# The Effect of Problem posing Learning Model and Problem Based Learning Model on Skills Writing Text Reviews Cilacap City middle School Students Reviewed from Critical thinking Ability

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Abstract— This study aims to determine the effect of learning models and critical thinking skills on writing text review skills. This research was carried out on Cilacap City Middle School students. This research uses a 2x2 factorial design. The data analysis technique uses a 2-way analysis of variance. The results showed that: (1) The results of writing text reviews students who were taught using the Problem Posing Learning modelwere better than students who were taught using the Problem Based Learning learning model. (2) The results of writing text review students who have high critical thinking skills are better than students who have low critical thinking skills. (3) There is no interaction between the learning model and the ability to think critically about the ability to write review texts.

Keywords—writing, critical thinking, posing learning, based learning, text reviews.

## I. INTRODUCTION

Writing is a productive and expressive activity. Writing requires mental abilities when understanding a meaning/purpose and interpreting it into a symbol/writing [1]. The process of writing as a way of communicating requires ideas that are arranged logically, expressed clearly, and arranged interestingly and then poured in a writing. Writing skills are a manifestation of the ability and language skills most recently mastered by language learners after listening skills, speaking skills, and reading skills[2]. Writing is a job that requires working systematically and logically[3]. Writing is divided into two types, namely writing using ideas/ideas and writing using the power of reason to criticize something[4]. Writing using reasoning power to criticize can be applied when writing review texts. The review text is the text that contains the results of someone's interpretation and evaluation of the work of the text, film, drama as a follow-up in appreciating those who function to introduce and recommend the work.

The text of the review is the writer whose contents weigh or assess a work written by someone else[5]. Therefore the review text becomes difficult material because students are asked to rate a work created by someone else. Learning text review of junior high school students in the City of Cilacap still needs to be improved because of the lack of student understanding of some language rules that should be there, such as synonyms and absorption words[6]. Basically, writing does not only give birth to thoughts or feelings, but also the expression of ideas, knowledge, knowledge, and life experiences in written language. Therefore, writing is not a simple activity and does not need to be learned but is mastered[7]. When viewing writing as a process, writing becomes a complex literacy activity which includes reading and writing, feeling and thinking, speaking and listening, observing and acting[8].

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Writing is a multi-dimensional concept that includes language, content and context[9]. Writing is a communication activity in the form of delivering messages (information) in writing to other parties using written language as a tool or medium[10]. Based on the opinions of the experts above, it can be concluded that writing is one of the most recent language skills or peak skills after active and very complex listening, speaking and reading skills, to express one's ideas, knowledge, knowledge, and life experiences that need mastered in written language. The review text is one of the eighth

grade learning studies in the 2013 curriculum. In reviewing text learning, students are required to compile comments or comments on the watched art. Then make the response results in written form. The review text contains responses, actions, and analysis. A work that is held will certainly invite a reaction from the audience. A good work of film or drama if according to someone good is not necessarily good in the eyes of others.

The review text is one of the multi-generic products in the genre that uses opinion as a means to get the reader to think about perspectives on literary work[11]. This statement is supported by Pardiyono that the review text is a text that contains critical giving, evaluation, or reviewing intellectual copyrighted works[12]. This text aims to provide criticism, evaluation results, on a scientific work, book, or work of art. Movie review texts are one form of film criticism[13]. In addition to films and film essays, film criticism is made as a follow-up in appreciating films. Review is a form of film analysis that serves to introduce new films and recommend or not recommend the film[14]. Based on the opinion of these experts, it can be concluded that the review text is a text that contains the results of one's interpretation and evaluation of the work of text, film, drama as a follow-up in appreciating the function of introducing and recommending the work.

