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EFFECTIVENESS OF THE SETS LEARNING MODEL ON ELEMENTARY SCHOOL STUDENTS CONCEPT APPLICATION ABILITIES

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ABSTRACT: This research aims to determine the effectiveness of the Science Environment Technology and Society (SETS) learning model on Elementary School Students' Concept Application Ability. Using quantitative methods, Quasi Experimental research type. The population is class IV students at SDN Kadudampit. The sampling technique uses saturated sampling, namely class IV samples have two class groups, namely class A as the experimental class and class B as the control class. Data collection uses multiple choice questions to measure application abilities, namely determining, carrying out, applying, investigating and classifying. Data analysis using an independent sample test obtained a sig value. 0.000 < 0.05 then Ha in this study is accepted, namely that there is a significant difference between the experimental class and the control class. "And testing the effectiveness using the N-gain Score test produced an average score for the experimental class using the SETS model of 58.48 in the medium category, while the control class used the conventional model with an average of 22.69 in the low category." So it can be concluded that the Science Environment Technology and Society (SETS) learning model is effectively used for elementary school students' concept application abilities.

Abstrak: Penelitian ini bertujuan untuk mengetahui keefektifan model pembelajaran Science Environment Technology and Society (SETS) terhadap Kemampuan Penerapan Konsep Siswa Sekolah Dasar. Menggunakan metode kuantitatif, jenis penelitian Quasi Eksperimental. Populasinya adalah siswa kelas IV SDN Kadudampit. Teknik pengambilan sampel menggunakan sampling jenuh, yaitu sampel kelas IV mempunyai dua kelompok kelas, yaitu kelas A sebagai kelas eksperimen dan kelas B sebagai kelas kontrol. Pengumpulan data menggunakan soal pilihan ganda untuk mengukur kemampuan penerapan yaitu menentukan, melaksanakan, menerapkan, menyelidiki dan mengklasifikasikan. Analisis data menggunakan uji sampel independen diperoleh nilai sig. 0,000 < 0,05 maka Ha dalam penelitian ini diterima yaitu terdapat perbedaan yang signifikan antara kelas eksperimen dan kelas kontrol. “Dan pengujian keefektifan menggunakan uji N-gain Score menghasilkan skor rata-rata kelas eksperimen dengan menggunakan model SETS sebesar 58,48 dalam kategori sedang, sedangkan kelas kontrol menggunakan model konvensional dengan rata-rata sebesar 22,69 dalam kategori rendah.” Jadi dapat disimpulkan bahwa terdapat efektivitas model pembelajaran Science Environment Technology and Society (SETS) terhadap kemampuan penerapan konsep siswa sekolah dasar.

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INTRODUCTION

The ability to apply a concept is the embodiment of a concept that can contribute to overcoming the real life problems faced by students in life and provide their own experience indirectly regarding the implementation of the learning process in school. Unconsciously finding problems in new situations that have never been encountered before, material to study and learn at school, ultimately being able to overcome the problems faced and apply them to everyday life (Afana, 2021). According to Faturrochman, et al (2016) in (Rahmah et al., 2017) Concept application is part of Bloom's taxonomy according to Anderson and Krathwhol based on six cognitive domains, namely remembering, understanding, applying, analyzing, evaluating and creating. Mastery of the application of concepts is the most basic goal of a learning process.

According to (Gunawan & Paluti, 2017) applying a concept is very important in concrete science learning. Applying refers to using procedures and utilizing them in the learning process to solve a problem by applying various learning styles. If a new, unusual problem arises, students are required to understand the problem and choose the right way to solve it. In fact, students have difficulty in learning science because students are not brought up to raise a problem which causes the delivery of the material to be less concrete. Students' concept application abilities are still not provided perfectly, the delivery of concepts makes them difficult to apply and master, because there are no procedures or steps that must be followed, resulting in students not understanding the expected concepts so that the results are not appropriate.

