



# Clap-Breathe-Count: Using Ice-Breaking Ma-Te-Ma-Ti-Ka to Increase High School Students' Learning Motivation

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## Abstract

Establishing an optimal learning environment is a crucial element in garnering undivided attention from kids. Assuming that the classroom environment may be made more favorable. Under such circumstances, students may experience feelings of boredom, fatigue, lack of concentration on the instructor, drowsiness, and engage in conversations with their peers, particularly given the observed manifestation of learning-related anxiety among students. Ice Breaking is a dynamic educational tool that emphasizes elements of innovation, creativity, and futurism. The objective of this study is to elucidate the utilization of ice-breaking techniques in the academic context with the purpose of enhancing the motivation to learn among eleventh-grade students at SMA Negeri 1 Pasuruan. The present study employs a descriptive qualitative methodology. The participants of this study consisted of pupils in the ninth grade. The data collection strategies used in this study encompassed interviews, observation, and documentation. Data analysis encompasses many methodologies for reducing and summarizing data, as well as approaches for effectively presenting the findings and drawing meaningful conclusions. The findings of this study indicate that the absence of ice-breaking activities in prior learning experiences resulted in a significant decline in student engagement and interest, leading to a sense of monotony and disinterest in the learning process. Nevertheless, the implementation of ice-breaking techniques in educational settings elicits positive emotions and enhances student motivation, hence fostering an engaging and pleasurable learning environment. Ice-breaking activities are widely recognized as highly helpful in improving student motivation towards learning.

**Keywords:** Ice Breaking; Learning Anxiety; Learning Motivation; Mathematics.

## Introduction

The objective of national education, as delineated in the Republic of Indonesia Law Number 20 of 2003 (Dai, 2020; Gang, 2022), is a deliberate and systematic endeavor to establish an educational environment (Lu, 2022; C. Wang, 2021). An instructional approach that enables students to actively cultivate their inherent capacities in terms of religious and spiritual fortitude (Kim, 2023; C. Sun, 2022), self-regulation (Tae, 2020), character (Dong, 2019), intellect, virtuous ethics, and the requisite proficiencies for personal, societal, national, and state advancement. As a result, teachers and other instructional staff must be professional in order to get students excited about learning and be able to come up with ways to make learning experiences that are both complete and meaningful.

Establishing an optimal learning environment is a crucial element in garnering undivided attention from kids. A suitable classroom climate can prevent students from experiencing boredom, lack of focus on the teacher, drowsiness, and engaging in conversations with their peers (Ding, 2020; Gu, 2022; Li, 2023; Peng, 2019). Consequently, educators may require assistance in comprehending the subject matter in order to effectively convey it to students, despite the fact that the content has already been presented. Educators need to carefully select suitable strategies and methodologies to cater to the needs of students who exhibit a greater demand for motivation in order to engage in the learning process actively (Hannon, 2019; S. Sun, 2021). A method refers to a tool or approach utilized to attain goals and facilitate successful learning. There are various strategies that educators can employ to address the issue of student inactivity and redirect their focus toward the learning process. Among these approaches is the utilization of the ice-breaking method (B. Wang, 2023; Yao, 2022).

The utilization of ice-breaking techniques in literary studies has been found to be an effective strategy for educators to enhance student engagement (Bock, 2018; Denis, 2005), motivation (Feng, 2018), and active participation in the learning process (Filgona et al., 2020; Maghfiroh et al., 2023). According to increased student enthusiasm for active involvement in both academic and extracurricular activities (Dickerson, 2017), the use of ice-breaking techniques among senior secondary school (SMA) students has produced positive results (Isoard-Gauthier, 2022; Osman, 2020). According to a study (Evansluong, 2019), the use of ice-breaking activities has proven effective in addressing student boredom during the learning process.

Researchers used observational methods to evaluate the learning environments of students in mathematics. Based on what was seen firsthand at Pasuruan 1 State Senior High School (SMA), it is clear that the current way of teaching math needs a wider range of teaching methods and strategies. Consequently, this deficiency has had an adverse impact on students' learning experiences, as they have exhibited a lack of engagement with the subject matter and have expressed feelings of boredom during instructional sessions. Additionally, it has been observed that students often show learning anxiety, stress, bewilderment, tiredness, and lack of focus during their participation in mathematics classes. During the interviews performed with students in the eleventh grade, it was observed that the prevailing perception among them was that mathematics primarily involves the processes of memorization, problem-solving, and calculation. The task at hand presents challenges and needs more engagement.

