

Ice-Breaking Activities and Student Learning Interest in Economics Classrooms: Evidence from Secondary Education

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Abstract

Learning interest is one of the key factors influencing the effectiveness of the learning process. Low learning interest may reduce students' attention, participation, and engagement in classroom activities, particularly in Economics learning. One instructional strategy that can be implemented to address this issue is ice breaking, which aims to create a more enjoyable learning environment, improve students' concentration, and enhance their enthusiasm during the learning process. This study aimed to analyze the effectiveness of implementing ice breaking in improving students' learning interest in Economics at SMAN 14 Bone. The study employed a quantitative approach using an ex post facto research design. The population consisted of 259 tenth-grade students, while the sample comprised 32 students from Class X.5 selected through purposive sampling. Data were collected using observation, documentation, and questionnaires that had met the validity and reliability requirements. The data were analyzed using descriptive statistics through frequency distribution and percentage analysis. The findings revealed that the implementation of ice breaking was categorized as high to very high across all measured indicators, while students' learning interest ranged from moderate to very high. These findings indicate that the implementation of ice breaking is effective in creating a more conducive learning environment, enhancing students' enthusiasm, maintaining their concentration, and fostering their learning interest. Therefore, ice breaking can serve as an alternative instructional strategy for teachers to improve the quality of Economics learning.

Keywords: Ice Breaking; Instructional Effectiveness; Learning Interest; Economics Learning; Senior High School

1. Introduction

Learning interest is one of the important factors that determines the quality of students' engagement in the learning process. Students with high learning interest tend to show attention, enthusiasm, and active participation throughout the learning activities, whereas students with low learning interest generally tend to be more passive, easily distracted, and less motivated to understand the material in depth. In the context of economics learning, learning interest becomes even more important because this subject not only requires mastery of concepts, but also the ability to analyze economic phenomena that are close to everyday life. Therefore, economics learning requires strategies that can sustain students' attention and engagement over an extended period.

Various studies show that students' interest in learning is influenced by internal and external factors. Internal factors include motivation, mental readiness, and students' curiosity, while external factors relate to the learning environment, instructional media, and the strategies used by the teacher Aris et al., (2024). Learning strategies that are monotonous and teacher-centered can reduce students' interest in learning because students only become recipients of information without meaningful involvement. Conversely, interactive and enjoyable learning tends to increase students' attention and interest in the material (Wardani et al., 2024). Therefore, teachers are required to create a learning atmosphere that is not only informative, but also able to foster engaging learning experiences for students.

The problem of low interest in learning is still a challenge across various levels of education, including at the upper secondary school level. The results of the initial observations during the implementation of the Field Introduction to School Practice (PLP) 2 in SMAN 14 Bone shows that some students are less active in learning economics. This is evident from students' low participation in asking questions, answering questions, and engaging in discussions during the learning process. In addition, some students appear to pay less attention to the teacher's explanations and are easily distracted by activities outside the learning session. This phenomenon indicates that the learning taking place has not fully been able to optimally attract students' attention and interest.

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One suspected cause of students' low interest in learning is related to the use of learning strategies that are less varied. Learning that continuously follows the same pattern can lead to boredom, especially in economics, a subject that contains many abstract concepts and requires high concentration. (Roseta, 2020) states that learning strategies that are less engaging can cause students to lose interest and involvement in the learning process. Therefore, strategies are needed that can refresh the classroom atmosphere and rebuild students' readiness to learn.

One of the strategies widely used to create a more relaxed and interactive learning atmosphere is ice breaking. Ice breaking is a short activity conducted at the beginning, middle, or end of learning to break the ice, reduce boredom, and bring students' attention back. This activity can take the form of chants, words of encouragement through clapping, simple games, light physical movements, or other interactive activities. (Dewita & Kadir, 2025) explains that ice breaking functions as a psychological stimulus that helps students be more ready to receive learning. In addition, ice breaking can also improve social interaction and student engagement during the learning process (Devi et al., 2022).

Several previous studies show that ice breaking has a positive effect on various aspects of learning. (Seftarini & Erdawati, 2025) found that implementing ice breaking can increase students' interest in learning through a more enjoyable and participatory learning atmosphere. (Astindari et al., 2022) report that ice breaking combined with other learning strategies is able to increase students' interest and activity in trigonometry material. Meanwhile, (Ningtyas & Sucahyo, 2023) shows that implementing ice breaking can improve students' concentration and readiness to learn, so that learning takes place more effectively and is more conducive.