The ability to apply concepts in essence has four elements, namely first, attitude, which is curiosity about natural phenomena, objects, and the causes and effects of problems that arise and looking for solutions. Second, the process of solving problems through scientific methods, namely hypotheses, experiments, evaluating, measuring and drawing conclusions. Third, the product contains facts, theories and laws. Finally, application is the application of concepts in life (Jannah et al., 2023). According to Marsyim (2021) in (Praseptia & Zulherman, 2021) science knowledge aims to develop it in everyday life so that it is useful for students. this is related to the SETS learning model, namely the beginning of the emergence of problems in the real world which consists of science and technology components from students' views of the concepts and processes to engage them with combining, examining, and applying concepts to students' real conditions to raise problematic issues in learning to make science learning more interesting, meaningful, and enjoyable. Science is needed in solving problems directly, students can seek experience to help them plan their lives in the future and their existence as humans who can master environmentally sound technology (Wulandari, 2016). The learning process at school when faced with conditions of students who have different knowledge, experience and abilities is not yet fully linked to real situations in the environment, because during the learning process they only look at the situation in the classroom, relying on objects in the classroom, not relating it to the situation in the classroom. real conditions that students experience. Not implementing a method to solve the problems that are being experienced causes students' ability to apply concepts to be still low, because there is no continuity between experience and ongoing learning.

In line with Surah An-Nahl verse 78 which means "Allah brought you out of your mother's womb in a state of not knowing anything and He made for you hearing, sight and a conscience so that you would be grateful." There is a connection with learning styles, namely the visual style emphasizes sight, the auditory style emphasizes hearing, and the kinesthetic style emphasizes movement and practice and the heart to store the knowledge gained. (Yuhadi, 2017). According to (Retnowati et al., 2023) aims to give students the opportunity to practice and carry it out in real conditions in accordance with theory. The reality is that using a monotonous learning style only hears, notes, sees, and doesn't always practice, so it doesn't provide a strong understanding and doesn't leave an impression on the heart and experience.

learning style must of course be adapted to developments in science, technology and changing times which have encouraged the government to carry out updates in the curriculum. to develop potential by implementing a meaningful, relevant and interactive learning process so that students are more interested and develop issues or problems that develop in the environment to adapt the learning model to the learning needs and interests of students (Guilford, 2022). Learning process will have a lasting impact and make it easier for students to remember the material that has been taught (Andrian, 2017). The reality is that students' participation in learning has not been implemented optimally, it is said that they tend to be passive and lack enthusiasm in the learning process because they only focus on the teacher, automatically students are not required to develop

issues in the environment. Especially in style material that is considered appropriate, because style is always carried out by students in everyday life in society.

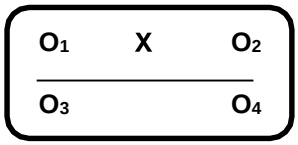
The problems faced by these students require efforts to be made to overcome this, namely by implementing various accurate learning models by applying the Science, Environment, Technology and Society (SETS) model. Menurut Fatchan dkk (2014) dalam (Widiantini et al., 2017) The learning model focuses on the real world, has important components, namely science and technology, in which there are concepts and processes which students are then invited to analyze and apply the concepts to real situations in society. Science has an impact on everyday life on the role of students in society by studying it at school. It is considered the most appropriate because the problems arise from the community, especially students (Taniatara & Wulandari, 2024). The condition of the development of science and technology from day to day which is increasingly rapid and intensively entering society into homes, automatically students must be sensitive to technology. Many new technologies are difficult for students to understand or master in their use and how to overcome these problems, because the learning process does not focus on technological developments and how to use them. It is hoped that the SETS learning model can improve the ability to apply concepts in elementary school students.

In line with (Putri et al., 2022) in their research, namely The application of the SETS learning model to critical thinking skills with the problem is the lack of practical and concrete learning which greatly influences the learning process and life, so that students experience difficulty in understanding concepts and their meanings. The use of the SETS learning model can influence critical thinking skills in research objects, which is marked by reduced problems in critical thinking, which is marked by a decrease in errors in the results of initial ability tests before the SETS learning model is used. After using this SETS learning model, you can improve your critical thinking skills by applying practice and concreteness according to students' conditions which must be concrete. In line with this description, it is hoped that the SETS learning model can improve the ability to apply concepts in elementary school students.

RESEARCH METHOD

The research was conducted at Kadudampit Elementary School. Quantitative experimental method with a Quasy Experimental research design, namely Nonequivalent Control Group Design, which means that in this design the control group is not chosen randomly, there are two classes, namely the experimental class and the control class as seen in Figure 1 below (Sugiyono, 2022).