Furthermore, upon conducting preliminary observations, it was observed that students needed more comprehension of previously taught topics. Observable behaviors such as frequent joking by students during class times, frequent entry and exit from the classroom while class is in session, casual and non-academic conversations between students, and instances of disruptive noise occurring inside the classroom during class times are examples of this. The process of learning occurs. So, the author wants to look at a way of teaching in the field of education—namely, how the Ice Breaker method can be used to teach math—as a way to deal with the problems that come up in school settings. The objective is to foster increased motivation among students in their engagement with the subject matter.

Extensive study has been conducted on the utilization of the icebreaking technique as a means to enhance student motivation in the context of mathematics education. This study distinguishes itself from other research by focusing specifically on the domain of mathematics education. The study was carried out in SMA Negeri 1 Pasuruan, namely in class XI-1. The utilization of ice-breaking activities in the classroom was primarily limited to being a supplementary tool within the context of mathematics education rather than being an integral component of the core curriculum. In addition to this, teachers incorporate mathematical information into their pedagogical practices. Humor can be found in instances where amusing and uncomplicated actions elicit laughter from students, therefore alleviating previously strained circumstances.

Moreover, the icebreaking exercises conducted are also associated with educational endeavors since they serve the purpose of dividing students into groups within the classroom setting. The vocabulary employed is derived from the subject matter currently being instructed, specifically circles. In addition, it is worth noting that the employed methodology lacked a control group due to the utilization of a single class. To make things even more interesting, the icebreaking method has yet to be used in this class as a way to encourage new ways of learning. Ice-breaking activities are also used with the purpose of mitigating potential discomfort or unease among students and

teachers, as well as fostering a positive social atmosphere among students themselves. The author's main research project is an experiment called "The Utilisation of Ice-Breaking Activities to Improve Student Motivation in Mathematics among Grade XI Students at SMA Negeri 1 Pasuruan." This study is affected by the topic's background.

### Theoretical Study

According to (Z. Chi, 2021; Peng, 2019) study, ice-breaking is a game or activity that reduces the initial social tension in a group. In his book, Ucu Sulastri introduces the concept of "Ice Breaking" as a means of transitioning from a dull, lethargic, and stressful atmosphere to a lively and enjoyable one through the use of uncomplicated games. According to (Y. Zhang, 2021), This game is an activity that is universally loved by all demographic groups (Lopez, 2019), irrespective of their characteristics or backgrounds. The limitation of age can arise due to the fact that individuals may experience boredom throughout the learning process (G. Wang, 2022), hence desiring a more enjoyable and conducive learning environment.

According to a variety of viewpoints, educators use ice-breaking as a pedagogical strategy to break up the monotonous atmosphere in the classroom and reenergize students' engagement and enthusiasm for the learning process (Axelsson, 2021; A. W. Zhang, 2023). This implies that an educator can cultivate an environment that fosters student engagement and rekindles their enthusiasm for the learning process.

The utilization of ice-breaking activities proves to be highly beneficial in rejuvenating students' cognitive faculties and cultivating a renewed sense of eagerness toward the pursuit of knowledge (Z. Sun, 2023). Ice-breaking interludes are deemed essential in activities that demand participants' focus and concentration, such as seminars and workshops, similarly within the realm of education. According to the (Tang, 2021) book on the function of Ice Breaking, it can be observed that Ice Breaking serves the purpose of stabilizing the concept and facilitating a return to the alpha condition. However, educators must exercise caution while selecting an appropriate icebreaker activity. This implies that it is important to avoid allocating class time for ice-breaking activities. The practice of ice-breaking, commonly employed in training or outbound activities, should be distinguished from ice-breaking techniques utilized within a classroom setting. One of the challenges faced by educators is the task of gathering icebreakers.

The utilization of ice-breaking activities in educational settings is beneficial as it fosters a renewed sense of enthusiasm among students toward the learning process. Moreover, it ensures that valuable learning time is not squandered. According to Ucu (Shao, 2020), the utilization of ice-breaking activities within the field of education should possess an educational purpose in order to enhance the retention of instructional content. Hence, highly innovative educators consistently establish a dynamic and enthusiastic environment through the implementation of engaging ice-breaking strategies. According to (R Darmayanti et al., 2023), In order to foster a genuine desire for learning among students, innovative educators employ strategies that emphasize positive reinforcement rather than relying on coercive measures.

