



Students' Critical and Creative Thinking Skills through Inquiry and Discovery Learning Models in Social Studies Learning Class VIII Mts Negeri 1 Lebong

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Abstrak

Penelitian ini bertujuan untuk mengetahui perbedaan model pembelajaran Inkuiri, *Discovery Learning* dan pembelajaran konvensional terhadap kemampuan berpikir kritis dan kreatif peserta didik, serta untuk mengetahui perbedaan kemampuan berpikir kritis dan kreatif peserta didik yang diajar menggunakan ketiga model tersebut di MTs Negeri 1 Lebong. Jenis penelitian ini menggunakan menggunakan adalah quasi eksperimen. Populasi dalam penelitian ini adalah seluruh peserta didik kelas VIII MTs Negeri 1 Lebong. Teknik pengambilan sampel menggunakan *cluster random sampling*, sehingga diperoleh tiga kelas sampel yaitu kelas yang menggunakan model Inkuiri, kelas yang menggunakan *Discovery Learning*, dan kelas yang menggunakan pembelajaran konvensional dengan jumlah sampel sebanyak 106 peserta didik. Instrumen penelitian berupa tes yang digunakan untuk mengukur kemampuan berpikir kritis dan berpikir kreatif peserta didik. Analisis data dilakukan menggunakan uji *One Way ANOVA* yang dilanjutkan dengan uji lanjut *LSD*. Hasil penelitian bahwa terdapat pengaruh yang signifikan model pembelajaran Inkuiri, *Discovery Learning*, dan pembelajaran konvensional terhadap kemampuan berpikir kritis dan berpikir kreatif peserta didik. Selain itu, terdapat perbedaan yang signifikan kemampuan berpikir kritis dan berpikir kreatif antara kelas yang diajar menggunakan model Inkuiri, *Discovery Learning* dan pembelajaran konvensional. Model pembelajaran *Discovery Learning* lebih efektif dalam meningkatkan kemampuan berpikir kritis peserta didik, sedangkan model pembelajaran inkuiri dan *Discovery Learning* mampu meningkatkan berpikir kreatif peserta didik. Dengan demikian, penerapan model pembelajaran Inkuiri dan *Discovery Learning* dapat menjadi alternatif model pembelajaran yang efektif untuk meningkatkan kemampuan berpikir kritis dan berpikir kreatif peserta didik dibandingkan dengan pembelajaran konvensional.

Kata Kunci: *Inkuiri, Discovery Learning, Berpikir Kritis, Berpikir Kreatif, Pembelajaran IPS.*

Abstract

This study aimed to determine the effect of the Inquiry model, *Discovery Learning*, and conventional learning models on students' critical and creative thinking skills. In addition, this study also aimed to identify the differences in students' critical and creative thinking skills among students taught using these three models at Mts Negeri 1 Lebong. This research employed a quasi-experimental design. The population of this study consisted of all eight-grade students of MTs Negeri 1 Lebong. The sampling technique used was cluster random sampling, resulting in three sample classes: a class taught using the Inquiry model, a class using *Discovery Learning*, and a class using conventional learning, with a total sample 106 students. The research instrument was a test designed students' critical and creative thinking skills. Data analysis was conducted using the One-Way ANOVA test followed by the Least Significant Difference (LSD) post hoc test. The results of the study showed that there was a significant effect of the Inquiry model, *Discovery Learning*, and conventional learning models on students' critical and creative thinking skills. Furthermore, there were significant differences in students'

critical and creative thinking skills abilities among the classes taught using the Inquiry model, Discovery Learning, and conventional learning. The guided Discovery Learning model was found to be more effective in improving students' critical thinking skills, while the Inquiry and Discovery Learning models were more effective in improving students' creative thinking skills. Therefore, the implementation of the Inquiry and Discovery Learning models can serve as effective alternative learning models to improve students' critical and creative thinking skills compared to conventional learning.

