



The Use of Uno Card Game to Improve Learning Outcomes of Grade X Students on The Topic of Atomic Structure at SMAN 12 Banda Aceh City

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ABSTRACT

This study aimed to determine student activities, learning outcomes and student responses with the use of UNO Cards as learning media. The sample in this study was 26 class X students consisting of 16 male students and 10 female students. This type of research was descriptive qualitative. The results of observations of student activities from the first meeting to the second meeting increased successively from 75.96% to 92.30% and the percentage of student learning outcomes completion was 92.30%. The positive response of students was 93.74%. Based on the results of the study, it can be concluded that student learning outcomes through the Use of UNO Card Learning Media on Atomic Structure Material for Class X SMAN 12 Banda Aceh City can achieve a successful level. It is suggested that further research be conducted on UNO Card Learning Media for other chemistry topics or other educational fields, so that the effectiveness of using UNO Card Learning Media in improving student learning outcomes will be known in general.

Keywords: UNO Card Media, learning outcomes, atomic structure

1. INTRODUCTION

Chemistry is one of the branches of natural science (IPA) and one of the basic sciences that has an important role in everyday life, in the development of science and technology, and in the field of education. Hence, studying chemistry requires an appropriate method to support the learning process. One of the important chemistry materials is the atomic structure material which is studied in class X semester 1. Atomic structure is the basic material in studying chemistry. However, in terms of its characteristics, the main material of atomic structure is abstract material, is memorization and requires deep understanding. Therefore, in learning students do not only listen to lectures from teachers but must be directly and actively involved in learning (Sari & Lutfi, 2005).

Based on the results of observations that have been carried out in March to April 2017 at SMA N 12 Banda Aceh City, in the teaching and learning process, especially chemistry lessons, teachers used the K13 curriculum. Learning in general still uses a conventional model, namely the lecture method (Dimiyati, 2002). Furthermore, teachers at SMA N 12 Banda Aceh City stated that in learning atomic structures, many student learning outcomes are still below the Minimum Completion Criteria (KKM) limit, which is 65.

This is supported by the results of the Atomic Structure material test which is not optimal, where 78% of 23 students have not achieved the KKM score. In other words, the success of students in improving learning outcomes both in the process and in the results achieved has not shown results that are in accordance with what is expected (Slameto, 2002). Some of the problems that are seen include, the learning media used is only a blackboard, students tend to get bored, students are not actively involved in the learning process, this is because teachers often use conventional learning where learning takes place in one direction (Sadiman, 2009).

From the problems that occur, a solution is needed to improve student learning outcomes. As an alternative to solving the problem is the use of media that is in accordance with learning objectives. One of the media that can be used as a learning medium with the aim that students can understand the material being taught and make students not feel bored is the type of game. One of the games that can be adopted from everyday games is a card game. Learning media card games are designed by modifying a highly popular game among teenagers, namely the card game called "UNO". UNO is played with special shuffled cards. It means "one" in Spanish. This



four-colored card game looks simple. However, to play it, players must have good tactics and strategies to win. Good strategies and cooperation are also needed when playing in pairs. This game is interesting and fun, which makes it gain popularity among people of all ages (Harrisburg, 2010).

2. METHODS

This research was descriptive qualitative (Sugiyono, 2008). It collected data through direct observation on the learning process in the classroom in two meetings. This research was conducted in class X with a total of 26 students consisting of 16 male and 10 female students.

3. RESULTS & DISCUSSION

3.1 Results

3.1.1 *Implementation of the Learning Process*

This research was conducted in 2 (two) meetings on the topic of atomic structure using the UNO Card Game media. To start the learning process, the researchers gave an initial test (pre-test) aiming to measure the initial ability before students received learning material from the researchers, allowing the researchers to carry out the learning process properly based on the students' initial ability. The first meeting was held on Tuesday, August 15, 2017 from 07.45 WIB to 09.15 Western Indonesia Time (WIB). At the first meeting, prior to the learning, a pre-test was given. Then, the researchers divided the students into several groups and gave them an understanding of atomic structure. The second meeting was held on August 22, 2017, Tuesday at 07.45 WIB to 09.15 WIB. The researchers continued by using the snake and ladder game as the learning medium. After that, a post-test was delivered to see how far the students understood the material. Questionnaires were distributed to find out the students' responses towards the use of UNO Cards in learning.

