the *Index Card Match* model (Andhika & Setiawan, 2022). One of the methods that can be used in this study is the data collection technique because data is the main goal of the research. The data collection techniques used in this study are as follows:

1. Observation: This is a data collection method that involves a direct visit to the research site. The purpose is to determine the research conditions, population size, and research samples.

2. The initial test (*pretest*) is conducted before the researcher applies the Index Card Match learning model to the learning of Freedom of Organization.

3. *Treatment* is the last test conducted to determine the learning outcomes of students in grades V-A SD in learning Freedom of Organization.

4. The final test (*posttest*) is a final test conducted to determine the learning outcomes of students in grades V-A SD in the learning of Freedom of Organization.

The researcher used descriptive and inferential statistical analysis to analyze the data obtained from the research results. Pretest and posttest scores from the data collected. Next, the data from both sources will be compared. Whether there is a difference between pretest and posttest scores will be determined by comparing the two values. The t-test, or t-test, is used to test the difference in values only against the average of the two grades. Next, the following steps were taken to analyze the experimental data: 1. Descriptive Statistical Data Analysis: Descriptive statistics analyze data by providing an overview or explanation of the data collected.

2. Inferential Statistical Data Analysis: Inferential statistics are used to analyze sample data and results for the population (Sugiyono, 2019, p. 148). Researchers use a statistical technique (t-test) with this method (Yulia et al., 2022).

Previous research that is relevant to this study is a study conducted by Sarito Sinaga (2023) entitled The Effect of the Use of *the Index Card Match* Learning Model on Student Learning Outcomes in Subtheme 1. The purpose of this study is to find out whether the learning outcomes of grade IV students in subtheme 1 of animal and plant learning in my home environment at SD Negeri 124386 Pematang Siantar are influenced by the *Index Card Match* Learning Model. There are two hypotheses in this study. The first is that the use of *the Index*

Card Match learning model has an impact on student learning outcomes (Ha), and the second is that it has no impact on student learning outcomes (Ho). The experimental method was used in this study, which is a type *of pre-experimental* research with the design of "One Group *Pretest Posttest*" design. The data was tested using SPSS Version 24 assisted analysis.

The results of the research hypothesis test have a significant influence on this study. Data analysis showed the average results of the experiment in *the pretest* (46.42) and *posttest* (84.46). The results of the study at the level of 0.5 based on the analysis of pretest and posttest value data showed that the sig value (2-tailend) was 0.00 < 0.05, which indicates that Ho was rejected and Ha was accepted. The learning outcomes of grade IV students of UPTD SD Negeri 124386 Pematang Siantar were influenced by 38% by the *Index Card Match learning model* on subtheme 1, animals and plants in my home environment.

Figure 1. Application of *the Index Card Match Learning Model*

Figure 2. Application of *Pretest* and *Posttest*

Results and Discussions

Result

Prior to the treatment, students were taught with the Conventional Learning Model. After that, they were given *a pretest* of 10 questions to measure their initial ability. The assessment was carried out on a scale of 100. In the second meeting, the researcher applied treatment, or the provision of treatment, to students using the *Index Card Match Learning Model*. At the last meeting, students were given *a post-test*. The following table shows the pretest and *posttest results* for the experimental class:

Table 2. Pretest and *Posttest Student Learning Outcomes*

Statistik	*Pretest*	*Posttest*
Jumlah Siswa	20	20
Jumlah Soal	10	10
Jumlah Nilai	880	1730
Rata-rata	44	86,5
Nilai Maksimum	70	100
Nilai Minimum	10	70

The table above shows that students in the experimental class obtained an average pretest score of 44 before being given treatment and an average of 86.5 after being taught with the Index Card Match Type Active Learning Model.

Before conducting a hypothesis test with a t-test to evaluate student learning outcomes, a prerequisite test is carried out, which includes the normality Test. One of the normality test methods is the Liliefors method, which involves analyzing the requirements before conducting a hypothesis test. The learning outcomes of Civic Education (PKN) students in the experimental class were used for this normality test. The normality test was carried out to determine whether *the sample pretest* and *posttest data* were normally distributed. In this study, normality was tested using the SPSS 26 statistical program. According to the significance determination, a significance value below 0.05 indicates that the data is not normal, but a significance value above 0.05 indicates that the data is normal. The results of the normality test are shown in Table 3. Test of normality. Based on the data in Table 3. below shows that the pretest and posttest data obtained with SPSS 26 are normally distributed because it is known that the pretest data has a value of 0.200 0.05 and value of 0.200 0.05 andue of 0.200 0.05 and ≥*the posttest* data has a value of 0.080 0.05. So, it can be concluded that the results of the calculation greater than or equal to the *retest* and *posttest* data in this study are typically distributed.

In this study, there are two hypotheses. The first is that the learning outcomes of students in the subject of Civic Education (PKn) in grade V of SD IT Permata Medan Labuhan (Ha) are influenced by the active learning model based on index cards. Student learning outcomes in the subject of Civic Education (PKn) in grade V of SD IT Permata Medan Labuhan (Ho) are not affected by the *Index Card Match learning model*. The results showed that the pretest value (X1) was 880 and the posttest value (X2) was 1730. Table 4. The hypothesis t-test in the table below shows the results of the hypothesis t-test. Based on table 4. under the results of the t-test, the value of sig= 0.000 is obtained, which means it is less than 0.05. Thus, Ho was rejected, and Ha was accepted. Cap$Alpha$ In the t-test, tcount = 13.141 and ttable = 1,729.13, which means tcount > ttable so that Ho is rejected and Ha is accepted. Therefore, it can be concluded that the influence of the *Index Card Match* Learning Model affects the learning outcomes of grade V students in Civic Education (Pkn) learning at SD IT Permata Medan Labuhan.

Table 3. Normality Test

Kolmogorov-Smirnov
0,200

Table 4. t-Test Results (Hypothesis)

T-value	Say.
13,141	0.000

Conclusion

Researchers can conclude, based on data and research results, that *the Index Card Match* learning model has a positive impact on student learning outcomes in Pkn subjects in grade V SD IT Permata Medan Labuhan. The results of the hypothesis test conducted using SPSS Statistics 26 showed that tcount = 13.141> ttable = 1.72913 and sig (2-tailed) = 0.000 < 0.05. Ho was rejected, and Ha was accepted. These results show that the use of *the Index Card Match* learning model has an impact on student learning outcomes in Pkn subjects in grade V SD IT Permata Medan Labuhan.   It is recommended that schools implement the *Index Card Match* Learning Model on an ongoing basis. Teachers must better understand student characteristics, including students' students' individual characteristics and ability levels, in order for *the Index Card Match* Learning Model to be well received by students. It is hoped that students can actively participate in learning in the classroom and continue to learn better. In addition, other researchers hope that this research can be used as a reference and correction for the preparation of future research. Thus, this research will be beneficial for readers.

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