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THE EFECTIVENESS OF ICE BREAKING IN IMPROVING STUDENT LEARNING OUTOMES IN MATHEMATICS SDN 23 PAGAR ALAM

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ABSTRACT

This study aims to determine the effectiveness of ice breaking in improving student learning outcomes in mathematics subjects in grade 1 of SDN 23 Pagar Alam and identify its inhibiting factors. The background of this study is the low learning outcomes of Mathematics students in grade 1 of SDN 23 Pagar Alam, which is caused by a lack of motivation and a monotonous learning atmosphere. The method used is qualitative descriptive research with data collection techniques through observation, interviews, and documentation. The population in this study is all students at SDN 23 Pagar Alam which totals 143 people. The sample was taken through the purposive sampling method, namely all 29 grade 1 students and actively applied ice breaking during classroom learning activities. The findings of this study indicate that ice breaking plays an important role in increasing students' enthusiasm, concentration, and learning achievement. The obstacles found include time constraints, inconsistencies in the type of ice breaking, diverse student characters, and limited supporting facilities and infrastructure.

Keywords: Ice breaking; Learning Outcomes; Mathematics

INTRODUCTION

Education as a methodical process to create human beings with the knowledge and abilities necessary to compete successfully in the country's social and economic environment (Sanga & Wangdra, 2023). School as a formal and structured system with various learning components. The success of learning is closely related to the teacher because the teacher is in full control in the classroom(Ashlan et al., 2022). Teachers have the ability to choose the most effective learning methods to be applied in the classroom. One of the activities that is always prioritized and pursued is to improve learning outcomes (Arifin et al., 2023). Currently there are still many teachers using the lecture method or conventional methods, with students only as listeners and unable to participate in the learning process (Sitorus et al., 2023). Sometimes, classroom learning can become boring and uninteresting for students if teachers choose inappropriate learning methods.

The *ice breaking* method that allows students to learn easily, fun, and can make students more active, enthusiastic, and focused in the learning process must be maintained so that students' concentration and involvement in learning activities can return (Algivari & Mustika, 2022). *Ice breaking* through interactive activities helps break the tense or awkward atmosphere and allows for smoother communication (Ambarwati et al., 2023). Many regions in Indonesia have implemented the *ice breaking* method, one of which, in South Sumatra, especially in the education sector, refers to the application of *ice breaking* methods in learning activities to improve interaction, communication, and learner enthusiasm(Rusman, 2022).

During this time, teachers dominate learning in the classroom, so learning is less effective because there is no learning strategy that suits the needs of students. To make the learning atmosphere more dynamic and fun, some schools in South Sumatra have started using *ice breaking* in the classroom since the implementation of the independent curriculum in South Sumatra(Asmarani et al., 2023). Educators in South Sumatra tested various *ice breaking* techniques, ranging from simple games to more interactive activities, to capture students' attention and reduce tension in the classroom(Dakhi, 2020). However, the reality is that schools, especially in Pagar Alam, such as SDN 23 Pagar Alam, still use methods that seem less varied and innovative(Gusteti & Neviyarni, 2022). Retrieved on Mustakim & Kamal, (2024) this causes them to not focus and lack concentration on learning, especially in math learning . Learners are more likely to engage in activities that are not relevant to the lesson, such as fighting in class and even daydreaming due to the monotonous and uninteresting learning process and the rigid and formal classroom environment.

Researchers conducted observations at SDN 23 Pagar Alam, where the results stated that there were still many students who felt bored, tense, sleepy and bored, especially in Mathematics subjects. This causes them to be unfocused and less concentrated on the material taught by the teacher and more likely to engage in activities that are not relevant to learning, such as disturbing their friends, chatting, and even daydreaming (Subhi et al., 2024). Therefore, related to this problem, *ice breaking* provides a good change to the boring classroom atmosphere, making the initially monotonous atmosphere more relaxed and making the atmosphere conducive again. This use is very important for effective learning. With this, researchers are motivated to conduct research with the title "The Effectiveness of *Ice breaking* in Improving Student Learning Outcomes in Mathematics Subjects at SDN 23 Pagar Alam". With a research focus on knowing the effectiveness and inhibiting factors of the effectiveness of *ice breaking* in improving student learning outcomes in Mathematics subjects.

RESEARCH METHODS

This research uses descriptive qualitative methods, located at SDN 23 Pagar Alam South Sumatra. A total of 143 populations in this study, 29 grade 1 students were taken as research samples to emphasize focus so as not to expand the discussion of the effectiveness of *ice breaking* in improving learning outcomes in Mathematics subjects. This research was conducted in November 2024-July 2025 where the research data sources were primary and secondary which were collected through observation and interview.