The review text is included in the type of discussion, namely text that serves to discuss various views of an object, issue or specific problem[15]. Review texts include argumentative text types. In the text, many opinions are presented based on interpretations or interpretations from certain perspectives accompanied by supporting facts. According to Kosasih, the review text has three structures, namely the introduction of issues; arguments; and assessments exposure to recommendations[15]. An introduction to the issue or review of the work containing the title, director, performer, including the description of the work itself, commonly called a synopsis. Then the argument exposure contains the core part of the text. The presentation of the argument contains an analysis regarding the elements of the work based on a particular perspective. In this section, the supporting facts are stated to strengthen the writer or Furthermore, speaker. the assessment recommendations that contain the strengths and weaknesses of the film/drama being reviewed. This section can also be accompanied by suggestions for audiences related to the importance of appreciation.

Characteristics of text reviews in the 2013 curriculum book, namely 1) foreign vocabulary or absorption words are words originating from foreign languages that have been merged or combined into a language and are generally accepted for use. Example: supermarket, plaza, and try out; 2) synonym or equivalent word is a word that has a different form but has the same understanding. Examples: flower-flowers, lies, and death; 3) verbs or verbs are classes of words that express an action of existence and experience. Example: listening, reading and writing; 4) nouns or nouns are words that indicate a concrete or abstract object. Example: Ties, chairs, and cabinets; 5) pronouns are words used to refer to other nouns, or replace other nouns. Example: he, his, this, and that; 6) Adjectives are words used to express the nature or condition of people, objects, or animals. Example: hard, far, and rich; 7) prepositions, also called prepositions, are words that connect words or parts of words and are usually followed by nouns or pronominals. Example: in, and, for; 8) conjunction also called conjunctions is a task word that connects two equal language units; word by word; phrase by phrase, clause by clause. Example: which is, or, to, from; 9) simplex sentences are sentences that have one main verb. Example: Ani has learned to save while Budi is already good at washing, and 10) complex sentences are sentences with two more main verbs. Example: Budi wins the class because Budi studies hard[16]. These types of words are used by students to produce review texts. The characteristics of a good review text according to Hooper must include four things, namely 1) a lively review text, 2) seriousness in writing (be serious), 3) the absence of condescension (No place for condescension), and 4) the author does not have a bad personality (Milquetoasts not allowed)[17]. Therefore, a good writer must be able to make a living writing and writing on the proper path.

The author only reviews the matters contained in the review material. Meanwhile, Kosasih said the steps to compile the review text, namely 1) we first watched the film/drama to be reviewed. In this case, it must be witnessed firsthand; 2) record the identity of the film/drama such as the title, author/director, time and place of the performance, and the name of the production/studio that performed it; 3) record important events or scenes that occur in it. The note-taking place to make a synopsis in the discussion section. Note the shortcomings and advantages of the show/staging concerning characterization, plot, theme, settings, and other elements. Think about the reasons that can explain the advantages or disadvantages; and 4) after the data is complete pour it into written form, taking into account the structure of the review text[15]. Writing becomes more activity when it is carried out in groups. Some students can ask questions without feeling shy with peers in small

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group discussions[18]. Based on the steps of composing the review text, the researchers applied it to both Problem Posing Learning and Problem Based Learning models.

### **Problem Posing Learning**

Problem Posing Learning is learning that emphasizes critical thinking by involving three skills, namely listening, dialogue, and action[19]. Learning methods Problem Posing Learning is given by giving examples, from these examples various problems will emerge[20]. Problem posing is defined as the submission of a problem or the formulation of a problem related to the terms of a problem that has been solved or an alternative problem that is still relevant[21]. In problem-based learning, students are presented with problem situations that contain social ideas as a whole as a matter of students' daily lives and become a stimulus in the learning process. Steps of learning Problem Posing Learning according to Ibrahim are: (1) the teacher conveys the learning objectives and motivates students to learn, (2) the teacher presents information both in lectures or questions and answers and then gives examples of ways of making questions from the information provided, (3) the teacher forms a study group between 5-6 students per group that is heterogeneous in terms of ability, race, and gender, (4) during group work takes place the teacher guides groups that have difficulty in making questions and completing them, (5) the teacher evaluates the results learn about the material that has been learned by means of each group presenting the results of their work, (6) the teacher rewards students or groups who have completed a given task well[22].