Although the results of the study indicate the effectiveness of ice breaking, most of the research still focuses on the elementary education level or on specific subjects such as mathematics and religious education by Hazrullah & Chasanah, (2024). Research that specifically examines the implementation of ice breaking in economics learning at the senior high school level is still relatively limited. However, the characteristics of senior high school students differ from those of elementary school students because they tend to experience boredom more easily and need learning strategies that are more varied and suited to their psychological development Gulo et al., (2024). The limited research in the context of economics learning shows that there is a research gap that needs further development.

In addition, some previous studies have placed more emphasis on the effect of ice breaking on motivation or learning concentration, whereas the relationship between ice breaking and students' learning interest in economics learning has not been discussed specifically enough by Khadijah & Pohan, (2024). Meanwhile, learning interest has a broader set of dimensions because it includes feelings of enjoyment toward learning, interest in the material, attention and focus, active involvement, and the desire to learn. Therefore, research is needed to provide a more comprehensive picture of how the implementation of *ice breaking* is related to various indicators of students' learning interest in economics learning (Lena et al., 2023).

This study has novelty in its research focus, context, and analytical approach. First, it specifically examines the effectiveness of implementing ice breaking in increasing students' interest in learning in Economics subjects at the senior high school level. Second, the research is conducted in the context of schools in Bone Regency, which has not been widely studied in previous research. Third, this study analyzes effectiveness based on indicators of the implementation of ice breaking and students' interest in learning in a descriptive manner, thereby providing a more detailed empirical picture of the most prominent aspects in Economics learning (Haryati & Puspitaningrum, 2023).

Theoretically, this research contributes to the development of studies on learning strategies oriented toward increasing students' interest in learning Tutt, (2022). The findings are expected to strengthen the view that a pleasant and interactive learning atmosphere is an important factor in increasing student engagement. Practically, the results of this study can serve as a reference for Economics teachers in selecting and implementing more innovative learning strategies to reduce boredom and increase students' attention and participation throughout the learning process.

Based on the description above, this study aims to analyze the effectiveness of implementing ice breaking in increasing students' interest in learning in the Economics subject at SMAN 14 Bone.

2. Literature Review

2.1 Interest in Learning in Economics Instruction

Learning interest is one of the psychological aspects that plays an important role in determining the success of the learning process. Learning interest reflects an individual's tendency to pay attention, feel pleased, and become actively involved in learning activities. Students with high learning interest generally show strong curiosity, stay more focused

during the learning process, actively participate in discussions, and have strong motivation to achieve optimal learning outcomes. Conversely, low learning interest can cause students to pay less attention to the material, be passive in learning, feel bored easily, and even experience difficulties in understanding the concepts being studied.

In learning Economics, interest in learning is a very important factor considering the characteristics of this subject require the ability to think logically, analytically, and to understand various economic phenomena that occur in everyday life. Economics material is not only oriented toward mastering concepts, but also requires students' ability to analyze problems and make decisions based on economic principles. Therefore, teachers are expected to be able to create an engaging learning atmosphere so that students maintain their focus and enthusiasm throughout the learning process.

According to Wardani et al., (2024), interest in learning can be identified through several indicators, namely feelings of enjoyment in taking part in learning, interest in the subject matter, attention during the learning process, active involvement in learning activities, and the desire to keep learning. These five indicators illustrate that interest in learning is not only related to affective aspects, but is also reflected in students' behavior during the learning process.

Students' interest in learning is influenced by various factors, both those originating within the students themselves and those from the learning environment. Internal factors include motivation, psychological conditions, readiness to learn, and students' self-confidence. Meanwhile, external factors include teachers' competence, teaching methods, instructional media, the classroom environment, and the interactions that occur during the learning process. Among these various factors, the teaching strategy used by the teacher is one of the most crucial factors in building students' interest in learning.