Various forms of ice-breaking games can be observed, replicated, and adapted in the following manner: The topic of interest pertains to games. Games, whether digital or physical, are a form of ice-breaking activity that tends to elicit high levels of excitement among pupils. The engagement of students during gameplay is likely to result in a heightened sense of novelty and increased levels of enthusiasm. According to (Nazarova, 2022), The sensation of drowsiness dissipates, and indifference transitions into spontaneous engagement. Games create a dynamic environment that fosters favorable conditions for

learning. When selecting icebreaker games for educational purposes, teachers should consider many elements such as safety, time management, equipment availability, and instructional value.

### Research Method

This study employs a descriptive-qualitative research methodology. The objective of this qualitative research is to describe a learning process activity that has not used ice-breaking techniques (Darmayanti et al., 2023). The researcher employs ice-breaking tactics in the classroom as a primary tool, followed by data collection techniques utilizing triangulation (Arif et al., 2022; Astuti et al., 2023). The analysis of the data is qualitative in nature, and the outcomes of the qualitative study prioritize the interpretation of meaning rather than generalization (Sugiyono, 2018). The utilization of a qualitative-

descriptive methodology is widely regarded as more efficacious due to its ability to yield thorough data, which researchers find valuable. The participants of this study consisted of students from class XI-1, who were identified as the primary sources of information for this research.

The research in question utilizes primary data sources, namely obtained through interviews and observations conducted directly with relevant sources, pertaining to learning activities within the classroom. Subsequently, employ secondary data sources, specifically derived from documentation and researchers' field notes acquired during the site visit. Subsequently, the researchers collected data through interviews, observations, and documentation, which were subsequently subjected to interactive data analysis. The data analysis method can be seen in Figure 1.

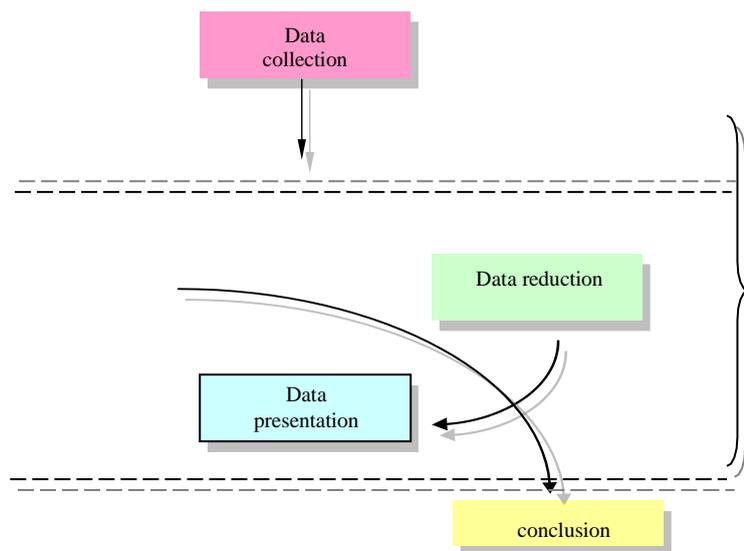


Figure 1. analysis method (Hasanah et al., 2022)

The data analysis process incorporates the Milles & Huberman (2005) paradigm, as referenced by Ilyas (2016). This model encompasses three key stages: data reduction, data presentation, and conclusion. During the reduction phase, data is collected from interviews, observations, and documentation. The data-gathering phase encompasses the processing of data through the careful selection of information acquired from the study. Subsequently, during the phase of finishing the interpretation of study findings, conclusions are derived.

### Results and Discussion

The objective of this study is to enhance students' enthusiasm to learn through the use of ice-breaking activities inside the teaching and learning process. According to the assertion made by (Fauza et al., 2022), learning can be understood as a deliberate endeavour undertaken by an individual to bring about a comprehensive transformation in their character, which arises from their own experiences and interactions with the surrounding environment. Hence, the utilization of ice-breaking techniques in educational activities enhances students' motivation to learn (Afifah et al., 2022; Sefira et al., 2024), enabling them to assimilate the instructional content and foster personal development effectively. There exist numerous potential strategies for enhancing the enjoyment of learning, one of which is educators or teachers employing innovative icebreakers inside the instructional framework.

