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Senior high school students' responses to learning debate based on higher-order thinking skills in civics

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Abstract

Research based on program data from the Programme for International Student Assessment (PISA) has revealed that low student achievement can be attributed to a lack of emphasis on higher-order thinking skills (HOTs) in learning. Field data also indicate that educators face challenges in identifying appropriate teaching methods. The overarching goal of this study was to gauge students' responses to the HOTs-based active debate learning method in the subject of civics. The active debate method serves as a problem-solving approach aimed at fostering higher-order thinking skills. The research employed a quantitative approach, utilizing a descriptive research method to provide a comprehensive overview of the research subject. A correlational design was employed to establish a connection between the active debate method and HOTs. The study was conducted among eleventh-grade students in senior high school, with a randomly selected participant pool of 108 students. The research findings demonstrate that students responded positively to the active debate learning method centered around higher-order thinking skills. The suitability and appropriateness of the active debate learning method were well-established. The students exhibited a commendable level of higher-order thinking skills. Additionally, the interpretation of the students' responses was carried out effectively. Consequently, based on the outcomes of this study, it is recommended that educational institutions further develop the utilization of active debate learning methods to enhance the learning experience.

Keywords: Civics education; learning debate; higher order thinking skills

1. Introduction

In preparing students who are able to compete in the era of the industrial revolution 4.0, teachers must be able to direct students to be able to think critically, analyze, and provide conclusions accompanied by problem solving. That the statement is in accordance with higher order thinking skills that students must possess and agree with future statements. Job opportunities will decrease because factories use robot-assisted automation systems and people who are not creative will find it difficult to get and develop their jobs. However, people who are creative and skilled at solving problems will be able to open up new opportunities by creating opportunities(Laila 2019).

However, the high-level thinking skills of students in Indonesia can still be said to be low, this can be seen based on the results of an international study program for international student assessment (PISA) that Indonesia's literacy score is 371 with a rating of 72 out of 78 countries. With regard to literacy skills, it certainly has an influence on higher-order thinking skills related to mastery of students' insights because the use of questions consists of 6 levels, level 1 is the lowest and level 6 is the highest while students in Indonesia are only able to answer at level 1 and level 2.

Related to the acquisition of study results at the international level, the 2013 curriculum was prepared, namely other improvements were also made to assessment standards, by gradually adapting international standard assessment models. It should be noted that the low achievement of students in the program for international student assessment or PISA is due to the fact that learning in Indonesia is generally not based on higher order thinking skills (Susilawati and Khaira 2021). Learning that is not based on higher order thinking skills is related to the provision of inappropriate learning methods.

This is based on a statement that there are difficulties for educators in adjusting the provision of learning models and methods given to students. The difficulty of adjusting the learning method has an impact on the ability of students who are still low in the following ways such as (1) understanding complex information, (2) understanding the theory of problem-solving analysis, (3) using problem solving procedures, (4) conducting investigations. Therefore, educators should be able and understand in choosing and determining learning methods that create higher order thinking skills (HOTS) in learning (Saridewi, Dewi, and Furnamasari 2022).

So, the purpose of higher order thinking skills according to a statement includes the ability to think critically, logically, reflectively, metacognitively, and creatively. The learning method that influences higher order thinking skills or higher order thinking skills is the active debate learning method. Based on the statement that several methods can be used in learning based on higher order thinking skills, namely the debate learning method. The active debate learning method is expected to be able to influence high-level thinking skills on students because according to a statement that active debate can be a valuable method for increasing thinking and contemplation, especially if students express opinions that contradict themselves.

This is expected to be able to have an impact on students' higher-order thinking skills and in accordance with the statement that education should aim to help students develop their various human potentials. Therefore, the active debate learning method is a solution in developing the potentials of students, one of which is the potential in speaking. That this potential can be developed through an active debate learning process which will have an impact on obtaining higher order thinking skills or higher order thinking skills for students in Civics subjects (Darby 2007).

The general condition of the school environment which will be the aim of the research is in one of the high schools in one city in Indonesia. There are two majors, namely Natural Sciences (IPA) and Social Studies (Social Sciences) which have used the revised 2013 curriculum. Based on the problems described above to overcome the problems in learning, the authors conducted research on students' responses regarding the active debate learning method which hopes to be a solution to facilitate students in the learning process. Therefore, the author gives the title "Student Responses to Active Debate Learning Methods Based on Higher Order Thinking Skills in Civics Subjects (Mumtaz and Latif 2017).

Based on the background above, the formulation of the problem can be formulated, namely how students respond to active debate learning methods based on higher order thinking skills in Civics subjects. Then it can also be formulated the limitations of the problem in the research, namely; (1) How appropriate is the implementation of the active debate learning method in Civics subjects; (2) How is the level of higher order thinking skills of students in learning with active debate learning methods; (3) How big is the student's response to the active debate learning method based on higher order thinking skills in Civics subjects.

The general objective of this research is to find out the responses of students to active debate learning methods based on higher order thinking skills in Civics subjects. While the specific objectives of this research are (1) to determine the appropriateness of the implementation of active debate learning methods in Civics subjects, (2) to determine the level of higher order thinking skills of students in learning using active debate learning methods, (3) to determine the magnitude student responses to active debate learning methods based on higher order thinking skills in Civics subjects.