2.2 Ice Breaking as a Teaching Strategy

One teaching strategy that can be used to increase students' interest in learning is the implementation of ice breaking. Ice breaking is a brief activity designed to create a pleasant learning atmosphere, reduce boredom, and restore students' concentration during the learning process. This activity not only serves as entertainment, but also becomes part of a teaching strategy that can build students' psychological readiness before receiving the lesson material.

According to Dewita & Kadir, (2025), ice breaking is a simple activity carried out before, during, and after the learning process to create a more conducive classroom atmosphere, increase students' enthusiasm for learning, and restore students' focus on the material being studied. This view is supported by Devi et al., (2022), who state that implementing ice breaking can improve interaction between teachers and students, create more active learning, and maintain students' learning motivation throughout the learning process.

The effectiveness of implementing ice breaking strongly depends on how well it aligns with the learning objectives. Ice breaking that is designed appropriately not only helps to lighten the classroom mood, but also serves as a medium that supports achieving the learning objectives. Anuranti et al., (2021), explain that effective ice breaking must be related to the learning material, be able to increase students' enthusiasm, encourage active involvement in the learning process, improve concentration, and provide motivation to students.

In practice, ice breaking can be carried out through various forms of activities, such as educational games, clapping to encourage enthusiasm, simple movements, short quizzes, as well as other collaborative activities tailored to the characteristics of students and the learning material. Through these activities, students are expected to reduce boredom, maintain focus on the material, and be better prepared to take part in the next learning process.

2.3 Previous Research

Various studies have shown that implementing ice breaking has a positive impact on the quality of the learning process. Seftarini & Erdawati, (2025), found that applying ice breaking can increase elementary school students' interest in learning by creating a more enjoyable and interactive learning atmosphere. The results of this study indicate that

students become more enthusiastic, more actively involved in participation, and better able to concentrate during the learning process.

Another study conducted by Astindari et al., (2022) shows that using ice breaking in mathematics instruction has a positive effect on increasing students' interest in learning the trigonometry material. Ice breaking can reduce learning boredom so that students are more active in taking part in the learning and more easily understand the material delivered by the teacher.

In addition, Ningtyas & Sucahyo, (2023) also reported that ice breaking contributes to improving students' concentration and engagement during the learning process. Short activities carried out during teaching have been shown to restore students' focus so that the learning process becomes more effective.

Although these various studies show positive results, most research still focuses on the elementary school level and on subjects other than Economics. Research on the effectiveness of implementing ice breaking to increase students' interest in learning in the Economics subject at the senior high school level is still relatively limited. This indicates that further research is still needed to provide empirical evidence regarding the effectiveness of this strategy in the context of Economics learning.

2.4 Research Gap and Novelty of the Study

Based on theoretical studies and the results of previous research, it can be seen that ice breaking has the potential to increase students' motivation, concentration, engagement, and interest in learning. However, there are still some research gaps. First, most previous studies were conducted at the primary education level, so their results cannot be fully generalized to upper secondary school levels. Second, earlier research has mostly examined the effect of ice breaking on learning motivation or learning outcomes, whereas research that specifically measures its effectiveness on learning interest in Economics subjects is still very limited. Third, the characteristics of Economics learning, which require analytical thinking skills, call for instructional strategies that can sustain students' attention and engagement on an ongoing basis.

Based on these gaps, this study offers novelty by analyzing the effectiveness of implementing ice -breaking in increasing students' interest in learning in Economics at SMAN 14 Bone. This study measures the effectiveness of ice -breaking using indicators of alignment with the learning material, increased learning enthusiasm, active student involvement, improved concentration, and providing motivation. Meanwhile, learning interest is analyzed through indicators of feelings of enjoyment, interest in the material, attention, active involvement, and the desire to learn. Therefore, this study is expected to provide empirical contributions to the development of more effective learning strategies in improving the quality of Economics learning at the upper secondary school level.

3. Research Method and Materials

This study uses a quantitative approach with an ex post facto design to analyze the effectiveness of the implementation of ice breaking in increasing students' interest in learning in the Economics subject. The ex post facto design was chosen because the research was conducted on conditions that had already taken place without providing any treatment or manipulation of the research variables. Through this approach, the researcher examines the relationship between the implementation of ice breaking as the independent variable and students' interest in learning as the dependent variable based on the actual conditions occurring in the learning process.