Figure 1. *Nonequivalent Multiple-Group Design*



Details:
O1 : Pretest
O2 : Posttest After being given treatment
O3 : Pretest
O4 : posttest without treatment
X : Treatmen SETS learning model

The population used in this research was all class IV students at SDN Kadudampit, consisting of 27 class IV A and 25 class IV B, so the total number was 52. The selection of research samples used was class IV students at SDN Kadudampit consisting of two class groups, namely the experimental class with a total of 27 who were given the SETS learning model treatment and the control class with a total of 25 students who were given the conventional learning model treatment. The sampling technique used was saturated sampling. According to Sugiyono (2022:85) saturated sampling is a sample with all members of the population used as samples. This sample is used if the population used is relatively small. The selected population is also called a census because all members of the population are used as samples.

Data collection techniques in this research using a multiple choice question sheet which aims to determine the ability to apply concepts before (Pretest) and after (Posttest) the learning process occurs. Before treatment is given, the research instrument used must meet several requirements so that this research obtains reliable and accountable data. In this way, the test instrument test is carried out at SDN Cibunar 3 where the results will be tested for validity, reliability, level of difficulty and distinguishing power using Microsoft Excel 2016. The test questions consist of 15 Multiple Choice questions aimed at measuring the ability to apply concepts to the Gaya material.

According to Sundayana 2016 in Afana (2021) the aim of the validity test is to find out and measure the high and low levels of the instrument used by drawing conclusions if tcount > ttable then it is declared valid, whereas if tcount < ttable then it is declared invalid. Whether or not the question is valid or not is used to determine whether the question is valid or not. Furthermore, the reliability test aims to determine whether the measurement results are the same or do not change (consistent) by looking at certain criteria. The differentiating power aims to measure and differentiate the ability levels of students with low abilities and students with high abilities, because students have different abilities. Lastly is the difficulty level test which aims to measure the difficulty level of the questions, whether the questions are classified as difficult, medium or easy.

Interpreted that the results of the validity test of the question instrument show that questions number 1, 2, 3, 5, 6, 8, 9, 12, 14, and 15 are said to be valid because the value of tcount > ttable, while for questions number 4, 7, 10 , 11, and 13 are said to be invalid because tcount < ttable. These results are determined based on criteria according to Sundayana 2016 in Afana (2021) that the validity test is intended to determine and measure whether the data is valid or not by taking it based on a comparison of tcount and ttable, if tcount > ttable then it is declared valid, whereas if tcount < ttable then it is declared not valid. Whether the questions used are valid or not is whether the questions are appropriate or not.

Furthermore, the reliability test results produced a value of 0.97, so it can be categorized as very high. According to Sundayana 2016 in (Afana, 2021) the results of the reliability test aim to determine whether the measurement results are the same or do not change by looking at certain predetermined criteria.

The difficulty level test shows that questions number 2 and 8 are categorized as good, while questions number 5, 7, and 11 are categorized as fair, and questions number 1, 3, 4, 6, 9, 10, 12, 13, and 14 are categorized as bad. These categories are obtained based on the established difficulty level criteria used to measure the level of difficulty of the questions, which can then be classified as difficult, medium or easy. This was determined according to Sundayana 2016 in (Afana, 2021)

Based on the different power test, it was found that questions number 1, 2, 3, 4, 5, 6, 8, 9, 12, 14, and 15 were categorized as easy, questions number 7, 11, and 13 were categorized as medium, and question number 10 was categorized as difficult. . According to Sundayana 2016 in Afana (2021), the discrimination test aims to measure and differentiate the ability levels of students with low abilities and students with high abilities, because each student has different abilities.

After testing the questions and calculations, 10 questions were obtained that were suitable to be used as pretest and posttest questions, namely questions number 1, 2, 3, 5, 6, 8, 9, 12, 14, and 15. Each class carries out a pretest first to determine the students' initial abilities. Then during the learning process, the experimental group was given a treatment by learning using the SETS learning model, while the control group used the conventional learning model. After being given treatment, students were given a posttest to find out whether there were improvements and differences between the experimental class and the control class, so a prerequisite analysis test was carried out using normality and homogeneity tests, as well as to find out the comparison of class learning outcomes that used the SETS learning model with those that did not (conventional). , then analysis was carried out using a two independent sample t test. Next, to find out whether the use or application of a model can be said to be effective or not, an N-Gain Score test is carried out.

