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APPLICATION OF ICE BREAKING ACTIVITIES TO INCREASE LEARNING MOTIVATION OF ENGINEERING STUDENTS IN SPORTS COURSES

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Abstract. *This research is motivated by the findings of a lecturer teaching sports courses at the engineering study program of Cipta Wacan Christian University in Malang who reported low student enthusiasm during class learning. This raises the need for innovative methods to increase student learning motivation. This study aims to identify the effect of the application of ice breaking on learning motivation and student activity in learning sports courses in the classroom. The method used is quantitative research with descriptive design. Data were collected through observation, interviews, questionnaires, and the internet, with a sample of 45 students consisting of 21 Civil Engineering students and 24 Mechanical Engineering students. The results showed that the application of ice breaking had a significant impact on student learning activities, with the results of data analysis showing an interval score of 63-84, which reflected a very good level of success. Students become more motivated, and learning activities increase. In conclusion, the application of ice breaking in learning sports courses can effectively increase student motivation and learning activities, making it a relevant strategy to be implemented in the Engineering study program*

Keywords: *Ice breaking, learning motivation, sport*

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1. INTRODUCTION

Sports is one of the courses that has a strategic purpose. Sports learning involves the formation of motor skills, which are essential for automating complex movements [1]. In practice, sports learning often faces challenges in maintaining student attention and engagement. When in the field it is often found that the learning that takes place is found to be less interesting teaching so that it reduces student motivation. Therefore, there is a need for innovation in teaching methods to create a more pleasant and interactive learning atmosphere. One approach that can guarantee is the application of ice breaking, which aims to break the atmosphere, build effective communication and increase student involvement in the learning process [2].

Ice breaking games are used to break the ice that occurs in the classroom and warm up the learning atmosphere so that the classroom atmosphere becomes more conducive to learning [3]. Games in the form of ice breaking activities aim to change the atmosphere of learning. Learning conditions that are boring, saturating, and tense become conditions that are fun, full of enthusiasm, and bring a sense of attention and pleasure to always be involved in all learning activities. There are many kinds of ice breaking games to improve classroom conditions for the better, including clapping, singing, concentration games and many more, the main goal is clearly to liven up the classroom atmosphere [4].

Previous studies have shown that ice breaking has been used in a variety of educational contexts and has proven effective in increasing learner motivation [5]. The use of ice breaking can build interactions between teachers and students, as well as between students, thus creating a more effective learning environment. Another research by [6] found that these activities can reduce students' anxiety and improve group cooperation, which is very important in physical activity-based learning such as physical education. However, these studies have mostly focused on academic subjects, such as math and language, and have not deeply explored how ice breaking can be applied specifically in physical education learning [13]; [14].

Within the framework of constructivism learning theory, students can learn optimally in a supportive and enjoyable learning atmosphere [7]. The use of ice breaking activities is in line with this principle because it attracts students' attention and stimulates students' enthusiasm for learning, especially in subjects that require a level of focus [8]. Although ice breaking activities have been documented in some literature, their application in learning for university students has rarely been researched. This creates a gap, while providing an opportunity to explore the potential of ice breaking in helping students overcome learning barriers, such as awkwardness or lack of confidence in physical activity. This research seeks to fill this gap by integrating ice breaking methods specifically for Cipta Wacana Christian University Engineering students, so that it can make a new contribution in improving the quality of dynamic, inclusive, and effective sports learning. This study aims to identify the effect of applying ice breaking on the motivation and involvement of Cipta Wacana Christian University Engineering students in sports courses, evaluate the effectiveness of this method in improving student learning outcomes, and provide practical recommendations for educators to integrate ice breaking strategies into sports course learning.

2. RESEARCH METHODS

The research used a quantitative descriptive approach to explore in depth the interest and motivation of students in learning sports courses in Mechanical and Civil Engineering study programs at Cipta Wacana Christian University. The research subjects were 3rd semester mechanical engineering and civil engineering students with a total of 45 students. The selection of participants was carried out using purposive sampling technique, which is based on certain considerations that are relevant to the research objectives [11]. Mechanical engineering and civil engineering students in semester 3 were chosen because they have an adequate level of concentration and sufficient time for research implementation as well as the availability of sports courses. The quantitative approach emphasizes the quality of information obtained rather than the number of participants.

This research design uses semi-structured interviews as the main technique of data collection [12]. This method allows researchers to explore in-depth information about the application of ice breaking in learning sports courses, including the types of ice breaking applied in mechanical engineering and civil engineering students at Cipta Wacana Christian University. In addition, data collection was also carried out through direct

observation in the classroom and documentation, so that the information obtained is more comprehensive. Data measurement was conducted through semi-structured interviews, observation, and documentation. In semi-structured interviews, the researcher prepared main question points to discuss in depth various aspects related to the application of ice breaking. The success of the application of this method was measured through student responses, learning motivation, and classroom atmosphere during the learning process. The data analysis technique used is interactive analysis, which is the process of systematically searching and compiling data from interviews, observations, and documentation. The steps of analysis include data collection, organizing data into categories, interpretation, and drawing conclusions relevant to the research objectives. The analysis was conducted in depth to provide a detailed understanding of the interactions, behaviors, and dynamics during the research.

