The Effect of Using Ice Breaking on the Learning Motivation of Grade 4 Students of SDN Cibodas

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Abstract. Background to this study is the low level of student motivation to learn as a result of dull teaching and learning activities. In actuality, student learning motivation plays a significant role in the process and has a significant impact on the outcomes. To respond to these problems, researchers conducted an examination of class IV of SDN Cibodas which aimed to see the influence of the use impact classroom ice- breaking on pupils' enthusiasm to learn. This study's methodology employs a quantitative approach. A questionnaire was used to gather the information-giving technique after conducting experiments on two classes. In the experimental class, researchers integrate ice breaking in whilst taking the control class, learning, they carry out conventional learning as usual without ice breaking. As for data analysis techniques, researchers use normality tests, homogeneity tests, and hypothesis tests using unpaired T tests. The results showed that breaking the ice can boost students' enthusiasm to learn.

Keywords: Ice Breaking · Students · Learning Motivation

1 Introduction

Everyone certainly has the desire to change themselves for the better. Such changes can be achieved by learning. Learning is a way that can be done in a person's life to improve his life in any way. To get a better life one can acquire as much knowledge as possible which can later be used in everyday life. Whether a person is active several factors affect learning, and one of these factors is motivation in learning [1].

However, in reality the learning process of students experiences various kinds of problems, one of which is a psychological condition, including the ups and downs of the urge to learn or the motivation to learn. Motivation itself has a meaning as a psychological situation that motivates someone to act. Naturally, the goal of motivational education is to create psychological conditions that inspire a person to be excited about his or her learning [2].

[3] States that In order to carry out the various tasks for which he is responsible and fulfill his obligations in order to achieve predetermined goals, a member of the organization must be motivated. Motivation is the force that causes that person to be willing to exert abilities in the form of expertise or skills, energy, and time. With motivation, of course, a student will bring out all his abilities in the learning process.

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In addition, students will also be willing to sacrifice their playing time to study harder in order to achieve achievements in learning. The success of a person depends on oneself and the surroundings in the learning process. This desire is what is referred to as motivation [3].

In learning itself, learning motivation is important and greatly affects the process and results throughout the educational process that students engage in. In the learning process itself, learning motivation acts as a trigger or trigger for students' enthusiasm to learn even material that is considered difficult. So that when students have high learning motivation, even difficult learning materials will be easily understood by students [2].

One of the efforts that a teacher can make in increasing student learning motivation is to integrate it with ice breaking in every learning, ice breaking itself can be viewed as an attempt to loosen or melt an icy environment in order to create a more comfortable, relaxing ambiance. This is so that the materials presented can be accepted. Students will if the environment is not stressful, but rather relaxed, comfortable, and more welcoming, they will be more receptive to the subject matter [4].

According to [5] ice breaking is a touch of activity that can be used to break the ice, stability, dryness, and saturation of the atmosphere so that it becomes melted and the atmosphere can become more conducive. Some of the opinions above can be concluded that ice breaking is one of the ways that teachers can use to dilute the atmosphere in the classroom by means of activity, movement, and cheerfulness.

Passion in participating in classroom learning is one of the biggest influences of a student's success. Ice breaking is the diversion of boring situations, saturating, sleepy and tense to be relaxed, excited there is interest and enjoyment in hearing or seeing the individual speaking in front of the class thus increasing the motivation to learn.

The ARCS Approach Model is a type of problem-solving strategy for creating elements of the learning environment that will encourage and sustain students' enthusiasm to learn [6]. The steps of the ARCS approach model according to [7] are as follows: 1) Arouse student interest and attention. 2) Describe the learning objectives and benefits of learning. 3). Ask questions related to everyday life based on the topics of Economics discussed.

Based on the discussion above, we see that there is a relationship that can be developed from the use of ice breaking when learning is carried out to student learning motivation. Where the use of ice breaking with an ARCS approach that is adapted to the learning material will increase students' enthusiasm for learning the learning material. There is also a difference from our research with similar research in the use of ice breaking is that we will integrate ice breaking into the material that will be studied by students in each subject.

2 Method

This study uses a quantitative research design. According to [8], quantitative research is based on the philosophy of positivism which emphasizes objective phenomena that as research designed to determine whether treatment has any effects on the topic under investigation. Comparing one or more experimental groups that received therapy with a control group that received no treatment will reveal the answer.

According to the definition provided above, a quasi- experimental design is a style of research in which the experimental group is not randomly chosen but instead has a control group. Because there are external variables in this study that the researcher cannot control, researchers employ a quasi-experimental approach.