The learning model Problem Posing Learning is divided into three types of learning steps, namely learning by solving problems in examples (learning by solving examples), learning by reproducing examples (learning by reproducing examples), and learning by evaluating examples (learning by evaluating examples)[20]. Based on the opinion of the experts above, it can be concluded that the steps of the Problem Posing Learning model in this study are divided into three stages. The first stage, namely (1) the teacher introduces the film review text, (2) the teacher asks students to pre-read the film review text to see their knowledge before responding to information, (3) the teacher exemplifies one example of the film review text, and (4) the teacher starts to tell the story using four pictures. Then the second stage, namely (1) the teacher distributes different films for each group, (2) the teacher asks students to take four pictures according to the film being distributed and explains each picture using the correct grammar, (3) during this process, students are

asked to work in small groups discussing important parts of the film, and (4) students write review texts about the films that have been discussed. Then the third stage, namely (1) the teacher gives a study guide to divide the story into four parts, (2) tells the story to three other students in front of the teacher, (3) gives the opportunity for students to rewrite the story, and (4) collect the results of writing to the teacher.

### **Problem Based Learning**

Problem Based Learning is a learning model that is oriented to the active role of students by exposing students to a problem with the aim of students being able to solve existing problems and then drawing conclusions by determining their steps[23]. Problem Based Learning is a problem based learning model that uses real problems encountered in the environment as a basis for gaining knowledge and concepts through the ability to think critically to solve problems[24]. Problems aren't just things that need to be solved. However, the most important ideas can be generated with additional information obtained from these problems[25]. These ideas can shape learning when problem solving is being done. Problem solving styles as consistent individual differences in the ways people prefer to plan and carry out generating and focusing activities, in order to gain clarity, produce ideas, and prepare for action[26]. Based on the expert opinion above, it can be concluded that Problem Based Learning is one type of learning model that encourages students to think scientifically in solving problems based on understanding the problem.

This learning helps students to process information that has already become in their minds and compile their knowledge about the social world and its surroundings. According to Savery the characteristics of Problem Based Learning, namely (1) the role of the teacher as a facilitator of learning, (2) students need to be directed and regulated in learning, and (3) the need for instructional commands as a stimulus for inquiry[25]. According to Ertmer & Simmons Problem Based Learning is not as easy as presenting a problem and students solve it but the teacher has an important role to marry the direction[27]. According to Ismail one of Problem Based Learning strengths is that it can generate student ideas and encourage students to debate and argue about the particular problem being discussed[28]. The goal of Problem Based Learning is content learning, discipline, and the development of problem solving skills. Problem Based Learning also includes the goal of independent learning, information gathering skills, group learning, and evaluative reflective thinking skills[29]. According to

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Sanjaya Problem Based Learning has advantages, namely (1) problem solving techniques to better understand the content of the lesson, (2) provide challenges for students to find new knowledge, (3) problem solving to improve learning activities, (4) problem solving activities for provide knowledge for students to understand problems in real life, (5) problem solving can help students to develop new knowledge and be responsible for learning, (6) problem solving gives a picture that subjects are ways of thinking and something students understand not just learning from teachers and books, (7) problem solving is seen as more exciting and liked by students, (8) problem solving can develop skills to adapt new knowledge, (9) problem solving gives students the opportunity to apply the knowledge they have in the real world, (10) problem solving can develop an interest for continuously learning even though formal education has ended[30].

Weaknesses of the Problem Based Learning model, namely (1) when students do not have an interest or trust so the problem being studied is difficult to solve, students are reluctant to try, (2) learning success requires a considerable amount of time, and (3) without an understanding of the reasons for solving problems being studied, students will not learn what they want to learn (Sanjaya, 2011: 220). According to Huda the steps in implementing the Problem Based Learning model, namely 1) students presented a problem; 2) students discuss the problem in the Problem Based Learning tutorial in a small group [18]. In forming groups, heterogeneous groups must be carried out to provide opportunities for minority students[31]. Problem Based Learning is a student centered approach whereby students deal with ill-structured problems while workingin small groups[32]. Minority students are not isolated in one group. Then the formation of heterogeneous groups can provide opportunities for students to give new ideas and implement obligations equally. Clarifying the facts of a case then identifying a problem. They brainstorm ideas by building on prior knowledge. Then identify what is needed to solve the problem as well as what is not yet