FINDINGS AND DISCUSSION

Data Description

Pretest and posttest were given to the experimental class and control class who had received treatment. The experimental class received treatment in the form of learning using the SETS model, while the control class did not use the SETS learning model. The posttest was given to determine the comparison between the experimental class and the control class which

received different treatment.

Table 1 . Data Description

	Experimental class		Control class	
	Pretest	**Posttest**	**Pretest**	**Posttest**
N	27	27	25	25
Average	52,59	78,52	47,60	59,20
Modus	40	70	40	60
Median	50	80	50	60
Maximum	80	100	70	80
Minimum	30	50	20	40

The pretest data experimental class obtained the lowest score of 30 and the highest score of 80 with an average score of 52.59. Posttest data obtained the lowest score of 50 and the highest score of 100 with an average score of 78,52. In the control class the pretest data obtained the lowest score of 20 and the highest score of 70 with an average score of 47,60. Meanwhile, the posttest data obtained the lowest value of 40 and the highest value of 80, the average value was 59.20. shows that there are significant differences between students who use the SETS model and students who do not use the SETS model.

Table 2. Experimental class Pretest Frequency Distribution

Intervals	**Upper limit**	**Lower limit**	**Frequency**	**Fr**
30 - 40	29,5	40,5	10	37%
41 - 50	40,5	50,5	5	19%
51 - 60	50,5	60,5	5	19%
61 - 70	60,5	70,5	5	19%
71 - 80	70,5	80,5	2	7%
			27	100%

Table 2 shows that in the experimental class the highest frequency of pre-test scores is the 30-40 score group (37%), then the 41-50 score group (19%), the 51-60 score group (19%), the score 61-70 (19%), and the score group 71-80 (7%).

Table 3. Experimental class Posttest Frequency Distribution

Intervals	**Upper limit**	**Lower limit**	**Frequency**	**Fr**
40-50	39,5	50,5	1	4%
51 - 60	50,5	60,5	2	7%
61 - 70	61,5	70,5	8	30%
71 - 80	70,5	80,5	7	26%
81 - 90	81,5	90,5	7	26%
91-100	90,5	100	2	7%
Total			27	100%

Meanwhile in table 3 the post-test scores with the highest frequency are the 61-70 score group (30%), the 71-80 score group (26%), the 81-90 score group (26%), value group 51-60 (7%) ,value group 81-90 (7%), and value group 40-50 (4%).

Table 4 Control class Pretest Frequency Distribution

Intervals	**Upper limit**	**Lower limit**	**Frequency**	**Fr**
20 - 30	19,5	30,5	3	12%
31 - 40	30,5	40,5	8	32%
41 - 50	40,5	50,5	7	28%
51 - 60	50,5	60,5	5	20%
61 - 70	60,5	70,5	2	8%
			25	100%

Table 4 shows that in the control class the highest frequency of pre-test scores was the 31-40 score group (32%), the 41-50 score group (28%), the 51-60 (20%), value group 20-30 (12%), and value groups 61-70 (8%).

Table 5 Control class Posttest Frequency Distribution

Intervals	Upper limit	Lower limit	Frequency	Fr
40 - 50	39,5	50,5	9	36%
51 - 60	50,5	60,5	8	32%
61 - 70	60,5	70,5	6	24%
71 - 80	70,5	80,5	2	8%
			25	100%

Meanwhile, in table 5, the highest post-test scores are in the 40-50 score group (36%), the 51-60 score group. (32%), the 61-70 value group (24%), and the 71-80 (8%).

Tes Analysis Prerequisites

Testing the prerequisites for data analysis for the experimental class and control class uses SPSS 25. The data analysis used is the normality test, homogeneity test.

1. Normality Test

The normality test aims to determine whether the data has a normal distribution. Interpretations can be compared with a significance level of 0.05. If sig > 0.05, then the data distribution is normal. If sig < 0.05, then the data distribution is not normal (Astuti, 2022).