The research was conducted at SMAN 14 Bone, Bone Regency, South Sulawesi, in the even semester of the 2025/2026 Academic Year, from February to June 2026. The selection of the research location was based on the consideration that the school had implemented ice breaking in learning Economics, so it aligns with the research objectives.

The research population consists of all students in class X of SMAN 14 Bone, totaling 259 students spread across eight classes. The research sample was determined using purposive sampling technique, namely the technique of determining the sample based on certain criteria relevant to the research objectives. Based on these criteria, class X.5, consisting of

32 students, was selected because this class had implemented ice breaking in Economics learning, so it was considered capable of providing information consistent with the focus of the study.

This study involves two variables, namely the implementation of ice breaking as the independent variable (X) and students' interest in learning as the dependent variable (Y). The ice-breaking implementation variable is measured through five indicators, namely alignment with the learning material, the ability to increase students' enthusiasm, activating and involving students, improving concentration and focus, and providing a motivational impact. Meanwhile, the students' learning interest variable is measured through five indicators, namely feelings of pleasure toward learning, interest in the material, attention and focus, active involvement, and the desire to learn.

Data collection was carried out through observation, documentation, and questionnaires. Observation was used to obtain an overview of the implementation of Economics learning and the application of ice breaking in the classroom. Documentation was utilized to supplement research data related to the school profile and research activities. Meanwhile, the questionnaire was used as the main instrument to measure students' perceptions of the implementation of ice breaking and their interest in learning. All statement items were prepared using a five-point Likert scale, ranging from Strongly Agree (SA) to Strongly Disagree (SD).

Before being used as a research instrument, the questionnaire is first tested for its quality through tests of validity and reliability. The validity test is conducted using Pearson's Product Moment correlation to determine the ability of each statement item in measuring the construct under study. An item is declared valid if the correlation coefficient value is greater than the r table value at the specified significance level. Next, the reliability test is carried out using Cronbach's Alpha coefficient to test the instrument's internal consistency. The testing results show that all instruments meet the criteria for being valid and reliable, making them suitable for use in the research data collection process.

The research procedure is carried out systematically through several stages, namely research preparation, development of the instrument, testing the instrument's validity and reliability, data collection, and processing and analysis of the data. In the preparation stage, the research location is determined, permissions are obtained, and the population and sample are defined. The next stage is developing the instrument based on the indicators of each variable, followed by testing the instrument before it is distributed to respondents. After the data are collected, all data are coded, tabulated, and processed using statistical software to obtain objective research results that can be scientifically accounted for.

Data analysis was conducted using descriptive statistics to describe the level of effectiveness of implementing icebreaking and students' interest in learning. The results of the questionnaire data were analyzed through frequency distribution and percentages, then interpreted based on effectiveness criteria consisting of categories of very high, high, moderate, low, and very low. This approach is used to provide an empirical overview of the effectiveness of implementing ice-breaking in increasing students' interest in learning in the Economics subject at SMAN 14 Bone.

4. Results and Discussion

This study involved 32 students of class X.5 SMAN 14 Bone as respondents. All research instruments have met the criteria for validity and reliability, so they are suitable for measuring the effectiveness of implementing ice breaking and students' interest in learning. The research data were analyzed using descriptive statistics through frequency distributions and percentages to describe the level of effectiveness for each research indicator.

4.1 Characteristics of Respondents

The characteristics of the respondents are presented based on gender. Among all participating respondents, the number of female students is higher than that of male students. This composition indicates that the research data were obtained from respondents with relatively diverse characteristics, enabling a picture of the implementation of ice breaking and students' interest in learning in the Economics subject.

4.2 Effectiveness of Implementing *Ice Breaking*

The results of the descriptive analysis show that the implementation of ice breaking in Economics learning at SMAN 14 Bone obtained a high to very high category across all measured indicators. A summary of the research results is presented in Table 1.

Table 1 Summary of the Ice Breaking Implementation Variables

No	Indicator	Category
1	Suitability with the learning material	Very High
2	Increasing students' enthusiasm	Very High
3	Encouraging students' active participation and engagement	High
4	Improving students' concentration and focus	Very High
5	Memberikan dampak motivasional	High

Source: Processed research data, 2026.