They examine the problem and develop an action plan to solve the problem; 3) Students are involved in independent studies solving problems outside of the teacher's guidance. This can include libraries, databases, websites, communities, and observations; 4) Students return to the tutorial Problem Based Learning sharing information through peer teaching or cooperative learning on certain problems; 5) students present solutions to problems; and 6) students review what they have learned during the teaching process so far. All who participated in

the process we're involved in personal reviews, paired reviews, and reviews based on teacher guidance, as well as reflecting on their contributions to the process.

### **Critical Thinking Ability**

Critical thinking as an attitude wants to think deeply about the problems and things that are within one's reach, knowledge of the methods of examination and logical reasoning, and a kind of skill for applying these methods[33]. Critical thinking can make each more competent in seeing a problem[34]. Critical thinking is the art of thinking to make thinking better[35]. One of the major ambitions of education is to foster students' critical thinking in order to prepare them for functioning in a complex and rapidly changing society[36]. Then according to Cottrell critical thinking is cognitive activity related to the mind using mental processes such as attention, categorization, selection, and judgment[37]. Critical thinking is an attempt to draw smart conclusions in an open minded way[38]. Therefore the ability to think critically is the ability to think about things, substance, problems in depth using the method of logical reasoning and give an assessment of it.

Students learn better when actively building their knowledge than passively accepting it. The ability to think critically is a mental activity of organizing, decision making to solve problems, analyzing data, and interpreting data[39]. According to Adair when thinking using three things that work, namely 1) analyzing (analyzing) is the activity of taking pieces of elements which are then studied each piece, 2) synthesizing (synthesizing) taken from Greek verbs means freeing or loosening. Developing a concept, idea, theory, etc., and 3) valuing by giving a value and comparing the value of that thing with the value of something else[40]. Then according to Allen thinking starts from the process of finding, analyzing, and communicating information[31]. According to Paul and Elder critical thinking involves three phases, namely 1) analyzing thinking, 2) evaluating thinking, and 3) improving thinking[35]. Similar to the opinion of Mcmillan and Weyers critical thinking has three activities, namely 1) sharp (incisive) by seeing the complexity and unclearness of a thing, 2) logically (logically) by looking for the evidence used to provide clarity of the position of a thing, and 3) deep by involving high level of analysis, synthesis and assessment skills[41]. Critical thinking ability requires five components so that critical thinking skills can be formed, namely (1) critical reasoning skills, (2) critical attitude, (3) moral orientation, (4) critical reasoning concepts, and (5) special knowledge disciplines[42]. Critical reasoning

skills are the ability to state reasons properly. A critical attitude is an expression of attitude to tend to ask interrogative questions. Moral orientation is the motivation for critical thinking. Knowledge of the concept of critical reasoning is a need and condition that requires critical thinking. Specific knowledge discipline is the ability that must exist to be able to think critically. According to Ennis there are 12 indicators of critical thinking and are divided into five stages of activity, namely 1) providing a simple explanation that contains: focusing questions, analyzing questions and asking questions, and answering questions about an explanation or statement; 2) building basic skills, which consist of considering reliable sources or not and observing and considering a report on the results of observations; 3) concludes, consisting of activities to reduce or consider the results of deduction, induce or consider the results of induction, and make and determine the value of consideration; 4) provide further explanation, which consists of identifying the terms and definitions of consideration and also dimensions, and identifying assumptions; and 5) set strategies and techniques, which consist of determining actions and interacting with others[43]. Based on the opinions of the experts above, there can be synthesized three aspects of critical thinking abilities, namely 1) analyzing information by thinking sharply, thinking logically, and thinking deeply to understand information; 2) With the information that comes to mind critically formed the concept of information synthesis. Information synthesis is based on the appearance of interrogative questions over the information; and 3) Evaluate the synthesized information and follow up by communicating the information (explaining the information) obtained correctly.