RESULTS AND DISCUSSION

Based on the findings from observations and interviews conducted by researchers on the effectiveness of *ice breaking* involvement in improving student learning achievement in mathematics subjects, through observations the following results were obtained:

Effectiveness of *Ice breaking* in Improving Student Learning Outcomes in Mathematics Subjects in Grade 1 SDN 23 Pagar Alam

1. Redukasi Data

   Data reduction is carried out with the aim of collecting all data, at this stage the stages of data collection are observation (Barker, 1980). The initial observation stage was carried out with the aim of directly monitoring the object's activities and reporting in detail with its activities. This observation is done by researchers to review and find research concepts that researchers can develop for research needs. The object in carrying out this *ice breaking* activity is the Mathematics teacher as well as the 1st grade homeroom teacher. What the researcher wants to find in this observation is related to how effective *ice breaking* is in improving student learning outcomes. Grade 1 students tend to get bored quickly and find it difficult to concentrate in abstract math lessons.

   Based on observations, the researchers believe that the main problem is student discipline and work, such as late arrivals, not wearing complete uniforms, and even not doing assignments. Secondly, problems in the learning process. students are less active in learning where many students are passive, do not ask questions, or only receive material without active participation. As for talking about facilities and infrastructure, researchers see that in this school, namely SDN 23 Pagar Alam, it is very supportive in fulfilling teacher competence in implementing *ice breaking* activities, one of which the researchers see, namely regarding devices such as the availability of a library that provides teacher packbooks or for students, internet facilities (wifi), and projectors that assist teachers in displaying *ice breaking* that will be used in learning activities. However, the school only has 1 projector so it cannot be used at the same time.

2. Display Data

   After reducing the data based on the findings of the research. In qualitative research, researchers present data display (data presentation) in narrative form in order to make it easier for readers to understand the research findings. Based on the results of data collection that researchers have conducted at SDN 23 Pagar Alam regarding the Effectiveness of *Ice breaking* in Improving Student Learning Outcomes in Mathematics Subjects in Grade 1 SDN 23 Pagar Alam. The results obtained when conceptually, *ice breaking* activities carried out by teachers have been carried out in accordance with pedagogical principles that support active student involvement, encourage a positive learning atmosphere, and strengthen learning outcomes. Observational data supported by teaching modules and score lists show that *ice breaking* activities have a significant contribution to increasing student motivation and participation in learning.

Based on the results of research at SDN 23 Pagar Alam, the use of *ice breaking* was shown to have a positive impact on improving learning outcomes. Students who experienced *ice breaking* showed higher scores in formative assessments and showed more active and positive changes in learning behavior. *Ice breaking* is able to change the rigid and monotonous classroom atmosphere into a more lively and fun one. It breaks the tension and improves learners' concentration before or during the learning process. This helps students to focus more on understanding the material, especially in Mathematics lessons which are often considered difficult. Not only that, *ice breaking* creates a positive atmosphere, encouraging students to be more enthusiastic in participating in learning. This is proven to increase students' internal motivation to learn actively. Through interactive activities such as singing while counting, games, or simple movements, students are more active in asking questions, discussing, and daring to express opinions. This is important to create meaningful and collaborative learning. *Ice breaking* creates a comfortable and familiar learning condition between teachers and students as well as between students themselves. This facilitates the knowledge transfer process as students feel less pressured and more open to learning.

The effectiveness of *ice breaking* in improving students' learning outcomes lies in its ability to create an active, interactive and fun learning atmosphere. This has a direct impact on increasing motivation, concentration, student engagement, and academic results, especially in Mathematics lessons in class I of SDN 23 Pagar Alam. Before the implementation of *ice breaking*, students showed low involvement in learning activities. this was reflected in the initial evaluation results which showed that most students scored below the Criteria for Achieving Learning Objectives (KKTP). The classroom atmosphere tends to be passive, and students show less interest and motivation in understanding

the material presented by the teacher. This disinterest also affects students' absorption of the subject matter, especially in Mathematics.

However, after the application of *ice breaking* in the learning process, there were quite striking changes in student behavior and participation. *Ice breaking* proved to be able to create a more fun and interactive learning atmosphere, making it easier for students to concentrate and understand the material being taught. The positive impact of this approach can be seen from the increase in student learning outcomes reflected in subsequent evaluations, where most students experienced a significant increase in grades. This phenomenon shows that *ice breaking* not only acts as a means of entertainment, but is also able to build students' mental readiness to receive subject matter more optimally. Thus, it can be concluded that the application of *ice breaking* in a structured and directed manner can contribute positively to improving student learning outcomes, especially in Mathematics subjects in grade 1 SDN 23 Pagar Alam.