Keywords: *Inquiry Model, Discovery Learning, Critical Thinking, Creative Thinking, Social Studies Learning.*

Research Background

Education is a force that can raise human dignity and dignity. With education, the young generation is not only able to improve the quality of life economically, but also foster moral, spiritual, and social responsibility. The learning paradigm now requires students to have competencies that are in accordance with the needs of the modern world, such as the ability to think critically, creatively, innovatively, and collaborate. Therefore, the curriculum needs to be designed to reflect the changing learning paradigm of the 21st century and prepare students with the appropriate skills and competencies to face today's challenges. (Hanipah, 2023). 21st century learning emphasizes the importance of abilities and skills that are relevant to the demands of the times. 21st century skills include critical thinking, creativity, communication, and collaboration.

In this context, the role of teachers is very important in equipping students to have the necessary competencies in the modern era. 21st century skills also need to be integrated in social science learning to fit the context of a digital society. Thus, social skills are an important aspect in facing various complex challenges in the ever-changing modern era. (Sholeh et al., 2023). In the social studies curriculum, social studies education in the 21st century aims to involve students in the active learning process while equipping them with valuable skills. "Skills for the 21st Century" explains these skills. To

succeed in the modern world, learners must be able to do four things: 1) think critically and solve problems; 2) communicate effectively; 3) cooperate well; and 4) creative and innovative (Rohman & Kusaeri, 2021). If learners can develop these skills, their learning will become more meaningful. (Maslahah et al., 2022).

The ability to think critically is the main capital for students to be able to sort information, analyze problems, and make the right decisions in the midst of the rapid flow of changing times. Critical thinking makes students more ready to be part of a global society that is active, productive, and able to contribute in the world of work and social life. Thus, the development of critical thinking skills must be a priority in the educational process so that future generations can face future challenges intelligently and responsibly. This is in line with what was stated by Pratama (2024) "The ability to think critically is very important for students because it is considered a distinguishing characteristic of an educated person and a requirement to become an active worker and citizen of the world". Creative thinking skills are a cognitive ability in the problem-solving process that allows a person to use their intelligence in a unique way and directed towards a result. In solving problems in social studies subjects cannot always be solved in the same way as before, this requires students to develop creative thinking skills so that students are able to solve problems in society in various ways of

solving. There are five aspects in creative thinking, namely fluency, flexibility, authenticity, elaboration and sensitivity in thinking (Utami., 2020).

Creative thinking is a learning process that requires teachers to be able to motivate and bring out students' creativity during learning, by using several varied methods and strategies, such as group work, role-playing, and problem solving, through this ability, students are expected to be able to understand, master, and solve the problems faced by coming up with innovative ideas and solutions. Thus, the creative thinking process allows students to obtain appropriate and effective solutions to various problems they encounter. (Febrianingsih, 2022). Based on the results of mid-semester and end-of-semester exams for the 2024/2025 academic year for social studies subjects, there are still many students who have not completed the KKTP there are around 70% of students in grade VIII MTs Negeri 1 Lebong who obtained scores below the Learning Goal Achievement Criteria (KKTP).

This low learning outcome is influenced by the limitations of students' critical and creative thinking skills. This can be seen from the lack of students' habits in participating in active learning that can develop students' potential to think critically and creatively. This reveals that students' critical thinking skills are still lacking or low because students are not used to being trained in indicators of critical thinking skills, and there is still a lack of innovative learning models that are applied to improve students' ability to think critically.

Currently, MTs Negeri 1 Lebong is still using a lecture learning model that still tends to be passive, because students listen more than play an active role directly in the learning process. This can reduce student

involvement, reduce learning motivation, and limit critical and creative thinking skills. In addition, these methods are often less effective in facilitating students' different learning styles, especially for those who understand better through hands-on experience. If used singly and excessively, lecture learning can make the classroom atmosphere monotonous, so students tend to feel bored. So it is felt necessary to apply the Inquiry and Innovative Learning model *Discovery Learning* to improve critical and creative thinking which will then be on the Learning Goal Achievement Criteria (KKTP).

This low learning outcome is influenced by the limitations of students' critical and creative thinking skills. (Prasetyo & Rosy, 2021) states that the ability to think critically is a very important skill possessed by every individual to deal with various problems that arise, both in social and personal life. The inquiry learning model provides opportunities for students to build knowledge through the process of finding answers to a problem on their own. In this approach, teachers play the role of facilitators who guide students to explore, ask questions, observe, and draw conclusions based on the data they collect.