2.   Research Method

The definition of the research method is generally stated that the method is a scientific way to obtain data with specific goals and uses, the scientific way means that research activities are based on scientific characteristics, namely rational, empirical and systematic. This study uses a quantitative approach with a quantitative descriptive research method, namely a method that functions to provide an overview of the object under study through data or samples collected as they are, perform analysis and draw conclusions. The research design in this research is using a descriptive correlational study design. Descriptive correlational research design is; "Research that studies the relationship of two or more variables, namely the extent to which variations in one variable relate to other variables (Tanjung, Ritonga, and Siregar 2021).

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Data collection techniques are techniques that can be done in various ways by researchers. So in this research data collection techniques are based on data collection techniques in various ways of researchers, namely questionnaires and interviews. Questionnaires are data collection techniques that are carried out by giving questions or written statements to respondents to answer. Then the questionnaire used was 30 questions via Google form. Interviews can be carried out in various ways, namely they can be carried out in a structured or unstructured manner and can be carried out face to face or by telephone. The interview that will be conducted is an unstructured type of interview with the eleventh grade Civics teacher at senior high school.

Population has the meaning that is; the area of generalization consisting of objects or subjects that have certain qualities and characteristics that are determined to be studied and conclusions drawn. Then the population in this study were all high school students in one of the eleventh grade Garut districts with 108 students.

Research instruments can be understood as tools for researchers in collecting data and the quality of the instruments will determine the quality of the data collected. So, there are research instruments, namely questionnaire guidelines, interview guidelines, observation guidelines, and documentation guidelines. The results of the questionnaire calculation from 36 trial respondents obtained 1741 results using the help of MS Excel. Based on the recapitalization of the calculation of variable of debate learning, the result is that of the 15 items in the questionnaire, there are 2 invalid questions, namely numbers 7 and 14 which are invalid. As well as other items declared valid. The results of the questionnaire calculation from 36 trial respondents obtained 1759 results using the help of MS Excel. Based on the recapitalization of the variable of higher order thinking skills questionnaire above, it can be stated that all 15 items are declared valid. After calculating with the Spearman Brown formula and obtaining a result of 0.5865, the resulting reliability coefficient is determined, then an interpretation is carried out using the reliability coefficient classification according to Guilford's criteria. From the

calculation of the reliability test of the variable of debate learning above, the reliability coefficient is obtained with a value of 0.7392 and when interpreted, the value is included in the high reliability category.

3. Result of the research

Of the 108 respondents, the ideal score was obtained and the highest score was 52 and the lowest score was 37 based on questions that had been declared valid. Next determine how students respond to the active debate learning method. Then it is done with several steps to make a Likert scale interpretation. The total results of data processing calculations obtained from the questionnaire were 4698. Based on the table above, the score of the research results questionnaire is in good interpretation (4563<ST<5616). So, this shows that the respondent's response to the active debate learning method is good.

From 108 respondents, the ideal score was obtained and the highest score was 60 and the lowest score was 42, based on the questions tested which were declared valid. Next determine how the students' higher order thinking skills or higher order thinking skills. The total results of data processing calculations obtained from the questionnaire were 5358 (5220<ST<6420). Then the score of the questionnaire results of the research has a good interpretation. So, this shows that the respondent's response to increasing higher order thinking skills through an active debate learning process is good.

Observations of the active debate learning variable and the Hots variable are in the form of an ordinal scale, so the degree of correlation is sought with the Spearman rank correlation coefficient. The correlation value obtained is the correlation value is 0.53 (t_{count} (6.5)> t_{table} (1.9)). This shows that the correlation that occurs is significant. Therefore, there is a significant correlation between active debate learning variables and higher order thinking skills. This shows that there are student responses to active debate learning methods based on higher order thinking skills in Civics subjects.

In knowing the influence between the independent variable and the dependent variable, the coefficient of determination is sought. The calculation results show that the coefficient of determination obtained is 0.29. Based on the analysis of the manually calculated determination data, it can be obtained that the magnitude of students' responses to the active debate learning method based on higher order thinking skills in Civics subjects is or 29%. This shows that the other 71% the influence of other variables which are not research objectives or not examined in this study but have no effect whatsoever on research because research has been carried out.

Based on what has been described above, thus, based on research from the responses of eleventh grade students in high school, the results can be obtained that the application of the active debate learning method has an influence on higher order thinking skills or higher order thinking skills in students in learning (Rodger and Stewart–Lord 2020).

4. Conclusion

Student responses can be identified based on their experiences in learning and related to 21st century education that learning is student-centered and the industrial revolution 4.0 which requires students to have several skills including critical and creative thinking skills which are included in higher order thinking skills. The suitability of the active debate learning method is very suitable to be implemented in civics learning because it will have an academic impact and impact on the attitudes of the participants, especially fostering an attitude of tolerance and mutual respect and will make students have the value of a disciplinary attitude. The level of students' higher order thinking skills or higher order thinking skills can be stated well based on the interpretation of the Likerts' scale carried out. The magnitude of students' responses to the active debate learning method based on higher order thinking skills in civics learning is 29%, which means that the active debate learning method can influence students' higher order thinking skills.

Acknowledgement

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