Based on Table 1, most of the indicators for implementing ice breaking fall into the very high category. These findings indicate that ice breaking has been applied in line with the learning material, is able to build students' enthusiasm, and helps improve concentration and focus during the learning process. On the other hand, indicators related to students' active involvement and motivational impact are in the high category, which suggests that the implementation of ice breaking also contributes to encouraging students' participation and learning motivation during learning activities.

4.3 Students' Learning Interest

Students' learning interest is analyzed based on five indicators that reflect the affective and behavioral aspects of students in following Economics learning. The recap results show that students' learning interest level is in the moderate to very high category, as presented in Table 2.

Table 2 Summary of Students' Interest Variables in Learning

No	Indicator	Category
1	Enjoyment of the learning process	Very High
2	Interest in the learning material	Very High

3	Attention and focus	High
4	Active participation	Moderate
5	Willingness to learn	High

Source: Processed research data, 2026

As shown in Table 2, the indicators of feeling happy about learning and interest in the material are categorized as very high, indicating that students have positive responses to the Economics learning process. In addition, the indicators of attention and focus as well as the desire to learn are in the high category, suggesting that students can maintain their attention during learning and show encouragement to keep studying. Meanwhile, the indicator of active engagement is in the moderate category, so there is still room to improve students' participation in learning activities.

4.4 Main Research Findings

Overall, the results of the descriptive analysis show that the implementation of ice breaking has a high level of effectiveness in supporting an increase in students' interest in learning in the Economics subject at SMAN 14 Bone. Indicators related to the suitability of ice breaking to the learning material, increased enthusiasm, and increased concentration all fall into the very high category, while aspects of student involvement and motivational impact are in the high category. In the learning interest variable, the indicators for feeling happy and interest in the material are in the very high category, while attention, focus, and the desire to learn are in the high category, and active involvement is in the moderate category. In general, these findings indicate that the implementation of ice breaking can create a more conducive learning atmosphere and support the growth of students' interest in learning in the Economics subject.

4.5 Discussion

The research findings show that implementing ice breaking has a high effectiveness in increasing students' interest in learning in the Economics subject at SMAN 14 Bone. These findings indicate that ice breaking not only functions as a refreshing activity to improve the classroom atmosphere, but also serves as a learning strategy capable of creating a more conducive, interactive, and student-centered learning environment. This condition allows students to maintain their attention, reduce boredom during the learning process, and increase their readiness to receive the material delivered by the teacher. Thus, the implementation of ice breaking contributes to creating a more effective and meaningful learning process.

Theoretically, the results of this study are in line with learning theory that emphasizes the importance of psychological aspects in the learning process. According to the learning interest theory, interest is an individual's tendency to give continuous attention to an activity accompanied by feelings of enjoyment. When students have a high level of interest in learning, they tend to show greater attention, participate actively, and have the motivation to understand the material more deeply. In this context, the application of ice breaking acts as a stimulus that can build positive emotional conditions, making students more prepared to take part in learning activities. Fun, interactive activities that fit students' characteristics can reduce boredom and increase students' engagement throughout the learning process.

The high effectiveness of implementing ice breaking also shows that learning strategies that consider students' psychological conditions play an important role in improving the quality of learning. In the Economics subject, students are faced with various abstract concepts and need analytical thinking skills. If the learning process takes place monotonously, students tend to lose focus, so their interest in learning decreases. In contrast, applying ice breaking at the right time can restore students' focus, increase learning energy, and create a more dynamic classroom atmosphere. These conditions enable students to understand the material more easily because they are in a more mentally and emotionally prepared state.

The findings of this study align with the results of Seftarini & Erdawati, (2025), which states that implementing ice breaking can increase students' learning interest by creating a pleasant and interactive learning atmosphere. The similarity between this study lies in the increase in students' enthusiasm and attention after the teacher applies ice breaking activities. Both studies show that learning interspersed with refreshing activities can reduce boredom, making students more active in taking part in the learning process.

This study also supports the findings of Astindari et al, (2022), who reported that the use of ice breaking positively affects students' increased interest in learning. That study explained that ice breaking activities can create a more enjoyable learning atmosphere, making students more able to concentrate and understand the material they are learning. The similarity between the two studies lies in the role of ice breaking in building students' engagement during instruction. However, this study differs in its research context. Astindari et al. investigated Mathematics instruction, while this study focuses on Economics as a subject at the senior high school level. The difference in context shows that the effectiveness of ice breaking is not limited to particular subjects, but can also be applied to Economics learning, which has different characteristics of the material.