Various icebreakers can be employed in continuous learning events. The study conducted by (Asgafi et al., 2023; Cahyadi et al., 2023) examined many categories, including different sorts of vocal expressions, variations in applause, genres of songs, diverse forms of

physical exercises, various styles of humour, interactive games involving jeans (Abidin et al., 2023; Jayanti et al., 2023), narrative genres, different approaches to magic, and a range of audio-visual presentations.

*Ice breaking is a vocal expression employed to foster a sense of camaraderie and enthusiasm among individuals*

Vociferations are linguistic expressions that elicit fervor or drive through a resolute, sonorous, yet significant vocal modulation. Vocalizations can be produced through deliberate movements of bodily appendages concomitant with the articulation of words intended to inspire or encourage. The vocal expressions of a collective assembly serve to foster and amplify enthusiasm. In addition to fostering motivation, chants have the potential to manifest as a defining attribute of a collective entity, serving as a medium through which their thoughts and ingenuity can be articulated. Scout chants are commonly employed as a means to foster squad cohesion, as they are typically performed collectively. The modification of rhymes can generate these chants to align with famous songs or through the deliberate creation of original content by the team, showcasing their creative abilities. The implementation of engaging chants is likely to enhance team spirit and foster a sense of unity among team members. During the Multi-Purpose Learning System (MPLS), students engage in collaborative and enjoyable activities. Despite their seemingly inconsequential nature, these chants serve a significant purpose in fostering heightened enthusiasm. In competitive settings, it is common for groups to enhance the atmosphere by vocalizing slogans in order to foster a sense of camaraderie and unity among team members.

The essence of learning encompasses the internal endeavors that

initiate learning activities, maintain their continuity, and offer guidance toward achieving educational objectives. Extrinsic motivation plays a significant part in the teaching and learning process by cultivating a sense of passion, emotional engagement, and enthusiasm toward learning, motivating students to pursue the attainment of educational objectives actively. The presence of both intrinsic and extrinsic motivation is crucial in educational pedagogy and the process of acquiring knowledge.

Motivation plays a crucial role in the attainment of predetermined learning objectives. The genesis of motivation is not exclusively derived from students themselves; rather, teachers must actively engage in fostering motivation for student learning. Motivation catalyzes instilling passion among students, so enabling them to ascertain the trajectory of their educational pursuits. As an illustration, the instructor utters the phrase "small circles, small circles, small circles" while manipulating his digits to delineate a circular shape.

The teacher inquired about the shape of various objects, such as a coin or a dinner plate, specifically referencing a circle, while gesturing towards the students to proceed with their comments.

The presence of a drinking bottle is observed, and it is noted that there is another drinking bottle. The inquiry pertains to the whereabouts of the circular form. The instructor inquired of the remaining students to demonstrate which of the bottle forms possessed round attributes. Additionally, educators can cultivate various alternative methods of vocal expression

#### *The utilization of ice-breaking techniques as a Humor*

Humor is a comedic approach employed to elicit amusement, contentment, and laughter among children. Humor is a form of amusement that elicits laughter and entertainment from others. According to Eysenck's seminal work in 1972, Humor is a phenomenon that elicits laughter. According to Munandar (1996), Humor can be conceptualized as a stimulus that elicits a reflexive response of laughter (Mendiburo-Seguel, 2020), aligning with Eysenck's description. The utilization of Humor in teaching initiatives is pedagogically beneficial. According to (Olah et al., 2022), the presence of a well-developed sense of Humor among students might contribute to a positive learning environment characterized by a lack of psychological stress or strain. Teachers who possess a well-developed sense of Humor are likely to exert a beneficial impact on pupils, enhancing their receptiveness to instructional content and fostering diverse learning experiences within the classroom setting. According to (Ruch, 2018), the incorporation of Humor in educational settings can significantly impact student engagement and learning outcomes. Therefore, teachers must employ creative strategies that effectively integrate Humor into the learning process.

Humor or jokes can manifest through verbal or non-verbal means. Humor possesses the capacity to alleviate muscular stiffness and tension resulting from the repetitiveness and tedium of boring routines. Humor possesses the capacity to invigorate and rejuvenate cognitive processes, hence inducing a state of relaxation and contentment among students.

How significant is the role of Humor and ice-breaking activities in the process of learning? The act of ice-breaking elicits a cognitive response associated with learning. The acquisition of learning responses has the potential to empower students emotionally in the context of their learning experiences (Dionigi, 2022; Torres-Marín, 2022). Do all instructional sessions incorporate a stimulus that fosters a sustained desire for learning among students, leading to the creation of tangible outcomes that can be applied in real-world contexts in the future?