Table 6. Normality test results

Sample	Sig. (Kolmogorov Smirnov)		Sig. (Shapiro-Wilk)		Information
	Pretest	Posttest	Pretest	Posttest	
Experimental Class	0,071	0,064	0,059	0,096	Normal
Control Class	0,058	0,068	0,156	0,066	Normal

Table 6 for the experimental class using data (Kolmogrov-Smirnov) for the pretest obtained a value of 0.071 while the posttest was 0.064. Data using (Shapiro-Wilk) obtained a paretest of 0.059 and a posttest of 0.156. Both test results have a sig value. > 0.05 then it is normally distributed. The control class used data (Kolmogrov-Smirnov), the pretest was 0.058 while the posttest was 0.068. Data using (Shapiro-wilk) obtained a pretest of 0.156 and a posttest of 0.066. Both test results have a sig value. > 0.05 then it is normally distributed.

2. Homogeneity Test

The homogeneity test aims to determine whether data variants have the same or different characteristics. Interpretations can be compared with a significance level of > 0.05. If sig > 0.05, then the data variance is the same. If sig < 0.05, then the data variance is different.

Table 7. Homogeneity Test

Sample	Sig.	Information
Experimental Class	0,158	Homogen
Control Class	0,158	Homogen

Table 7 homogeneity test is 0.158 > 0.05, so the data variance in this study is the same. Conclusion: The posttest results for the experimental class and control class came from samples with homogeneous variance.

Hypothesis Test

(1) Ha: There are differences in the concept application abilities of elementary school students using the Science Environment Technology and Society (SETS) learning model.
(2) Ho: There is no difference in the concept application abilities of elementary school students using the Science Environment Technology and Society (SETS) learning model.

Test the hypothesis by testing the difference between two independent samples t-test. Interpretation of data is compared with a significance level of <0.05 Ha accepted or there are significant differences. Meanwhile, if the significance level is > 0.05 then Ho is accepted or there is no significant difference.

Table 8. Independent Sample Test

Sample	Sig.	Information
Pretest Experimental and Control Class	0,209	Ho is sccepted and Ha is rejected
Posttest Experimental and Control Class	0,000	Ha is accepted and Ho is rejected

Hypothesis testing using the Independent Sample test. The pretest test in the experimental and control classes obtained a sig value. 0.209 > 0.05 then Ho is accepted, it can be concluded that the experimental class and control class have the same initial abilities.. The results of the hypothesis test using the t test for two independent samples obtained a sig value. 0.000. Because the sig value is <0.05, Ha in this study is accepted, that is, there is a significant difference between the experimental class and the control class.

N-Gain Score Test

The effectiveness test is a follow-up test after the pretest and posttest research data for the experimental and control classes have a significant difference as proven by the difference test. Test effectiveness using the Normalized Gain (N-Gain Score) method. Interpretation based on Hake, R.R (1999) in (Riffalah et al., 2022).

Table 9. N-Gain Score interpretation

Index N-Gain	Category
G > 0,70	high category
0,30 < G < 0,70	Medium
G < 0,30	Low Category

The N-Gain test results from the experimental class and control class according to this interpretation can be seen from the table below.

Table 10. N-Gain Score Test Result

Sample	N-Gain Skor	Min	Max	Information
Experimental Class	58,48	28,57	100	Medium Category
Control Class	22,69	0,00	42,86	Low Category

Table 10 analysis of N-gain in the experimental class is at a value of 0.58 in the medium category with a minimum N-Gain score of 28.57 and a maximum value of 100. Meanwhile in the control class it is at a value of 0.23 in the low category with an N- The minimum gain score is 00.00 and the maximum score is 42.86. These results indicate that students' concept application abilities in experimental class style material using the SETS learning model based on concept application abilities have a higher average N-Gain value compared to the control class which does not use the SETS learning model, so that the SETS learning model is effective on their abilities. concept application. This can also be seen from the results of the ability to apply the concept based on the indicators below.