This process will hone students' critical and creative thinking skills, because they not only receive ready-made information, but also have to test, analyze, and prove a concept before it is accepted as knowledge (Tohir, 2020). Models *Discovery Learning* is one of the learning models where the teacher does not directly provide the final result or conclusion of the material he presents. Rather, students are given the opportunity to search and find the results of the data. This learning process will be remembered by students all the time, so that the results they get are not easily forgotten

(Rahmadini, 2024). In line with this, through the learning experience found by themselves, students will find it easier to understand and remember the material in the long term. This process of discovery is what makes knowledge not quickly forgotten, because the information obtained goes through the stages of active and critical thinking. Based on the background of the problems that have been described above, the author is interested in conducting research with the title "Students' Critical and Creative Thinking Skills Through Inquiry and Inquiry Models." *Discovery Learning In Social Studies Learning Class VIII MTs Negeri 1 Lebong*".

Research Methodology

This type of research is a pseudo-experiment (*quasi-experimental*) with a comparative approach. Experimental research is a study that is used to find the influence of certain treatments on others under controlled conditions, other variables that can affect the experimental process can be controlled precisely (Sugiyono, 2020). The research was carried out from January to February 2026 at MTs Negeri 1 Lebong. The population in this study is all students of class VIII MTs Negeri 1 Lebong which consists of 3 even semester classes for the 2025/2026 Academic Year, totaling 106 students, with a total of class VIII.A 27 students, class VIII.B 26 students, class VIII.C 27 students, and class VIII.D 26 students. Sampling in this study was carried out using the *Random Sampling* by based on lotteries. In this study, data collection was carried out using instruments in the form of critical thinking ability tests and creative thinking skills. The method used to analyze the data in this study is variance analysis (ANOVA). Before ANOVA is implemented, the researcher will conduct a prerequisite test, namely a normality test and a homogeneity test, to

ensure that the assumptions of the analysis are met.

Results and Discussion

A. Theory Discussion

1. Critical Thinking Skills

Critical thinking is essential to equip students with the data analysis, evaluation, and synthesis skills needed to face the challenges faced by contemporary society (Wisudojati et al., 2024). Critical thinking is an important ability that students must have to face challenges in society, through this skill, students are expected to be able to analyze, evaluate, and synthesize various information in depth and objectively. Thus, they are not only able to understand a problem comprehensively, but also able to make the right decisions and produce creative and rational solutions in various life situations.

Based on the theory above, the behavior of students describes the level of critical thinking skills they have. We can correlate a person's critical thinking skills with the indications issued by various authorities in his field. Six critical thinking skills, including: (1) interpretation, the capacity to understand, explain, and give meaning to data or information; (2) analysis, the capacity to understand the relationship between information used to formulate ideas or opinions; (3) evaluation, the capacity to verify the accuracy of the information used to formulate ideas or opinions; (4) inference, the capacity to understand and acquire the components necessary to reach reasonable conclusions; and (5) explanation, capacity to articulate or convey the results of reasoning based on evidence,

methodology, and context. (6) Self-regulation, Maintaining one's own mental process, or self-regulation. (Haryani, 2017). Critical thinking skills are useful life skills in all fields. Therefore, it is important to teach it early in society, at home, and in the classroom. (Oktariani & Ekadiansyah, 2020).

2. Characteristics of Critical Thinking Skills

The character of a person who thinks critically will produce an independent idea and ideas that are beneficial to learning and society, including: 1. Having many alternative answers and creative ideas 2. Easy to understand other people's points of view 3. Be a good colleague 4. More independent 5. Often find new opportunities 6. Minimize misperceptions 7. It is not easy to be deceived (Prasetiyo & Rosy, 2021). Based on this, it can be concluded that students who have the ability to think critically will show a positive and productive character, both in learning and in society. A person who is able to think critically tends to be creative, has a broad point of view, and is able to work well together. They are also more independent, able to find new opportunities, and have the ability to assess information appropriately so as to avoid misunderstandings and forms of fraud.