### II. METHOD

The study was conducted in three junior high schools in the city of Cilacap. Three junior high schools were selected as research samples, namely SMP Negeri 4 Cilacap, SMP Negeri 6 Cilacap, and SMP Negeri 7 Cilacap. This research is an experimental research. In this study using a true experimental research design type factorial design with the procedure of assigning random assignments (randomly assignment) into several groups[44]. The factorial design used in this study was a 2 x 2 factorial design. The population in this study were all 8th-grade students of state junior high schools in the administrative city area of Cilacap in the 2018/2019 school year consisting of 28 schools. The sampling technique used in this study uses cluster random sampling.

Data collection techniques in this study is a test. Test techniques are used to collect data on critical thinking skills and written text review skills. Test techniques are carried out in two types. First, a written test technique in the form of the work of writing a student review text. Second, multiple choice test techniques (multiple choice) to measure students' critical thinking skills. Test the validity of the review text writing skills using construct validity. Test the validity of the instrument of critical thinking skills carried out content validity and empirical validation. Empirical validity uses the calculation of the validity of the product moment tests. The reliability test of writing review text skills was carried out by the rating reliability test which emphasized the consistency between the assessors of interraters reliability. Test reliability items about critical thinking skills using Cronbach's alpha reliability test. Before conducting data analysis it is necessary to test the prerequisites for data analysis. In this study, there are two prerequisite tests, namely the normality test and the homogeneity test. The normality test in this study uses the Lilliefors technique. The homogeneity test in this study uses the Bartlett technique. The data analysis technique used to analyze research data inferentially is a two-way analysis of variance (ANOVA) techniques.

### III. RESULT AND DISCUSSION

The research data were obtained from the scores of the written text reviews Students are divided into two classes namely, experimental class students and control class students. The experimental class was taught using the Problem Posing Learning model. The control class is taught using the Problem Based Learning model. In the experimental and control class two groups are divided. The two groups are students who have high critical thinking skills and students who have low critical thinking skills. From the experimental class and the control class the pretest and posttest data were obtained. The data collected in the form of scores writing text reviews of students who were taught with the Problem Posing Learning model. Data score writing reviews of students who were taught with the Problem Posing Learning model amounted to 23. Based on these data obtained the highest score of 92 and the lowest of 56. The average (mean) score of writing text reviews with the Problem Posing Learning model of 73.39. Then the middle value (median) is 72 and the highest value (mode) is 72. The standard deviation of the score writing review text with the Problem Posing Learning model 9.99 and the total score of 1688. Furthermore, the data collected in the form of writing scores for students review text taught

with the model Problem Based Learning. Data score writing review texts of students who were taught with the Problem Based Learning model amounted to 25. Based on these data obtained the highest score of 80 and the lowest of 48. The average (mean) score of writing text reviews with the Problem Based Learning model of 65.44. Then the middle value (median) is 64 and the highest value (mode) is 68. The standard deviation of the score is to write a review text with a Problem Based Learning model 9.22 and a total score of 1636.

The data collected in the form of scores writing text reviews of students who have high critical thinking skills. Data score writing reviews of students who have high critical thinking skills totaled 24. Based on these data obtained the highest score of 92 and the lowest of 64. The average (mean) score of writing text reviews of students who have high critical thinking skills of 75.67. Then the middle value (median) is 76 and the highest value (mode) is 68. The standard deviation of writing scores for students who have high critical thinking skills 8.58 and the total score of 1816. Furthermore, the data collected in the form of scores for writing students reviewing texts that have low critical thinking skills. Data score writing reviews of students who have low critical thinking skills totaled 24. Based on these data obtained the highest score of 76 and the lowest of 48. The average (mean) score of writing text reviews of students who have low critical thinking skills of 62.83. Then the middle value (median) is 64 and the highest value (mode) is 64. The standard deviation of scores is writing text reviews of students who have low thinking ability 7.59 and a total score of 1508. The prerequisite test in this research is in the form of normality test and homogeneity test. The normality test was carried out on a sample group of Cilacap City Junior High School students. Normality test in this study was carried out with the Liliefors test. The normality test results of this study can be seen in the following table.

