The Influence of Student Team Achievement Division (STAD) Learning Model on Students’ Critical Thinking Ability in English Language Lesson

Obay Jambari¹, Dine Trio Ratnasari²

¹ STKIP Setiaabdi Rangkasbitung, Indonesia
² obayzam@gmail.com, dinetrioo@gmail.com

Abstract. This research is aimed to find out the influence of Student Team Achievement Division (STAD) learning model on students' critical thinking ability in English Language lesson. This research is conducted in the 4th year (Grade IV) students in the elementary school of SDN Kaduagung Timur 1, Kecamatan (sub district of) Cibadak, Kabupaten (District of) Lebak, Province of Banten. The research uses the Experiment Pacto Experiment design. The study sample consists of 60 students. The results of the research show that: (1) as a whole, students' critical thinking ability in English language lesson with STAD learning model is highly influenced. (2) There is an influence of interaction between STAD learning model on students' critical thinking ability in english lesson. From the findings of the study, it is concluded that the STAD model has an influence on students' critical thinking ability in English language lesson in the 4th year students in SDN Kaduagung Timur 1, Kecamatan Cibadak, Kabupaten Lebak, Province of Banten.

1. Introduction
Every human has the potential to think. Through proper coaching, education, learning, and good observation, the ability to think for humans will also be able to develop better. One way of thinking that demands high-level thinking ability is critical thinking, because in critical thinking, students are required to think reasonably and reflectively, by using their reasoning and they can make decisions about what to do. So that critical thinking is different from ordinary thinking.

Critical thinking is defined as a consideration and decision-making process that is thoughtful and carried out independently. It’s the process of formulating reasons and considerations regarding facts, circumstances, concepts, methods and criteria. Each learning process should be able to train intellectual, emotional and ability aspects for students. One such potential is the ability to think critically, which must be developed by the teacher during learning. According to Sapriya and Winataputra (2012: 185) "critical thinking is a thought process that expresses judgment by applying the correct norms and standards".

Fahrudin Faiz (2012: 3) argues that critical thinking is a mental activity carried out to evaluate the truth of a statement. Generally the evaluation ends with a decision to accept, deny, or doubt the truth.
of the statement in question. While R.H Ennis in Zaleha (2004: 27) states that critical thinking is reasoning and reflective thinking by emphasizing making decisions about what to believe or do. The purpose of critical thinking is to be able to distance someone from wrong and hasty decisions so that they cannot be accounted for.

According to Desmita (2011: 153) critical thinking is the ability to think logically, reflectively, and productively that is applied in assessing situations to make good judgment and decisions. In the context of English language learning, there are several problems that have to be solved. One of the problems faced is learning that is unattractive, boring, tends to be monotonous and focuses only on the teacher. Unidirectional teaching methods have resulted in uninteresting and monotonous learning. Monotonous learning can reduce student activity in learning, making students conduct less interaction with teachers and other students.

Learning model is one of the factors that cause low critical thinking of students. Based on the findings in the field, students are less passionate or indifferent to the subjects given by the teacher, if the learning model is not in accordance with the characteristics of the subject matter taught to students. So far the school only uses teacher-centered learning (teacher center) so that learning feels boring and students are not actively involved in the learning process.

Student Team Achievement Division (STAD) learning model is a cooperative learning model in which students learn in small groups consisting of 4 - 6 people heterogeneously, and they work together on positive interdependence and are responsible for completing part of the subject matter for team progress and getting a high score. Cooperative learning model type of STAD is designed to increase students' sense of responsibility towards their own learning and also other people's learning.

Kuntjojo (2001: 14) STAD learning model is a learning model that classifies students heterogeneously (achievement, gender, etc.), assigns tasks that are done in collaboration in groups, provides quizzes, or questions individuals, and sum up individual results as the results of each group.

According to Robert Slavin (2005: 143) STAD is one type of cooperative learning that emphasizes activities and interactions between students to motivate and help one another in mastering the subject matter to achieve maximum performance.

According to Nur Asma (2006: 51) states that the STAD type cooperative learning model consists of six stages:

1. Learning preparation. The teacher prepares learning tools that will be used including RPP, LKS and answer sheets and determines the members of heterogeneous groups with a maximum number of 4-6 people.
2. Academic ability (clever, medium and low) obtained from previous academic results (initial score). Keep in mind that the division must be balanced so that each group consists of students with balanced level of achievement (gender, social background, innate pleasure (quiet and active), etc.)
3. Presentation of the material. The teacher starts by conveying the indicators to be achieved, giving apperception with the purpose to remind students of the material that has been studied, so that students can connect with the material with their previous knowledge. Then the teacher presents the material to the students. Presentation of the material can use the lecture method, question and answer, and so on, tailored to the content of the material and the ability of students.
4. Group activities. Students are given worksheets (LKS) which include assignment sheets and activity sheets) to be studied. In the work group, students share tasks, help each other in completing tasks so that all group members can understand the material being discussed. The results of group activities are presented in front of the class by representatives of each group alternately. The teacher gives the answer key and explains if there are students who do not understand. Each group checks itself while completing the answer.
5. Individual tests. Students are given test questions to determine students' abilities and understanding of the material discussed. Students are not allowed to cooperate. The score obtained will be used in the calculation of group scores.