Students can engage in educational tasks within a comfortable and pleasurable environment. The disease above is distinguished by a countenance that displays signs of cheerfulness, including smiling and even laughter. Humor and ice-breaking can serve as effective strategies for transitioning from a state of boredom, sleepiness, tedium, and tension to one of relaxation, enthusiasm, alertness, and enjoyment in the context of a classroom setting.

The utilization of Humor and ice-breaking techniques has the potential to foster a sense of intimacy and rapport between educators and their students. The utilization of Humor and ice-breaking techniques has the potential to alleviate tension and create a more relaxed environment. Children often exhibit a preference for engaging in games or play activities, as their cognitive and social development is intricately intertwined with the realm of play. There exists a multitude of perspectives suggesting that if a student possesses a favorable disposition toward a teacher, it follows that the learner would inherently exhibit a positive inclination toward the subject matter being taught. Students are more likely to readily embrace a subject that is presented in a straightforward and accessible manner. As exemplified by the adage, "if one harbors affection for a particular endeavor (such as work), that endeavor (such as work) will reciprocate with affection."

The human brain reaches a state of saturation after approximately 15 to 20 minutes, hence necessitating the need for refreshment in order to facilitate optimal learning. The brain is capable of occasionally and incompletely processing information beyond the duration of these minutes. In examining our behavior, it is evident that when we participate in seminars or training sessions, we anticipate the inclusion of an icebreaker activity. This expectation arises from our inherent inclination towards such activities, which is observed right from the outset of the training program. The remaining portion of a child's existence primarily revolves around the realm of play. Engaging in ice-breaking activities can serve as a means for youngsters to rejuvenate their enthusiasm and regain their willingness to engage in the learning process. In the absence of external influence, if the child's will originates internally, there is no presence of coercion exerted by any party. The phenomenon under consideration will have a fluid-like behavior. The presence of a resilient and positive mindset can foster the achievement of favorable outcomes as well. The youngster will have an awareness of the learning process.

Based on an examination of teaching activities observed over many class meetings in XI-1 at SMA Negeri 1 Pasuruan. Hence, the implementation of ice-breaking activities for students in class XI-1 at SMA Negeri 1 Pasuruan can be utilized as a means to enhance their desire towards studying. Facilitate students' focus during study sessions and enhance their comprehension of icebreakers, which serve to alleviate tense circumstances and foster heightened passion for learning among students. There exist two distinct categories of ice breaking applications that contribute to the enhancement of learning motivation: those that are deployed spontaneously throughout the learning process, and those that are premeditated and strategically planned (Drewniak, 2021; Gunawan et al., 2023).

The spontaneous incorporation of ice breaking activities within the ongoing learning process. This is, undoubtedly, in the absence of any deliberate planning or preparations made by the instructor. A teacher who demonstrates responsiveness to the adverse circumstances faced by their students will promptly initiate appropriate measures. An icebreaker activity has been identified as a potential strategy to enhance students' motivation in the learning process, based on observations and interviews conducted with instructors and students from XI-1 SMA Negeri 1 Pasuruan. The aforementioned statement was explicitly made by the instructor of the fourth-grade class during the interview.

In the context of continuous learning endeavors (W. Chi, 2018; Pons, 2018), I have incorporated the utilization of ice-breaking techniques. This is due to the inherent likelihood of youngsters experiencing boredom when acquiring knowledge or engaging in the learning process. Hence, I intermittently incorporate ice-breaking activities into the process of instruction and knowledge acquisition. In upper-level classes, a strategy I have employed for fostering engagement and interaction is a modified version of the word connect game (W. Chi, 2020; Citroesmi, 2022). Ice breaking activities have been found to have a significant positive influence on the learning process, particularly in situations where children are beginning to exhibit signs of boredom and disengagement, such as resting their heads on the table. Subsequently, the instructor employs ice-breaking techniques. Furthermore, the implementation of ice breaking activities has been found to effectively enhance children's motivation to learn, particularly in cases where the child initially exhibits low levels of engagement, lethargy, drowsiness, and occasional daydreaming. Nevertheless, following the icebreaker activity, the children will experience a renewed sense of energy and eagerness to engage in the learning process. Upon the teacher's delivery of the lesson, the youngsters will regain their focus.

