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THE EFFECTIVENESS OF USING THE TEAM BASED LEARNING (TBL) LEARNING MODEL TO INCREASE INTEREST IN LEARNING CRITICAL THINKING SKILLS AND ECONOMIC LEARNING ACHIEVEMENT OF STUDENTS AT SMA NEGERI 1 AMARASI, KUPANG REGENCY

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Abstract

This study discusses the Effectiveness of the Team Based Learning Learning Model to Increase Learning Interest, Critical Thinking Ability and Student Achievement at SMA Negeri 1 Amarasi, Kupang Regency. This study aims to determine the effectiveness of using the Team Based Learning (TBL) learning model to increase learning interest, critical thinking skills and student achievement at SMA Negeri 1 Amarasi and the effect of using the Team Based Learning (TBL) learning model to increase learning interest, critical thinking skills and student achievement of SMA Negeri 1 Amarasi. The results of the N-gain data analysis and the Manova test show that 1) the Team Based Learning learning model is quite effective in increasing student interest in SMA Negeri 1 Amarasi. 2) the learning model of Team Based Learning is effective enough to improve the critical thinking skills of SMA Negeri 1 Amarasi students. 3) the learning model of Team Based Learning is quite effective in increasing student achievement in SMA Negeri 1 Amarasi. 4) there is an effect of using the Team Based Learning learning model on increasing interest in learning, critical thinking skills and student achievement of SMA Negeri 1 Amarasi with a significance value of 0.000.

Keywords: Team Based Learning (TBL), Interest in Learning, Critical Thinking Ability, Learning Achievement.

INTRODUCTION

The main goal of every economics educator is for students to acquire understanding of practical economic concepts and practices. Economic material undergoes changes and evolution over time. Therefore, creativity and active involvement from both students and educators are needed to understand economic concepts well. As a form of responsibility towards their duty, educators are required to choose the most accommodating and conducive learning models to achieve educational goals and philosophies. Mayona & Irawati (2010) stated that the selection of learning models and methods by educators can indeed affect students' learning interests, critical thinking abilities, and academic achievements.

Interest plays a very important role in the learning process of students (Safitri & Nurmayanti, 2018). Essentially, interest is the acceptance of a relationship between oneself and the outside world. In learning, interest becomes the main source of motivation in encouraging someone to learn (Suharyat, 2009). In general, interest has two meanings: the effort and willingness to learn and find out something, and the second is self-motivation to achieve a goal.

The important role of interest in learning activities is a supporting factor in the success or failure of a learning process that is intended to be achieved (Sadirman, 2006). Students who have high learning interests during the learning process can support the teaching-learning process to be better, while conversely, if students' learning interest is low, the quality of learning will decrease and affect students' learning outcomes. The phenomenon of students' learning interest at SMA Negeri 1 is still insufficient or not yet optimal. The diagram above shows the percentage of aspects that are assessed in learning interest. It can be seen that for each aspect of assessing students' learning interest, the percentage is still below 80%. And the lowest value for each aspect is in the aspect of interest, with a percentage of acquisition being 66%. From the third aspect, it shows that students are only interested in learning economics at school and in the classroom, but their interest in learning economics outside the classroom is still lacking.

The insufficiently high learning interest is due to the use of conventional teaching models (lecture) with a considerable duration of 1 x 4 teaching hours (Schedule of teaching at SMA Negeri 1 Amarasi 2022/2023), making students feel bored and uninterested during lessons as they only sit and listen to explanations from the teacher. The use of conventional teaching models and long teaching hours not only affects learning interest but also influences students' critical thinking abilities. Conventional teaching models (lecture) lead to less than optimal education and mastery of the material taught, and students are also less capable of critical thinking (Hatmanto, 2011).

Hidayah (2014) stated that critical thinking is a cognitive activity related to the use of reasoning power/thought. Critical thinking ability is a thinking model about any issue, substance, or problem in which the thinker enhances the quality of their thinking by skillfully handling the inherent structures in thinking and applying intellectual standards to them (Fisher, 2002). Lai (2011) explained the characteristics of students who have critical thinking skills as follows: 1) open-mindedness, 2) fairness in thinking, 3) tendency to seek reasons, 4) inquisitiveness, 5) desire for accurate information, 6) flexibility, and 7) respect.