6. Calculation of individual development scores. The calculation of individual development scores is carried out after the test score is obtained, based on the difference in the score of the previous test score (basic score) with the final test score.

Improving the learning process in the classroom can be emphasized on aspects of learning activities. These aspects are directly related to the teacher's responsibility in fostering students to be more motivated to learn, even with minimal support from the teacher or without being lectured. Efforts can be made to improve the quality of learning by using a better learning model.

2. Methods

This research is carried out in the 4th year students (class IV A and IV B) in SDN Kauagung Timur 1, Kecamatan Cibadak, Kabupaten Lebak, Province of Banten.

The selection of research sites is based on the number of students in the class who are not too different in terms of quality and quantity, so that these two classes are believed to have no significant differences. The treatment is carried out 16 times, face to face. Every week there are 2 meetings with duration of 2 x 35 minutes.

This research is quantitative evaluation and assessment. The type of data used is secondary data. Data analysis is performed with descriptive statistics. According to Sugiyono, descriptive statistics can be done to find the strength of influence between variables through correlation analysis, predictions with regression and making comparisons. Technically, descriptive statistics have no significant test, there is no level of error because they do not intend to make generalizations (Sugiyono, 2015: 209). To test the hypothesis testing is done by using multiple regression methods.

3. Results

The result of the data will be presented in this section based on summary of research data, as follows:

| Source of Variance | db | JK | RJK | F_count | F_table | F_table | F_table |
|--------------------|----|----|-----|---------|---------|---------|---------|
|                    |    |    |     |         | α=0.05  | α=0.01  | α=0.01  |
| Between Columns    | 1  | 488.28 | 488.28 | 9.184** | 4.20    | 7.64    |
| Between Lines      | 1  | 371.28 | 371.28 | 6.984 *  | 4.20    | 7.64    |
| Interaction        | 1  | 3022.53 | 3022.53 | 56.852** | 4.20    | 7.64    |
| Inner              | 28 | 1488.63 | 53.17 |  |        |         |         |
| Total Reduction    | 31 | 5370.72 |  |  |        |         |         |

Based on the results of the analysis of variance (ANAVA) with a significant level of $\alpha = 0.05$, obtained $F_{count} = 9.184$ with $F_{table} (0.05; 1/28) = 4.20$, then $9.184 > 4.20$ which means that $H_0$ is rejected. Thus it can be concluded that the STAD learning model influences students' critical thinking ability in English language lesson, so $H_0$ is rejected. The overall conclusion is there are differences in students' critical thinking ability in subjects.

Thus the research hypothesis which states that there is an influence between the STAD learning model and students' critical thinking ability in English language lesson has been tested for validity and acceptable.
Based on the results of the analysis of variance analysis (ANAVA) with a significant level of $\alpha = 0.05$, it was obtained that $F_{\text{count}} = 56.852$ with $F_{\text{table}} (0.05; 1/28) = 4.20$, then $56.852 > 4.20$ which means that $H_0$ is rejected. Thus it can be concluded that there is a very significant interaction effect between STAD learning models on students' critical thinking ability in English language lesson.

STAD learning model with an attitude shows the interaction of students' critical thinking ability in English language lesson. This means that the STAD learning model has a mutually influential relationship. The existence of an English learning model cannot be separated independently, the accuracy of the selection of learning models, significantly influences students' critical thinking ability in English language lesson.

4. Discussion

English learning by using Student Team Achievement Division (STAD) learning model has a relationship and influences students' critical thinking skills in English language lesson. Based on the results of these studies, English learning with STAD learning model can influence better outcomes because in the STAD learning process, students in groups help each other to understand better, or peer tutors. This allows students in groups to discuss and give opinions in one group. Students who have a high social attitude will be more active and creative in expressing their opinions.

The use of the STAD learning model provides opportunities for students to discuss and collaborate in groups to solve problems given by the teacher. In addition, the STAD learning model also gives freedom to each student in terms of expressing opinions, input, and suggestions to other group members during class presentations, which are conducted in a competitive and active atmosphere so as to enable creativity in learning. This freedom is expected to be able to develop students' positive behavior and students' understanding optimally.

Therefore, they need detailed, structured and systematic explanations and elaborations, especially to understand social studies materials so that the information presented systematically can be used in completing the tasks given by the teacher. Synthesis of theoretical studies in the form of a theoretical framework, which states that students' critical thinking skills in English language lesson are better by using the Student Team Achievement Division (STAD) learning model.

5. Conclusion

Based on the results of the research’s hypothesis testing, it can be concluded as follows:

1. Overall the study group with the STAD learning model gives a better influence on students' critical thinking skills in English language lesson of grade V SDN Kasuagung Timur 1 Kecamatan Cibadak, Kabupaten Lebak-Banten, compared to study groups that use varied lecture methods.

2. There is an interaction between STAD learning models on students' critical thinking skills in English language lesson in class IV SDN KadaugungTimur 1 Kecamatan Cibadak, Kabupaten Lebak-Banten.

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