Figure 2. Concept application capabilities

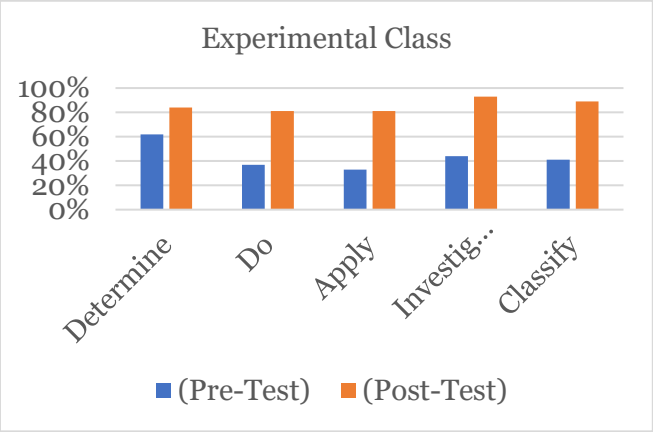


Figure 2 shows the ability to apply the pretest indicator concept to determine 62%, carry out 37%, apply 33%, investigate 44%, and classify 41%. Meanwhile, the results of the posttest indicators were 84% determining, 81% doing, 81% implementing, 93% investigating, and 89% classifying. Shows an increase in the ability to apply experimental class concepts after being given the SETS learning model. Therefore, it is important to create a classroom atmosphere that is designed in such a way by using the right learning model so that students have the opportunity to interact directly with each other which causes the learning process to take place optimally as expected (Suratno et al., 2023)

Figure 3. Concept application capabilities

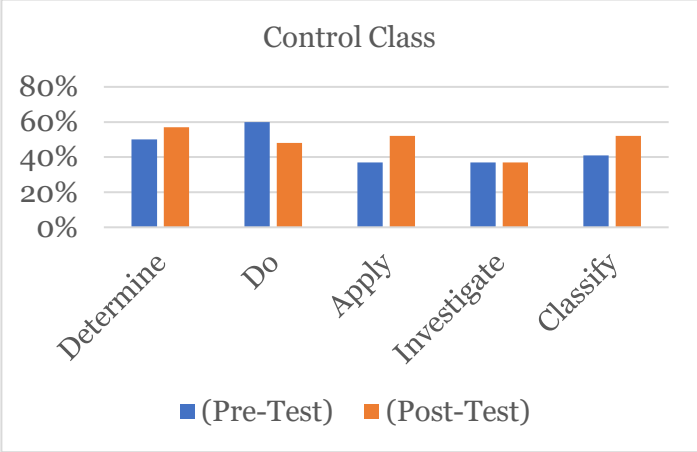


figure 3 the ability to apply the pretest concept to indicators determines 50%, carries out 60%, applies 37%, investigates 37%, and classifies 41%. Meanwhile, the posttest indicators determined 57%, carried out 48%, applied 52%, investigated 37%, and classified 52%. The control class that did not use the SETS learning model showed little change.

Learning outcomes can be influenced by the quality of learning in class, one of the things that can determine the quality of learning is the use of learning models that are appropriate, interesting and appropriate to the material being taught (Pendidikan et al., 2024). SETS learning model utilizes real world examples including science, society and technology. Students gain knowledge not only from books, but also by utilizing the environment, technology and society (Putri, 2020). This can help students to gain knowledge which is not only from books, but can utilize the environment, technology and society.