According to [9] time series design and nonequivalent control group design are the two variations of quasi experimental design. This study's design, which employs a nonequivalent control group design model, is quasi- experimental in nature. The control group and the experimental group both underwent a pretest test before to treatment in order to ascertain each group's pre-treatment state. The control group and the experimental group were then given a test following treatment, known as a posttest, to determine how each group felt following therapy.

In this study, the experimental group, learning was carried out by ice breaking before the core learning began and then the learning was carried out as usual it uses for the learning control group conventional methods, namely teaching and learning activities that still use LKA without ice breaking at the beginning of learning. In this case, the comparison method the researcher chose was a questionnaire of the meaning of Ice Breaking in learning. This research was conducted in 1 meeting in each group. The following is a picture of design of in a quasi-experimental study, a control group that is not equivalent [10] (Fig. 1).

are quantified or conducted by the use of data, statistical analysis, organization, and controlled experiments. Meanwhile, this study used a sort of research called quasi-experimental design research. Sugiyono [11] the study of how different treatments affect people under controlled circumstances is known as experimental research.

A similar opinion was also expressed by [12] who defined experimental research

01 = Experimental group before being given treatment
02 = Experiment group after being given treatment
03 = Control group before any treatment
04 = Control group that was not given treatment

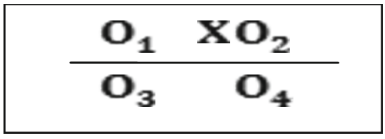

Fig. 1. Nonequivalent Control Group Design

x = Treatment (using Ice Breaking)

A. *Research Variables*

Research Variables are a characteristic, quality, or worth of a person, thing, or activity that is a specific variation the researcher has chosen to study before making judgments [13].

1) *Variable Identification*

Free/independent component (X). A free/independent variable (X) is a variable that impacts or triggers a dependent (bound) variable's emergence or change. In this investigation, free variable is Ice Breaking before starting learning, because the application of ice breaking before starting learning has an influence on student learning motivation.

Bound/dependent variable (Y). A variable that is impacted by or results from the presence of a free variable is referred to as a bound or dependent variable (Y). In this study, the bound variable is student learning motivation, because student learning motivation is influenced by Ice breaking before starting learning.

2) *Relationships Between Variables*

Researchers employed two variables in this investigation, including the free variable (X), which Ice breaking before starting learning and bound variable (Y) which is student learning motivation. So in this case ice breaking as a free variable has an influence on increasing student learning motivation as a bound variable. Here's a picture of the relationship between variables (Fig. 2)

B. *Research Place and Time*

1) *Research Site*

This research was carried out in Class IV A (as a control) and Class IV B (as an experimental class) SDN Cibodas Kertaraharja Village, Cikembar District, Sukabumi Regency.

2) *Research Time*

This research begins with the observation of the learning process which begins with Ice Breaking according to the subjects that will be delivered in April 2022.

C. *Research Subject*

The subject of this study was a Grade IV student of SDN Cibodas, Kertaraharja Village, Cikembar District, Sukabumi Regency for the 2021/2022 Academic Year. The students of Group IV A are 17 children consisting of 10 boys and 7 girls, while for Class IV B there are 15 there are 6 males and 9 girls. This study takes this subject because the

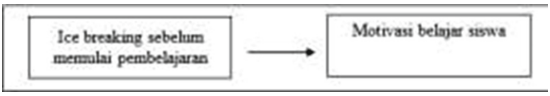

Fig. 2. Relationships between Variables

characteristics of students are not much different because they get the same treatment from teachers.

D. *Object of Study*

The object of this study is the learning motivation of Grade IV students of SDN Cibodas Kertaraharja Village, Cikembar District, Sukabumi Regency for the 2021/2022 Academic Year. In the object of this study, independent variables are Ice Breaking before starting learning, while dependent variables are student learning motivation.

E. *Sampling Techniques*

In this study researchers used purposive sampling techniques. In this technique, sampling from the sampling population is carried out at the discretion of the researcher. Based on the results of the sampling process, class IV A was obtained with 17 pupils as an experimental class and 15 students in class IV B as the control group.

F. *Data Collection Techniques*

1) *Student Response Questionnaire*

In the questionnaire, students' responses used a 4- point Likert scale, namely Strongly Agree (SS), Agree (S), Disagree (KS) and Disagree (TS). Researchers created 30 questionnaire items that were given to pupils in the control class and the experimental class.