Inhibiting Factors for the Effectiveness of *Ice breaking* in Improving Student Learning Outcomes in Mathematics Subjects in Grade 1 SDN 23 Pagar Alam

1. Reduksi Data

   This data reduction process is carried out to obtain information about the factors that hinder the effectiveness of ice breaking in improving student learning outcomes. researchers conducted data reduction through data collection techniques, namely interviews. The results of the interview conducted with Mrs. Amalia, S.Pd as the 1st grade teacher where the researcher conducted the research, as the object to find out about what factors hinder the effectiveness of ice breaking in improving student learning outcomes in mathematics subjects in class. If there are several factors that hinder the effectiveness of ice breaking in improving the learning outcomes of grade 1 students, especially in mathematics subjects.

   First, time constraints. Learning activities, especially mathematics, require a long time and high focus. Often the time available is not enough to carry out ice breaking optimally, so the activity is accelerated or even skipped. Secondly, the impact of post-ice breaking where some students have difficulty returning to focus on the learning material after doing ice breaking. Third, not all ice breaking is suitable for math learning. Ice breaking that is too long and irrelevant to the material can disrupt the flow of learning and reduce effectiveness. Fourth, learners' characteristics. Family background also affects children's ability to be actively involved. Fifth, limited facilities and infrastructure also greatly hinder the implementation of ice breaking activities.

2. Display Data

   After the data has been processed at the reduction stage, it will then go through the data display or data presentation stage. At this stage of data display, the researcher will present the results of data collection through the final observation of the interview in the form of tabulations regarding the inhibiting factors of the effectiveness of ice breaking in improving the learning outcomes of grade 1 students. Seen through the results of data acquisition taken through interviews when researchers made final observations at SDN 23 Pagar Alam, it is presented in Table 1.

Table 1. Table of Interview Results

No.	Informant	Interview Results
1.	Ibu Amalia, S.Pd	Obstacles in implementing *ice breaking* include time constraints, students who have difficulty focusing back on the lesson after the *ice breaking*, and the need to find variations of interesting activities *ice breaking*, and the need to find interesting variations of activities.
2.		Some students are less interested in *ice breaking* because shy, lack of confidence, sleepy, or not in the mood. The teacher takes a personal approach to make them feel comfortable.
3.		The tight lesson schedule meant that *ice breaking* had to be shortened or even omitted if time was not available. possible.
4.		Not all types *ice breaking* suitable for lesson math lessons. *Ice breaking* that is too busy or long can disrupt the focus and flow of learning.
5.		Student characters affect the effectiveness of *ice breaking*. Students shy and lacking stimulus are difficult to be active, while those who are too active are difficult to control after *ice breaking*

No.	Informant	Interview Results
6.		Infrastructure is still limited. Small speakers and light games are available, but LCDs and interactive tools are unevenly distributed. Teachers often bring their own equipment to support activities

Based on the results of data collection in table 1, it is known about the inhibiting factors for the effectiveness of *ice breaking* in improving student learning outcomes in mathematics subjects. Researchers stated that, the limited learning time in doing *ice breaking* is often hampered by the limited allocation of learning time, especially in subjects such as mathematics which require high focus and sufficient time to understand the material. *Ice breaking* activities must be adjusted quickly, which sometimes reduces their quality.

The incompatibility of the type of *ice breaking* with the material also plays an important role in the effectiveness of *ice breaking*, where not all forms of *ice breaking* are suitable in the context of Mathematics lessons. *Ice breaking* that is too far from the learning context or too active can disrupt students' transition to the core material. Diverse learner characteristics. The diversity of student characters, such as children who are shy, lack confidence, or are too active, affects the involvement in *ice breaking*. Limited facilities and infrastructure. The types of *ice breaking* that can be done may be limited by the lack of teaching aids. This can cause the activity to be ineffective but still fun while learning

CONCLUSIONS

Based on the results of research through observations, interviews, and documentation that researchers conducted, it can be concluded that *ice breaking* has a fairly good effectiveness in increasing students' enthusiasm, participation, and motivation to learn in Mathematics subjects in class. 1. The teacher has carried out this activity in a structured manner, from planning to evaluation, and is able to link *ice breaking* with the core material. The *ice breaking* applied is in accordance with the principles of active and fun learning, which encourages students to engage socially and emotionally before starting the core lesson. This contributes to the improvement of students' learning outcomes in general. Several factors were found to be influential in inhibiting the implementation of *ice breaking* which affected its effectiveness. Time limitations, especially in Mathematics subjects that require sufficient focus and duration. The inappropriateness of the type of *ice breaking*, which if it is too active or irrelevant to the material, it disturbs the students' focus. As well as the diverse characteristics of students such as shy students, overactive or lack of stimulus from the home environment and limited facilities and infrastructure which causes teachers to take the initiative to bring their own tools or limit the types of *ice breaking* used.

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