Table.1: Data Normality

No	Sample	N	Sig.	Explanation
	Group		U	•
1	A1	23	0,200	normal
2	A2	25	0,200	normal
3	B1	24	0,174	normal
4	B2	24	0,224	normal

### Explanation:

A1: Students who are taught with the Problem Posing Learning model.

A2: Students who are taught with the Problem Based Learning model.

B1: Students who have high critical thinking skills.

B2: Students who have low critical thinking skills.

Homogeneity testing is done by Bartlett test. In the homogeneity test sample of students who were taught the Problem Posing Learning and Problem Based Learning models, the chi-square value was 0.144 and the significance value was 0.707. Then the chi-square table value of 0.05: 1 = 3.81. Based on the results of the chi-square test is not greater than the chi-square table. Therefore, the sample comes from a homogeneous population. The homogeneity test sample of students who have high and low critical thinking skills obtained a chi-square value of 0.237 and a significance value of 0.63. Then the chi-square table value of 0.05: 1 = 3.81. Based on the results of the chi-square test is not greater than the chi-square table. Therefore, the sample comes from a homogeneous population.

Hypothesis testing is done using a two-way analysis of variance (two-way ANOVA). Based on the analysis of the variance of the two paths of the variance source of learning models obtained Fcount of 25,621 with sig. 0,000. Therefore sig. smaller than  $\alpha = 0.05$  then H0 is rejected. This means that there is a difference between the application of the Problem Posing Learning modeland the Problem Based Learning modelto the review text writing skills. Based on the results of the analysis of the variance of the two lines of variance in the source of critical thinking skills obtained Fcount of 53.570 with sig. 0,000. Therefore sig. smaller than  $\alpha = 0.05$  then H0 is rejected. This means that there are differences between students who have high critical thinking skills and students who have low critical thinking skills in writing text review skills. Based on the analysis of the variance of the two lines of variance in the source of learning models and critical thinking skills obtained Fcount of 0.013 with sig. .908. Therefore sig. greater than  $\alpha = 0.05$  then H0 is accepted. This means that there is no interaction between the learning model with the students' critical thinking skills with the review text writing skills.

# The effect between the use of the Problem Posing Learning learning model and the Problem Based Learning learning model on the skills of writing text reviews

This experimental study was conducted to determine the effect of problem-based learning models on writing text review skills. This research was conducted in class VIII G of SMP Negeri 4 Cilacap and class VIII B of SMP Negeri 6 Cilacap in the 2018/2019 school year.

In the Problem Posing Learning model students are required to be active. Learning that demands student

activity can produce the best learning outcomes[45]. Cognitive development depends on the activeness of students with the environment. This is in line with the syntax in the Problem Posing Learning learning model. Problem Posing Learning modelis also considered to reduce student inactivity in learning and fear of the material to be taught[46]. Learning text reviews with the Problem Posing Learning model in this study requires students to be active. With the role of each student in each group triggers students to be creative in solving problems. The problem in learning is in the form of questions that are arranged together.

The research in class VIII B of SMP Negeri 6 Cilacap carried out learning to write a review text using the Problem Based Learning method. The Problem Based Learning model has stages of orienting students to problems. At this stage triggers students to be more creative in solving problems[47]. This study applies a problem based learning model. The Problem Posing Learning modelhas the stages of composing questions that are made into problems. Then the Problem Based Learning model has stages of problem orientation. The formation of a problem in the two learning models has differences.

Based on the results of the study it was found that the Fcount was 25,621 and the value of sig. 0,000. When the value of sig. smaller than  $\alpha=0.05$  then H0 is rejected. In other words, there is a difference between the experimental class being taught with Problem Posing Learning and the control class being taught with Problem Based Learning. Although the Problem Posing Learning modeland the Problem Based Learning modelhave the same concept based on the problem but when applied have differences in the results.