2) *Documentation*

Using documentation, you may gather data from numerous sources of written information or documents that are on the respondent or place, in which the respondent resides or carries out his daily activities. The documentation in question is something in any form contained in the respondent and a research place that is useful as information for research such as letters or written evidence found at the location. The necessary data is a brief history of SDN Cibodas, school data, teacher data, student lists, and the organizational structure of SDN Cibodas.

G. *Research Instruments*

Research instruments are tools that the researcher chooses and uses in his gathering activity so that the activity becomes systematic, which he facilitated. In conducting research and collecting the necessary data, several instruments are used. The instruments in this study are divided into data collection instruments and treatment instruments. To obtain data in this study, three various tools were employed, including questionnaires

Table 1. Observation Result

No.	Indicator	Question	
		+	-
1	Attention as Learning Motivation for Students	7	0
2	Relevance of subjects with everyday life as student learning motivation	6	2
3	Confidence as student learning motivation	5	2
4	Satisfaction as student learning motivation	7	1
	Total	25	5

of student replies with ice-breaking strategies, learning motivation exams, and student responses, and observation of learning interactions in experimental classes.

1) *Learning Motivation Questionnaire Sheet*

Questionnaire sheets are used to obtain data on student learning motivation. The questionnaire contains a collection of statements given to students to assess a student's academic progress motivation in learning using ice breaking learning techniques.

2) *Documentation*

Documentation is an instrument for visualizing student activities throughout the educational process. Documentation in the form of student work completed during the activity and photographs taken during learning activities.

Documentation is carried out to see the records carried out in the study (Table 1).

Questionnaire scoring guidelines Alternate score of questionnaire answer: (SS/SS) 4
(S/S) 3
(KS/J) 2
(TS/TP) 1

3 Result and Discussion

The results of the questionnaire from the using the study's results, an experimental class and a control class were created. The results of the questionnaire were obtained after the learning took place, both in the experimental class integrated with Ice Breaking and also learning without Ice Breaking in the control class, the data is presented in Table 2.

A. *Data Analysis Techniques*

Putting data into groups based on variables and the types of respondents, tabulating data based on variables from all respondents, showing data on each variable analyzed, doing calculations to answer question formulations, and doing calculations to test hypotheses are all parts of data analysis hypotheses that have been proposed [13]. In a study, a hypothesis has been made that needs to be proven to be true.

Table 2. Quesioner Scoring

Quesioner Result	Methode of Experiment Class = 1, Control Class = 2
116	1
97	1
76	1
97	1
88	1
118	1
114	1
92	1
88	1
91	1
103	1
108	1
101	1
90	1
94	1
90	1
78	1
89	2

Table 3. Normality Test Result

Test Of Normality						
	Kolmogorov-Smirnov[a]			***Shapiro-Wilk***		
	Statistic	***Df***	***Sig.***	***Statistic***	***df***	***Sig.***
Eksperiment	,140	15	,200*	,954	15	,596
Control	,103	15	,200*	,983	15	,985

*. This is a lower bound of the true significance. a. Lilliefors Significance Correction

The data analysis techniques used in this study were the t test, homogeneity test, and normality test. The method of data analysis is only used for this population (the population that is the subject of the study) and does not intend to be generalized. The t-test is used to emphasize differences and influences on hypotheses. Hypothesis testing is carried out by calculating the research results obtained to answer the problem formulation.

Before conducting a hypothesis test, it is first necessary to carry out a preliminary examination that comprises a normalcy and homogeneity test.

B. *Normality Test*

Use the normality test to assess whether or not the research data is normally distributed. Testing for normality in this research used shapiro-wilk, because the study sample was small, which was less than 50.

Statistical hypotheses used:

H0: Sample derived from non-normally distributed population
H1: Sample derived from normally distributed population

The basis for decision making is:

If the sig value $>$ then H0 is rejected, and If the sig value is $<$ alpa then H0 is accepted.

Based on Table 3, a significance value for the experimental class of 0.596 and a significance value for the control class of 0.985 were obtained, of which the value $\geq$ 0.05. It can be concluded that the research data is normally distributed.

C. *Homogeneity Test*

The homogeneity test is used to find out whether the research data is from the same variance or not.

Homogeneity testing in this study used levene's test.

Based on Table 4, a significance value based on mean of 0.142 $\geq$ 0.05 is obtained, it can be concluded that the variance of the data is the same or it can be said that the data is homogeneous.

D. *Hypothesis Test*

Hypothesis testing is used to determine the effect of ice breaking on student learning outcomes. In this study, hypothesis testing used an unpaired sample t test.