Figure 4. interrelationship of the SETS learning model

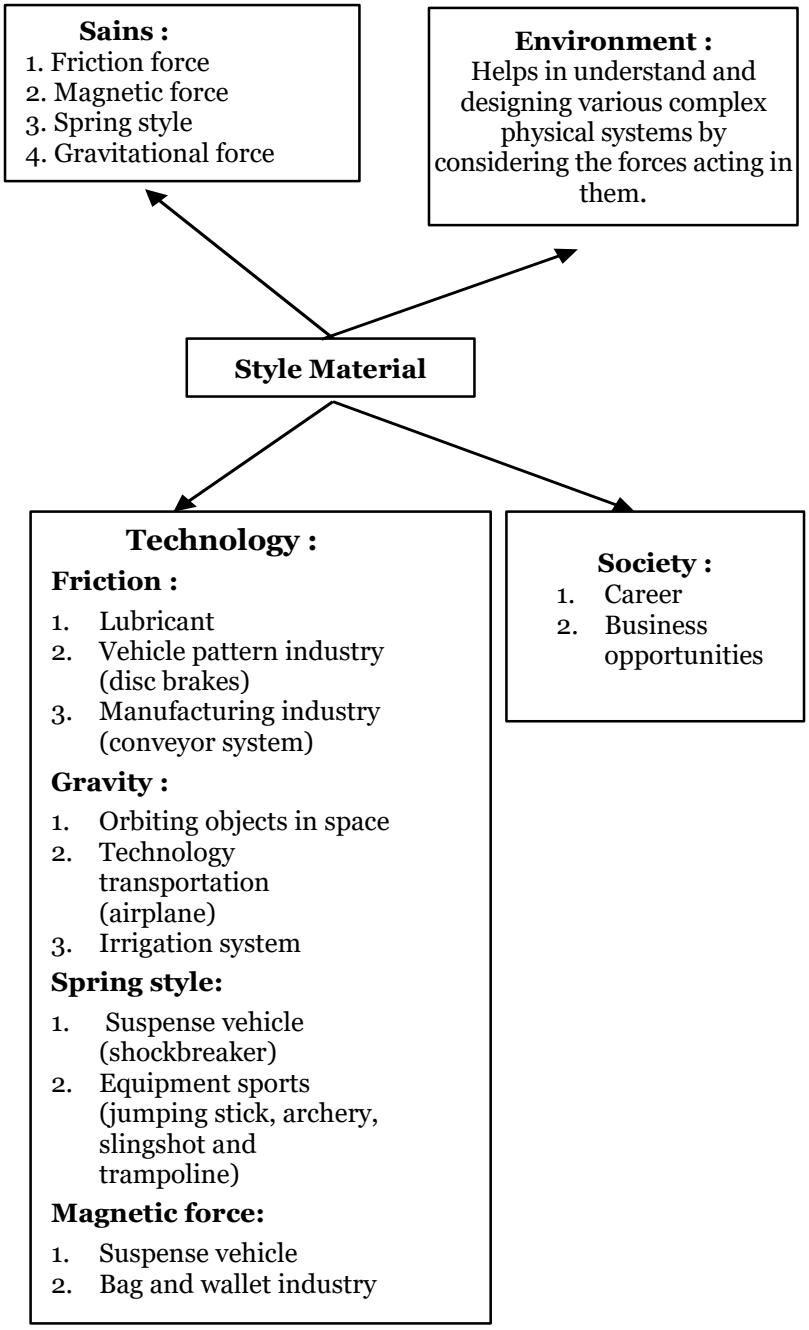


Figure 4 shows the relationship between science, environment, technology and society. In the experimental class, directly and indirectly, either consciously or unconsciously, students can recognize and use technology related to learning material about style. So that when learning this material, students are more concentrated on what they do when they are in the community, it will naturally be easier to understand the concept of style learned at school and apply it in everyday life. So this SETS model according to Aprianingsih and Sumadi (2016: 2) in (Putri et al., 2022) has the aim of forming students who have literacy in science and technology and also have a sense of sensitivity to problems arising from society and the students' environment, because The SETS learning model is interconnected between science, the environment, technology and its benefits for society. This science is part of science subjects that are related to the natural environment, so learning will feel more enjoyable (Sukma et al., 2020).

The SETS learning model stage consists of (1) Preliminary or initiation stage, namely exploring and starting. Invitation means an invitation that stimulates attention to learning. Apperception involves linking known events in daily life in the community with the material to be discussed. (2) The concept formation stage is carried out using various approaches and methods.

Such as the process skills approach, historical approach, demonstration methods, experiments, group discussions, role playing, and so on. (3) Application of concepts in life means understanding concepts by analyzing issues or solving problems in life and being able to apply them in everyday life and can also benefit oneself and society. (4) concept strengthening is carried out to straighten out students' misconceptions during the learning process. Consolidation of concepts is the key to learning which aims to remember the material so you don't forget. (5) Assessment is the final stage in the form of an assessment to measure students' abilities or understanding of the learning process (Poedjiadi, 2019).