The phenomenon occurring at SMA Negeri 1 Amarasi related to critical thinking skills is that students are less able to formulate questions or analyze arguments, their thinking relies on printed books. This can be seen from the teaching and learning process that occurs in the classroom where students can only provide

simple explanations related to the questions given by the teacher, their ability to analyze problems is still lacking, and the answers given are stuck on the printed books used, and the solution to the problems given tends to follow the pattern or flow of the teacher's explanation. In addition, students are also less creative in facing economic problems both in the form of example questions and those that occur in real life. Then, if given questions in different forms between one student and another, the students will find it difficult to work on them independently. There are even students who do not work on them but rewrite the given questions. This can also lead to low academic achievement among students.

Learning achievement is the result of learning that is achieved after going through the teaching and learning process, expressed in the form of scores or grades. Winkel (1997) states that learning achievement is evidence of successful learning or a student's ability to carry out learning activities according to the weight he wants to achieve. Nugroho and Pramukantoro (2014) state that learning achievement in the field of education is the result of measuring participants who cover cognitive, affective, and psychomotor factors after undergoing a learning process that can be measured using test instruments or relevant instruments. In the achievement process, learning achievement is greatly influenced by various factors, namely external and internal factors.

Slameto (2003) suggests that factors influencing the process and results of learning are classified into two categories: internal factors and external factors. Internal factors are those originating from within, including physical factors (health factors, physical disabilities), psychological factors (intelligence, attention, interest, talent, motivation, maturity, readiness), and fatigue factors. Whereas external factors are those originating from outside, including family factors (parents' level of education, relationships among family members). Family factors, provision of learning facilities, economic conditions), school/campus factors, and community factors.

Both internal and external factors influencing learning achievement cannot be separated from the teaching and learning process. The most dominant internal factor influencing achievement is interest, while the most dominant external factor is students' perception of teachers' teaching skills (Saputro et al., 2015). The phenomenon that occurs at SMA Negeri 1 Amarasi, namely the insufficiently high student interest in learning and the low critical thinking skills of students, results in low student learning achievement. This can be seen from the completion data obtained, where the acquisition of economics scores for IPS I & II students, where the scores exceeding the Minimum Completion Criteria (KKM) are only 2%, and 38% are the completion acquisition where the scores obtained are in accordance with the KKM standard and the remaining 60% are the number of students who are categorized as incomplete or whose semester exam scores are below the KKM

(Minimum Completion Criteria). Based on this data and observations made, economics learning at SMA Negeri 1 Amarasi requires an active learning model that can stimulate student interest and critical thinking skills, thereby improving student learning achievement.

Lucas da Rocha Cunha et al (2018), team-based learning (TBL) is an active learning model that focuses on students and is based on learning teams. The TBL model stimulates active, intuitive, and integrated learning. Team-Based Learning (TBL) is one learning model that encourages students to interact actively in groups to solve given problems (Dwirahayu, Gelar. Kustiawati, 2018). Michaelsen (2014) states that learning with the TBL model has its own characteristics, where teams are formed to solve a problem. According to Hunsaker (2002), a team is a group of people with skills and different skills complement each other to achieve common goals effectively and efficiently. The main goal of TBL learning is to not only focus students on understanding a concept but also to train them to apply that concept in solving a problem. Team-based learning (TBL) is one effective learning method that fully engages students in meaningful, enjoyable, and motivating activities in their learning environment (Khalafalla & Alqaysi, 2021). TBL provides students with opportunities to acquire and apply the knowledge they have (Ulfa et al., 2021). Vries (2021) states that the team-based learning (TBL) model is a new teaching model where TBL attempts to shift the focus of the teacher from being a knowledge transmitter to being a facilitator in learning. This is in line with constructivist theory.

Constructivist Learning Theory, or constructivist learning theory, is one of the knowledge philosophies that emphasizes that our knowledge is our own construction (Glasersfeld in Bettencourt, 1989; Matthews, 1994; Suparno, 1997). Glasersfeld (1987) argues that constructivism as a "theory of knowledge rooted in philosophy, psychology, and cybernetics" emphasizes active learners in constructing their own knowledge, social interaction is important for knowledge construction. He further states that constructivism, whatever its name, actively and creatively forms knowledge conceptions. He sees knowledge as something that actively accepts anything through healthy thinking or through communication and interaction.

The team-based learning (TBL) model is one active learning model that can be used as a solution to overcome the problems that occur at SMA Negeri 1 Amarasi. This learning model is chosen because the implementation of this learning model can be a challenge for students to participate directly and actively in the learning process so that students are not passive during the learning process and also learning does not only focus on the teacher but focuses on the students. The application of the Team-Based Learning model seeks to encourage effective group interaction by keeping students in the same groups for one semester and utilizing collaborative activities in each class. Team-based learning (TBL) is an active learning pedagogy with solid conceptual and empirical support (Sumiyati et al., 2017).