3. RESULTS AND DISCUSSION

Based on the observations of researchers during the research process, the application of ice breaking techniques in learning sports courses for engineering students has proven to be effective in increasing students' enthusiasm and attention. At first, the class atmosphere tended to be monotonous, and students seemed less focused when the researchers used the lecture method without ice breaking. However, after applying ice breaking techniques, students became more motivated and paid attention to the material presented.

The results showed an increase in student responses after the application of ice breaking. Out of a total of 45 students, 40 students stated that this technique had a great effect on their interest and motivation to learn, while 5 students stated that it had an effect. There were no students who rated it as having no effect or very little effect. In addition to the quantitative response, researchers also measured the increase in student scores before and after the application of ice breaking. Before ice breaking, the average score of students was quite low, with only 15 students achieving scores above the minimum passing standard (KKM). After the application of ice breaking, there was a significant increase, where 39 students managed to achieve scores above the KKM, while 6 other students showed an increase in scores even though they had not yet reached the KKM.

Table 1. Ice breaking Pretest and Postest Results

No	Student Name	Value Before Ice breaking	Value After Ice breaking	Description
1	Mhs 1	72	89	Increased
2	Mhs 2	53	69	Increased
3	Mhs 3	51	68	Increased
4	Mhs 4	50	65	Increased
5	Mhs 5	71	86	Increased
6	Mhs 6	60	83	Increased
7	Mhs 7	70	85	Increased
8	Mhs 8	58	76	Increased
9	Mhs 9	68	80	Increased
10	Mhs 10	64	80	Increased
11	Mhs 11	73	85	Increased
12	Mhs 12	43	65	Increased
13	Mhs 13	56	72	Increased
14	Mhs 14	67	78	Increased
15	Mhs 15	65	77	Increased
16	Mhs 16	63	75	Increased
17	Mhs 17	54	68	Increased
18	Mhs 18	74	86	Increased
19	Mhs 19	75	89	Increased
20	Mhs 20	60	84	Increased
21	Mhs 21	71	87	Increased
22	Mhs 22	74	88	Increased
23	Mhs 23	63	85	Increased
24	Mhs 24	77	92	Increased
25	Mhs 25	64	83	Increased
26	Mhs 26	63	82	Increased
27	Mhs 27	65	80	Increased
28	Mhs 28	66	83	Increased

29	Mhs 29	63	84	Increased
30	Mhs 30	73	84	Increased
31	Mhs 31	76	93	Increased
32	Mhs 32	67	90	Increased
33	Mhs 33	77	94	Increased
34	Mhs 34	66	84	Increased
35	Mhs 35	63	82	Increased
36	Mhs 36	58	78	Increased
37	Mhs 37	55	68	Increased
38	Mhs 38	58	78	Increased
39	Mhs 39	72	84	Increased
40	Mhs 40	58	75	Increased
41	Mhs 41	69	78	Increased
42	Mhs 42	67	81	Increased
43	Mhs 43	73	8	Increased
44	Mhs 44	67	80	Increased
45	Mhs 45	71	90	Increased
	Minimum	**43**	**65**	
	Maximum	**77**	**94**	
	Mean	**64.96**	**81.04**	

Overall, the application of ice breaking activities in learning sports courses for Mechanical Engineering and Civil Engineering students at Cipta Wacana Christian University has a very positive effect on the learning atmosphere in class, student motivation, and learning outcomes. This shows that ice breaking can be an effective strategy to create more dynamic and interesting learning, especially in courses that require active student involvement.

The increase in the average score from 64.96 to 81.04 shows that the ice breaking technique provides an increase in student learning outcomes. This is reinforced by the finding that ice breaking can create a more conducive learning atmosphere and motivate students to achieve the desired learning outcomes [9]. Each student has a different personality and comfort level. Educators need to be more observant in choosing activities that can engage all students, including those who are more introverted. Therefore, it is important to plan short but effective activities. Ice breaking activities should be relevant to the learning context of the sport course and the learning objectives. Educators need to ensure that the activity is not only fun, but also supports broader learning.

To overcome the challenges, educators can implement several strategies in the implementation of ice breaking. Educators need to plan ice breaking activities well, prepare a vulnerable time of 10 - 15 minutes, provide clear objectives, and apply appropriate student characteristics [10]. Educators must be flexible and ready to adjust the activity if needed to suit the students' situation during the learning process. After implementing ice breaking, educators need to evaluate the effectiveness of the activity and reflect for improvement in future lessons.

4. CONCLUSIONS

This study shows that the application of ice breaking activities significantly increases student motivation, enthusiasm, and learning outcomes in learning sports courses for Mechanical Engineering and Civil Engineering students at Cipta Wacana Christian University. Suggestions for educators to utilize ice breaking as a learning strategy and create a dynamic and fun atmosphere. In addition, variations of ice breaking can be developed to meet the needs of students. Further research can be conducted to examine the application of this method in other educational contexts.

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