Based on the stages of the SETS learning model applied in the experimental class, it is an effective strategy that has learning stages that must be passed and provides valuable and effective contributions and experiences to students' success in following the learning process. The stages of the SETS learning model applied when carrying out the learning process in this research are (1) introduction, students are required to explore or explore issues or problems faced in everyday life in their environment related to teaching material, namely about style. (2) Concept formation stage, through experiments or trials by using, exploring, applying, classifying and conducting experiments based on those carried out in groups to find a concept, then freezing. According to Syaiful Bahri (2010; 90) in (Therapy et al., 2018) the aim of freezing is to provide in-depth, memorable learning and students can observe and pay attention to what is being expressed in the learning process (3) Phase Application of concepts in everyday life -days, based on experiments at stage forming concepts, students understand and are able to convey concepts according to what is expected from the learning objectives and are able to solve the problems they face, so they are able to overcome the problems they experience by applying them in everyday life. (4) Consolidation of concepts, students are able to convey concepts related to style based on the experiences they experience in everyday life, then provide reinforcement in the form of open material based on theories or scientific concepts in style material which aims to remember the material being taught so as not to forget. (5) Assessment, at this final stage, students work on questions related to concept application skills in the form of Posttest questions as a measure of understanding using the SETS model.

The results of the posttest are evaluation material regarding students' success in understanding the ability to apply concepts based on question indicators which aim to measure the ability to apply concepts in solving problems experienced in everyday life. The application must start with the case or problem created, not the information contained in the book or recorded lesson (Jannah et al., 2023). In line with what was stated by Berlian et al., (2022) that C3 (application/application) is interpreted as the ability to apply knowledge in a real world context, where students are able to use their understanding practically. In this way, students are expected to be able to apply the concepts learned in everyday life situations that they have never experienced before.

In the learning process, the difference is very clear between the experimental class which uses the SETS learning model and the control class which does not use the SETS learning model. In the control class, students tend to be passive and appear less enthusiastic, because they only listen to the information they convey. Meanwhile, in the experimental class, from the start when they entered the class bringing tools and practical materials, the students looked enthusiastic and very enthusiastic during the ongoing learning process. Students also actively interact with their friends and ask each other questions. So that the learning process feels more active and creative as expected.

The results of the posttest are material for evaluating students' success in understanding the ability to apply concepts. Applications begin with cases or problems created, not information contained in books or recorded lessons (Jannah et al., 2023). The experimental class learning process is given direct experience through problems that arise from students, so that they can develop their knowledge in application skills. Meanwhile, the learning control class is teacher-centered and cannot optimize learning because students only see, hear and take notes. science learning focuses more on learning through real-world experiments that are interactive, fun, challenging and motivating, and active (Habsah & Habiby, 2024). According to Dimyati & Mudjiono (2013: 236) in Ridho & Basri (2023) active learning will determine student learning success, as well as the results of research by Novita, et. Al (2024) which revealed that learning through the Independent Curriculum is able to make students active in learning.

CONCLUSION

Based on the research that has been carried out, it can be concluded that there is effectiveness in using the SETS learning model on students' ability to apply concepts to style material at SDN Kadudampit. This can be seen from the students' ability to apply on the indicators of determining, carrying out, applying, investigating and classifying concepts in the experimental class using the SETS learning model which has a higher average score than the control class which does not use the SETS learning model, meaning that the ability to apply concepts in the experimental class is higher.

Analysis of research data resulted in a difference test using a two independent sample t test to obtain a sig value. 0.000. Because the sig value is <0.05, there is a significant difference in the ability to apply concepts resulting from the SETS learning model treatment. In this way, it can be concluded that the SETS learning model has an influence on the concept application abilities of Kadudampit Elementary School students.

The effectiveness analysis produced an average score for the experimental class of 58.48 in the medium category. The minimum N-Gain score is 28.57 and the maximum is 100. Meanwhile in the control class the average is 22.69 in the low category. The minimum N-Gain score is 00.00 and the maximum is 42.86. So it can be concluded that the use of the SETS learning model is effective in improving the concept application abilities of elementary school students at SDN Kadudampit. Overall, it can be concluded that the effectiveness testing resulted in the statement that the Science Environment Technology and Society (SETS) learning model is effective for Elementary School Students' Concept Application Ability.

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