The Team-Based Learning (TBL) model provides many benefits for students. Therefore, if implemented properly, students can gain deep knowledge and understanding of economic concepts in problem-solving because throughout the learning process students are given various complex problems, and students attempt to solve them in groups. Therefore, team-based learning, where groups are the main medium of learning, is one of the active learning methods that can be applied at SMA Negeri 1 Amarasi.

This study aims to determine 1) the effectiveness of using the Team-Based Learning (TBL) model in improving students' interest in learning at SMA Negeri 1 Amarasi, 2) the effectiveness of using the Team-Based Learning (TBL) model in improving students' critical thinking skills at SMA Negeri 1 Amarasi, 3) the effectiveness of using the Team-Based Learning (TBL) model in improving students' academic achievement at SMA Negeri 1 Amarasi, and 4) the influence of using the Team-Based Learning (TBL) model on the improvement of students' interest in learning, critical thinking skills, and academic achievement at SMA Negeri 1 Amarasi. Furthermore, this research will be documented in a thesis entitled: The Effectiveness of Using the Team-Based Learning Model to Enhance Students' Learning Interest, Critical Thinking Skills, and Academic Achievement in Economics at SMA Negeri 1 Amarasi, Kupang Regency."

METHOD

This research is an experimental study, a research method used to investigate the influence of a learning model on students' learning interest, critical thinking skills, and academic achievement under controlled conditions. The study involves two groups: the experimental group and the control group. The experimental group is taught using the Team-Based Learning (TBL) method, while the control group is taught using conventional methods or methods traditionally employed. The research design employed in this study is the Pretest Posttest Only Design. There are two groups sampled for this research. They are given pretests to determine any differences between the experimental and control groups. The sampling technique used is Purposive Sampling, where purposive sampling is a technique of sampling based on specific considerations (Sugiyono, 2009). The considerations taken into account are: 1) Two classes with similar characteristics. 2) Students in class X1. 3) Students taking economics lessons.

The data collection techniques used in this study include questionnaires, observation sheets, and tests. Questionnaires consist of a set of structured questions posed to obtain information from respondents about known aspects. They are used to determine students' learning interests. The questionnaire used is a closed-ended questionnaire employing a Likert scale. Observation involves systematic observation or recording of existing phenomena. This method is used to assess whether the

implementation of the TBL learning method can enhance students' critical thinking skills. Tests are measurement tools consisting of questions, commands, or instructions aimed at obtaining feedback from respondents (Suharman, 2018). There are two types of tests given in this research: pre-tests (initial tests) and post-tests (final tests). Pre-tests are used to measure students' readiness levels in learning the material to be presented, while post-tests are used to assess how well students have grasped the newly delivered lessons.

In this study, there are 4 hypotheses to be examined, namely: 1) Economics learning at SMA Negeri 1 Amarasi using the Team Based Learning (TBL) model is more effective in increasing students' interest in learning compared to using conventional learning. 2) Economics learning at SMA Negeri 1 Amarasi using the Team Based Learning (TBL) model is more effective in improving students' critical thinking skills compared to using conventional learning models. 3) Economics learning at SMA Negeri 1 Amarasi using the Team Based Learning (TBL) model is more effective in improving students' academic achievement compared to using conventional learning models. 4) There is an influence of using the Team Based Learning model on increasing students' interest in learning, critical thinking skills, and academic achievement at SMA Negeri 1 Amarasi compared to using conventional learning models.

RESULTS OF RESEARCH AND DISCUSSION

1. **Questionnaire Validity**
   a. Control Class Questionnaire
      Based on the output of the SPSS test results, it can be seen that the KMO value is 0.901, which means that the questionnaire instrument used is substantial because it has a value greater than 0.5 (0.901 > 0.50). With a significance value of 0.000, which means less than 0.05 (0.000 < 0.05), the instrument is declared valid.
   b. Experimental Class Questionnaire
      Based on the SPSS output results, it is observed that the KMO value is 0.878, indicating that the questionnaire instrument used is substantial as it has a value greater than 0.5 (0.878 > 0.50). With a significance value of 0.000, meaning less than 0.05 (0.000 < 0.05), the instrument is considered valid.

2. **Questionnaire Reliability**

Reliability is a condition in which something demonstrates accuracy and precision. A questionnaire can be said to have a high level of reliability if it consistently yields the same results. The reliability testing in this study utilizes the Cronbach's Alpha formula.