# The effect between students who have high critical thinking skills and students who have low critical thinking skills on writing text review skills

This experimental research also has the aim to show whether there is a difference in the ability to think critically with writing text review skills. The ability to think critically is divided into two, namely the ability to think critically high and critical thinking skills low. The measurement of critical thinking skills was carried out twice in each group. Based on the results of the analysis of the two-lane variance, Fcount 53.570 and sig values were obtained. 0,000. When the value of sig. smaller than  $\alpha = 0.05$  then H0 is rejected.

In other words, there is a difference between students who have high critical thinking skills and students who have low critical thinking skills. The methodologies that are most commonly used to develop critical thinking are related to oral and written communication as well as to reading and text analysis[48]. Students who have high critical thinking skills can write better review texts than students who have lower critical thinking skills. Someone who can think critically understands, gives reasons and acts according to the logic that is built[49]. Therefore in this study the ability to think critically has three aspects, namely (1) analyzing information by thinking sharply, thinking logically, and thinking deeply to understand information; (2) With the information that comes to mind critically formed the concept of information synthesis. Information synthesis is based on the appearance of interrogative questions over the information; and (3) Assess the synthesized information and follow up by communicating the information (explaining information) obtained correctly.

Analyzing information by thinking sharply is used by students who have high critical thinking skills to analyze the information of the work being reviewed. Then think logically about the facts contained in the work. In line with the opinion of Saputra (2016: 8) critical thinking is a cognitive ability to inform something based on logical reasons and strong empirical evidence. Next, think sharply to find elements in the reviewed works. The information obtained is developed and generates interrogative questions. The interrogative question is sought for answers and made into an informative sentence. Then it is presented densely in the text of the review made.

In this study there are two problem based learning models. Problem Posing Learning modeland Problem Based Learning learning model. The Problem Posing Learning Model is a learning model that requires students to find a problem statement. Then the problem formulation becomes the student's main focus to find the answer. The formulation of the problem is compiled in the form of a comprehensive view of the material discussed. The active role of students to solve problems by group is the main action in the Problem Posing Learning learning model.

The Problem Based Learning modelhas many similarities with the Problem Posing Learning learning model. In the Problem Based Learning model students are required to solve problems. If the Problem Posing Learning problem is in the form of a concept arranged in a question, the Problem Based Learning problem is broader. Problems that are solved in various forms and more than one. The ability to think critically is a set of abilities that come together with a certain purpose. The ability to think critically consists of various abilities and abilities that are

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carried out in stages. The ability to think critically stems from the ability to recognize existing problems. Students need to know the problem in-depth and understand the context in which the problem originated. Furthermore, analyzing information, students analyze existing information. References are sought and studied to provide new insights and perspectives on the problem. Then provide synthesis based on logic and facts accordingly.

# The interaction between learning models with critical thinking skills in writing text review skills

In this study the results of the analysis of two-way variants with the value of Fcalculation 0.013 and sig values. .908. Based on the results of these data the value of sig. greater than  $\alpha=0.05$  then H0 is accepted. Therefore, no interaction was found between the learning model and the ability to think critically. Although the Problem Posing Learning modeland the Problem Based Learning modelis problem based learning. As well as the need for critical thinking skills to understand deeply on the problem does not become the interaction between the two variables.

The application of learning models requires a variety of abilities that are not only critical thinking. Critical thinking skills exist and are applied at the stage of problem recognition in the learning model. However, the Problem Posing Learning modelmakes the introduction of problems at the beginning of learning carried out jointly. Implementation together in order to produce a problem statement that has a solid substance in accordance with the review text material. Furthermore, critical thinking skills are carried out by students in the Problem Based Learning model but the introduction of the problem is done in groups. With a group to explore the problem more easily carried out and provide higher quality results. The ability to think critically which is a process carried out in a relay or alternately within the group. So that students' critical thinking skills are not burdened individually.

### IV. CONCLUSION

Based on the results of the analysis that has been done, the results obtained by writing text reviews of students taught using the Problem Posing Learning method are better than the results of writing text reviews of students who are taught using the Problem Posing Learning method. Then the results of writing text reviews of students who have high critical thinking skills are better than the results of writing text reviews of students who have low critical thinking skills. Furthermore, no interaction was found between the learning model with

the ability to think critically on writing text review skills.

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