3.1.2 *Student Activities*

Student activities during the learning process were measured using a Student Activity Observation Sheet (Anni et al., 2004). This assessment aimed to see how students interacted during the lesson. Based on the data from the observation sheet, it can be seen that students were active in learning the material by using the UNO Card Game as a learning tool. The average student activity score was 75.96%.

At the second meeting, there was an improvement in student activity. This shows that the learning process using the UNO Card Game worked as expected. The average score at the second meeting increased to 92.30%, showing a rise in student activity of 16.34%. This improvement happened partly because, by the second meeting, students had a better understanding of how to use the UNO Card Game, which made them more enthusiastic and active in learning. The observation results also showed that students had positive attitudes and were actively involved during the learning process. This was reflected in the average score from the observation data.

3.1.3 *Analysis of Learning Mastery Results*

Data on learning mastery was obtained from a final test (post-test) consisting of 20 multiple-choice questions, given at the end of the second meeting. Meanwhile, the students' learning outcomes on the topic of Atomic Structure, using the UNO Card Game as a learning tool, showed an average score of 92.30%. This score was calculated by comparing the number of students who scored ≥ 70 with the total number of students, then multiplying by 100%. This shows that students' learning outcomes have reached the required level of mastery. However, some students still scored below the minimum passing grade (KKM). This happened because these students did not fully participate in the learning process, so they were not able to complete the test effectively (Supriyani, 2010).



3.1.4 Student

Responses

The questionnaire given to students aimed to find out their opinions about using the UNO Card Game as a learning tool. The results showed that 93.74% of students gave a positive response and felt happy learning with the UNO Card Game. They said the material was presented in an enjoyable way, which helped them stay motivated and made learning easier (Tinsman, 2002).

During the teaching and learning activities, all students played an active role. Each group member had the same chance to share their opinions and take responsibility. This teamwork helped the groups succeed and achieve good scores in every learning step. Only 6.26% of students gave a negative response to using the UNO Card Game in learning atomic structure. These students did not enjoy chemistry, which made them less active during the lessons (Wijarnako, 2009).

3.2 Discussion

The learning approach can be interpreted as our starting point or point of view on the learning process, which refers to the view of the occurrence of a process that is still very general in nature, in which it accommodates, inspires, strengthens and underlies learning methods with a certain theoretical scope (Narimawati, 2007). Viewed from the approach, there are two types of learning approaches, namely: (1) a learning approach that is oriented or centered on students (student-centered), and (2) a lesson approach that is oriented or centered on teachers (teacher-centered).

In this study, the researchers used a student-centered approach while the teacher only served as a facilitator. The students were divided into several groups and they were asked to solve problems on the atomic structure material that has been integrated into the UNO Card game media. Each student received a minimum of 5 cards with the responsibility of the material in their own card. Then, they started playing the UNO Card game according to the rules and regulations of the game listed on the students' LKS that had been previously distributed by the teacher.

Student participation in the first and second meetings was 75.96% and 92.30%, respectively, showing an increase of 16.34%. Thus, it can be said that the UNO Card game activity was in the very effective criteria (Sari & Luthfi, 2015). This shows that the UNO Card game can stimulate student activity in learning chemistry, especially in the main material of Atomic structure. The results showed that the use of UNO Cards in the learning obtained a positive response of 93.74%. In other words, using UNO Cards in learning atomic structure is fun; it motivates students to play an active role in the learning process (Yoestara & Putri, 2019).

The results of the post-test showed a completeness result of 92.30% of students, achieving maximum completeness, or above the KKM score. There were only two students who did not achieve the KKM score applied because they did not follow the teaching and learning process well. However, the majority of the students were able to understand the material. This aligns with the research by Sari & Luthfi (2015), stating that the increase in learning outcomes was due to the use of the UNO Card game media which created a fun learning atmosphere that increased students' learning interest. With the UNO Card games as learning media, students can learn more independently and the material can last longer in their memories (Supriyono, 2015).

4. CONCLUSION

Based on the results, it can be concluded that the use of UNO Card games on the topic of atomic structure has yielded highly positive results and had a significant influence on student participation and learning outcomes. It helped students achieve learning completeness (KKM), with a percentage of 92.30%, which was above the KKM score. Their level of class participation increased from 75.96% to 92.30%. Their responses to the use of UNO Cards were also positive (93.74%).



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