Based on Table 5, a significance value (2-tailed) of the experimental-control class questionnaire results was obtained by 0.001 $\leq$ 0.05, then H1 was accepted and H0 was rejected. Thus, it can be concluded that there is an ice breaking influence on the learning

Table 4. Homogeneity Test Result

Test of Homogeneity of Variances					
		Levene Statistic	***df1***	***df2***	***Sig.***
Result	***Based on Mean***	2,269	1	30	,142
	Based on Median	1,841	1	30	,185
	Based on Median and with adjusted df	1,841	1	25,884	,187
	Based on trimmed mean	2,272	1	30	,142

Table 5. Hypothesis Test Result

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Result	Equal variances assumed	2,269	,142	3,817	30	,001	14,26275	3,73623	6,63235	21,89314
	Equal variances not assumed			3,912	28,141	,001	14,26275	3,64619	6,79556	21,72993

motivation of grade IV students of SDN Cibodas Kertaraharja Village, Cikembar District, Sukabumi Regency for the 2021/2022 Academic Year.

E. *Discussion*

This study aims to determine the effect of ice breaking on student learning motivation at SDN Cibodas. This study used 2 variables as the object of research, namely the free variable (Ice breaking) and the bound variable (student's motivation). In this study, researchers took 2 classes as samples, namely class IV A (experiment) and IV B (control) with a total of 32 students. In the experimental class, ice breaking is applied, while in the learning control class it is carried out without ice breaking. Then the two samples were given a questionnaire with a total of 30 items to measure student learning motivation results.

Based on the results of data calculations using spss with normality tests of both classes, homogeneity and Unpaired T Test. Obtained a significance value (2-tailed) of the experimental-control class questionnaire results of $0.001 \leq 0.05$, then H1 was accepted and H0 was rejected. With this, it can be concluded that there is an influence of ice breaking on student learning motivation compared to classes that do not use ice breaking in learning in grade IV SDN Cibodas Kertaraharja Village, Cikembar District, Sukabumi Regency for the 2021/2022 Academic Year. In addition, judging from the enthusiasm for learning, students in the experimental class look more excited than students in the control class, this can be seen in the results of the documentation we attached.

4 Conclusion

The author concludes that there is an influence of ice breaking on the learning motivation of students in grade IV.

SDN Cibodas Kertaraharja Village, Cikembar District, Sukabumi Regency for the 2021/2022 Academic Year. In addition, the presence of ice breaking makes the learning

atmosphere fun, students are actively involved, interested in learning, and more focused and concentrated in understanding the subject matter.

References

1. Siagian, Sondang P, "Teori Motivasi Dan Aplikasinya, Bina Aksara"
2. Jakarta. 2004
3. Thoifuri. "Menjadi Guru Inisiator". Semarang: Media Campus. 2013
4. A.M, Sardiman. "Interaksi dan Motivasi Belajar Mengajar". Jakarta:
5. Rajawali Pers. 2014
6. Abbas, Y. Motivasi intrinsik, motivasi ekstrinsik, kompetensi dan kinerja guru. Humanitas 10: 61-74. 2013
7. Fanani, A. "Ice Breaking Dalam Proses Belajar Mengajar: learning, routinity, boring, ice breaking". Buana Pendidikan: Jurnal Fakultas Keguruan Dan Ilmu Pendidikan, 6(11), 25 - 28. https://doi.org/10.36456/bp.vol6.no11.a1080 2018
8. Arikunto, S. "Prosedur Penelitian Suatu Pendekatan Praktek". Jakarta:
9. Rineka Cipta. 2000
10. Nana Sujana dan Ahmad Rivai. "Media Pengajaran". Bandung: Sinar Baru Algensindo. 2010
11. Sunarto, "Ice Breaker dalam Pembelajaran Aktif", Surakarta: Yuman Pressindo, 2012
12. Sugiyono. "Metode Penelitian Pendidikan Pendekatan Kuantitatif, kualitatif, dan R&D". Bandung: Alfabeta. 2010
13. Sugiyono. "Metode Penelitian Kuantitatif Kualitatif dan R&D".
14. Bandung: Alfabeta. 2007
15. Sugiyono, Metode Penelitian Pendidikan, Bandung: Alfabeta, 2013.
16. Suharsimi Arikunto, Prosedur Penelitian Suatu Pendekatan Praktek. Jakarta: Rineka Cipta, 2013.
17. Sugiyono, Metodo Penelitian Kuantitatif Kualitatif & R&D. Bandung: ALFABETA 2014.