The integration of icebreaking activities into the ongoing learning process in a spontaneous manner. This phenomenon occurs due to the absence of intentional strategizing or premeditation on the part of the educator. A teacher who has a proactive approach to addressing adverse circumstances experienced by their children will promptly implement suitable measures. Based on observations and interviews performed with teachers and students of XI-1 SMA Negeri 1 Pasuruan, icebreaker activities were recognized as a possible method for enhancing student motivation in the learning process. The instructor of the eleventh-grade class clearly expressed the assertion above during the interview.

In the realm of ongoing educational endeavours, instructors must incorporate ice-breaking strategies. The observed phenomenon can be attributed to temporal constraints and the individual teaching styles employed by each instructor, which contribute to the enhancement of student motivation within the context of eleventh-grade classrooms.

Based on the findings, the integration of ice-breaking activities inside the classroom setting can be considered an innovative approach to enhance learning in class XI-1. Hence, I intermittently integrate icebreaker activities within the pedagogical framework to facilitate the process of teaching and knowledge acquisition. In advanced academic courses, I implement a pedagogical approach aimed at fostering active participation and collaborative discourse, which involves a customized adaptation of the word connect game. Research has demonstrated that the implementation of icebreaking activities can yield notable benefits for the educational experience, particularly in instances where youngsters exhibit indications of ennui and disinterest, such as resting their heads on the table. Subsequently, the instructor employs icebreaker approaches.

Furthermore, the implementation of icebreaking activities has demonstrated efficacy in enhancing children's motivation to learn, particularly in instances where children exhibit an initial lack of involvement, lethargy, drowsiness, and occasional daydreaming. Subsequent to engaging in this icebreaker activity, children will experience a renewed sense of vigour and eagerness to participate in the educational endeavour actively. Following the instructor's delivery of the lesson, the children will subsequently regain their attention.

The findings indicate that the process of ice-breaking involves the utilization of interactive motions or games that are collectively engaged in and enjoyable. The implementation of ice-breaking

activities during the learning process serves to prevent pupils from becoming disengaged or disinterested in the lessons delivered by the teacher. The findings from the observation conducted in class XI-1 at SMA Negeri 1 Pasuruan, where ice-breaking activities were incorporated into the learning process, indicate that the students exhibited signs of contentment, engaged in collective laughter, and created a highly favourable classroom environment. The documenting outcomes of this activity were subsequently shared on the TikTok social media platform, with the intention of offering innovative ideas for other educators to adopt and replicate. The documentation is visible in Figure 2.



Figure 2. documentation is visible

The findings depicted in Figure 2 indicate that the ice-breaking action or method has garnered significant attention from many demographics, as evidenced by the video's viewership and positive reception, with over 12,000 views and likes. (Ren, 2023; Vidyastuti et al., 2022) propose that the incorporation of icebreaking activities into educational settings might enhance students' focus and foster a heightened sense of passion for learning, hence mitigating potential boredom that may arise during study sessions.

## Conclusion

The findings of the research conducted show that there is a relationship between ice-breaking activities and increasing student motivation during the learning process at XI SMA Negeri 1 Pasuruan. Typically, during the initial icebreaking phase in an educational context, students tend to show renewed enthusiasm for the learning process and feel motivation. The use of icebreaker techniques serves as a means to transform an initially unstimulating learning environment into one that is conducive to effective knowledge acquisition. Students experience an increased state of relaxation and enthusiasm for the process of acquiring knowledge. Students are more likely to experience positive emotions and demonstrate focused attention when engaged in classroom discourse, such as when their peers or instructor deliver a presentation or provide an explanation of instructional content. It is important for teachers and students to pay attention to mathematics learning objectives. Ice breaking can be done in certain conditions by adjusting the material and student characteristics. Ice breaking can only help motivate students by creating a fun learning atmosphere. Ice breaking can also help students understand the concept of circles, but not the mathematical concept.

Therefore, the underlying drive behind classification is very important for educators to always provide motivation to their students. The use of icebreaking activities for class Ice-breaking actions in educational settings have been observed to have a positive impact on

student engagement and concentration, particularly in the context of mathematics education.

Suggestions for other researchers, if you want to do ice breaking, try other materials and test how far ice breaking has an effect on improving students' mathematical abilities in terms of the learning styles of each student who is studying in their respective areas.

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