Table 1. Questionnaire Reliability Test Results

Questionnaire	Alpha Cronbach Value	Information
Ordinary Questionnaire	0,980	Reliable
TBL Questionnaire	0,980	Reliable

3. Item Discrimination and Difficulty Level of Test Items

a. From the results of testing the difficulty level and item discrimination of the Pretest questions, it is evident that there are 8 items rated as "Fair," 10 items rated as "Good," and 7 items with distractor revision notes. Therefore, it can be concluded that the questions can be used in the study, but distractors need to be improved for items with revision notes.

b. From the results of testing the difficulty level and item discrimination of the Posttest questions, it can be seen that there are 13 items rated as "Fair," 8 items rated as "Good," and 4 items with distractor revision notes. Therefore, it can be concluded that the questions can be used in the study, but distractors need to be improved for items with revision notes.

Table 2. Summary of Average N-Gain Score Test

Variable	Class	Average	Standard Deviation
Interest	Control	-0,0056	0,24181
	Experiment	0,5482	0,18293
Critical Thinking Skills	Control	0,3465	0,10801
	Experiment	0,5656	0,08568
Learning Achievement	Control	0,3049	0,14660
	Experiment	0,5169	0,15854

4. First Hypothesis

The effectiveness test results of using the Team Based Learning model show that the N-gain score in the conventional learning model is 0.549, while the average N-gain score in the Team Based Learning model is 0.549. The value of 0.549 falls into the category of fairly effective, whereas the N-gain score in the conventional learning model is -0.0056, which, based on the criteria in Table 13, falls into the ineffective category. Therefore, based on the average

N-gain scores, it can be concluded that the Team Based Learning model is fairly effective in increasing students' interest in learning.

5. **Second Hypothesis**

The effectiveness test results of using the Team Based Learning model show that the N-gain score in the conventional learning model, where the average N-gain score in the Team Based Learning model is greater than that in the conventional learning model, with a value of 0.566. The value of 0.566 falls into the category of fairly effective. The N-gain score in the conventional learning model is 0.346, which, according to the criteria in Table 13, also falls into the fairly effective category, but the N-gain score in the Team Based Learning model is higher than that in the conventional learning model. Therefore, based on the average N-gain scores and the comparison, it can be concluded that the Team Based Learning model is more effective in improving students' critical thinking skills.

6. **Third Hypothesis**

The effectiveness test results of using the Team Based Learning model show that the N-gain score in the conventional learning model, where the average N-gain score in the Team Based Learning model is greater than that in the conventional learning model, with a value of 0.517. The value of 0.517 falls into the category of fairly effective. The N-gain score in the conventional learning model is 0.305, which, according to the criteria in Table 13, also falls into the fairly effective category, but the N-gain score in the Team Based Learning model is higher than that in the conventional learning model. Therefore, based on the average N-gain scores and the comparison, it can be concluded that the Team Based Learning model is more effective in improving students' academic achievement.

7. **Fourth Hypothesis**

The Multivariate Test results show a significant influence with a value of 0.000, where 0.000 < 0.05, thus it is concluded that the Team Based Learning model collectively influences students' interest in learning, critical thinking skills, and academic achievement.

CONCLUSION

Based on the findings of the research and the analysis conducted, the following conclusions can be drawn:

1. The Team Based Learning model is fairly effective in increasing students' interest in learning. This is evidenced by the N-gain score in the Team Based Learning model with a value of 0.548, which is higher than the N-gain score of -0.005 in the conventional learning model. The N-gain score in Team Based Learning falls

into the category of fairly effective. The comparison results indicate that the Team Based Learning model is more effective than the conventional learning model in increasing students' interest in learning.

2. The Team Based Learning model is fairly effective in improving students' critical thinking skills. This is evidenced by the N-gain score in the Team Based Learning model, which is 0.565, higher than the N-gain score of 0.346 in the conventional learning model. The N-gain score in the Team Based Learning model falls into the category of fairly effective. The comparison results indicate that the Team Based Learning model is more effective than the conventional learning model in improving students' critical thinking skills.
3. The Team Based Learning model is fairly effective in improving students' academic achievement. This is evidenced by the N-gain score in the Team Based Learning model, which is 0.516, higher than the N-gain score of 0.304 in the conventional learning model. The N-gain score in the Team Based Learning model falls into the category of fairly effective. The comparison results indicate that the Team Based Learning model is more effective than the conventional learning model in improving students' academic achievement.
4. The Team Based Learning model influences the improvement of students' interest in learning, critical thinking skills, and academic achievement at SMA Negeri 1 Amarasi. This is evidenced by the Multivariate Test, where the obtained significant value is below the significant level, thus it can be concluded that the Team Based Learning model collectively influences students' interest in learning, critical thinking skills, and academic achievement.

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