Furthermore, the results of this study strengthen the research by Ningtyas & Sucahyo (2023), which concluded that ice breaking can increase students' concentration during the learning process. In this study, the indicators of increased concentration obtained a very high category, indicating that ice-breaking activities help students maintain their focus on the learning material. The similarity between the two studies shows that concentration is one of the important aspects influenced by the implementation of ice breaking. However, this study makes a broader contribution because it not only examines concentration, but also evaluates students' interest in learning through several indicators that reflect the affective and behavioral aspects of students.

Even so, this study also shows that the indicator of students' active engagement has not reached the same category as the other indicators. This condition indicates that an increase in interest in learning is not always followed by an optimal increase in active participation. This may be influenced by various factors, such as students' individual characteristics, self-confidence, communication skills, and the learning culture in the classroom. Therefore, the implementation of ice breaking needs to be integrated with other learning strategies that encourage collaboration, discussion, and active participation so that all aspects of students' interest in learning can develop more optimally.

From a practical perspective, this study's findings imply that Economics teachers need to use ice breaking as part of the learning strategy, not merely as a filler activity. Teachers should choose the form of ice breaking that is relevant to learning objectives, the characteristics of the material, and students' conditions so that the activity can effectively support the achievement of learning goals. In addition, schools can use the results of this research as one of the bases for developing teacher training on active learning strategies that are able to increase students' engagement and interest in learning.

Academically, this research contributes to the development of studies on innovative learning strategies, particularly in Economics learning at the senior high school level. Most previous studies have mainly discussed the effect of ice breaking on learning motivation, learning outcomes, or were conducted at the elementary education level. This study expands the scope by focusing the analysis on the effectiveness of implementing ice breaking on students' learning interest in Economics at high school (SMA), using comprehensive indicators. Thus, this research adds empirical evidence that ice breaking not only functions to create an enjoyable learning atmosphere, but also contributes to building students' learning interest more comprehensively.

The novelty of this study lies in its analytical focus on the effectiveness of implementing ice breaking in increasing students' interest in learning in Economics instruction at SMAN 14 Bone through five indicators of the effectiveness of ice breaking and five indicators of students' interest in learning. Unlike previous studies, which generally assess the effect of ice breaking on motivation or learning outcomes, this study provides an empirical picture of how ice breaking contributes to various dimensions of students' learning interest. These findings enrich the literature on the implementation of active learning strategies in the context of Economics instruction while also providing empirical support for teachers to integrate ice breaking more systematically into the learning process.

5. Conclusion

This study aims to analyze the effectiveness of implementing ice breaking in increasing students' learning interest in the Economics subject at SMAN 14 Bone. Based on the results of the analysis, it can be concluded that the implementation of ice breaking is an effective learning strategy for creating a more conducive learning atmosphere, increasing enthusiasm, maintaining concentration, and encouraging the growth of students' learning interest. These findings show that ice breaking not only functions as a class-mood refreshing activity, but also becomes part of a learning strategy that can support students' engagement throughout the learning process.

This study provides empirical contributions to the development of research on active learning strategies, particularly in Economics instruction at the senior high school level. The results strengthen the evidence that implementing ice breaking can be one alternative learning strategy that supports increasing students' learning interest through instruction that is more interactive, enjoyable, and student-centered. Therefore, teachers are expected to be able to integrate ice breaking in a planned manner and tailored to the objectives and characteristics of the learning material so that its benefits can be felt optimally.

This study still has limitations because it was conducted in only one school with a relatively limited number of respondents and used descriptive statistical analysis, so the results cannot be generalized widely. In addition, this study only focuses on the variable of learning interest without examining its influence on other aspects, such as learning motivation, learning outcomes, or students' thinking skills.

Based on these limitations, further research is recommended to involve a larger number of respondents, include schools with different characteristics, and use a more comprehensive research design and analysis techniques. Future studies may also examine the effectiveness of ice breaking on other learning variables, so that a deeper understanding of the contribution of this strategy in improving the quality of learning can be obtained.

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