(Murti Bhisma, 2023), explains the Characteristics of Critical Thinking as follows:

- a. Critical thinking requires a constant effort to analyze and examine beliefs, knowledge, and conclusions made, using supporting evidence.

- b. Critical thinking requires the ability to identify prejudices, biases (biases), propaganda (e.g., drug company propaganda), lies, distortion (misinformation), misinformation (misinformation), egocentrism, and so on.
- c. Critical thinking includes the ability to recognize problems more sharply, find ways to solve the problem, gather relevant information, and recognize the assumptions and values behind beliefs, knowledge, and conclusions.

3. Indicators of Critical Thinking Ability

The indicators of critical thinking ability according to (Ennis, 1996) are:

Table 1. Dadd Critical Thinking Indicator

Yes	Indicator	Sub Indicators
1	Find problems	Finding the problem that Occurs
2	Provide arguments	Provide opinions and reasons for how it happened Problems
3	Linking problems with other problems	Describe the relationship between One Problem with Another Problem
4	Evaluate based on facts	Conduct fact-based evaluations and predict Possible occurrence
5	Drawing conclusions	Draw related conclusions Problems

6	Providing solutions	Provide solutions that can Done
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4. Steps to Critical Thinking Skills

(Prasetiyo & Rosy, 2021), Critical thinking can be defined as the process and ability used to understand concepts, apply, synthesize and evaluate the information obtained or the information produced. This process can be divided into three stages:

a. Identifying and clarifying problems

- Recognize key difficulties or challenges.
- Analyze similarities and differences.
- Identify relevant facts.
- Define the issue.

b. Assess relevant information

- Choosing facts, views, and reasoning/judgment.
- Verify consistency.
- Recognize assumptions.
- Identify potential stereotypical elements.
- Identify potential prejudices, emotions, propaganda, and misunderstandings of statements (semantic biases).
- Recognize potential differences in value orientation and ideology.

c. Problem Solving/ Drawing conclusions

- Determine the data needed and its adequacy.
- Anticipate potential consequences of actions, problem-solving, or conclusions reached.

5. Creative Thinking Skills

Creative thinking is a person's skill in analyzing new information, and combining unique ideas or ideas to solve a problem. The ability to think creatively can be known from the skill of analyzing data, as well as providing responses to various problem-solving problems. High creativity indicates that a person has been able to think creatively. Complex thinking branches into cognitive and non-cognitive thinking. Creative thinking is a form of cognitive thinking (Qomariyah & Subekti, 2021). Based on this, it can be concluded that creative thinking is an ability that allows individuals to be able to produce new and original ideas through a flexible mindset, open to various concepts, and able to innovate in facing challenges.

Creative thinking skills are skills that are categorized as high-order thinking skills or *High Order Thinking* (HOT). The ability to think creatively is a person's ability to create something new, either in the form of ideas, ideas or real works that are different from those that have existed before. In addition, the ability to think creatively is the ability where students produce new ideas that result from new understandings. So students who have the ability to think creatively will be better able to find solutions in a new way, this ability is one of the goals that must be achieved in social studies learning at school (Nadila et al., 2023). A person who has creative thinking skills is able to come up with ideas, solutions, or works that are fresh, unique, practical, and in accordance with the situation, as can be seen from some of the definitions given above.

This means that creative thinkers don't just repeat processes that have been considered beforehand; They can also see things from a new perspective, making connections between concepts that at first glance seem unrelated, and coming up with original and new approaches to old issues. In other words, the ability to think creatively is a cognitive potential that emphasizes originality, flexibility, fluency, and elaboration in producing ideas and solutions.

6. Characteristics of Creative Thinking Ability

Creativity is characterized by the following characteristics: a) ideas that arise quickly; b) the ability to connect and combine various elements; c) the ability to build simple things; d) the ability to work intricate and meticulous; e) a strong desire to know more; f) courage to take risks; g) responsiveness and independence; and h) preference to seek single concepts (Wijaya & Astuti, 2022). Based on the characteristics of creative thinking above, it can be concluded that creative thinking skills are characterized by a number of characteristics that allow individuals to produce new, unique, and useful ideas, ideas, or solutions. Individuals who have the ability to think creatively tend to think outside the box, dare to take intellectual risks, and are able to see a problem from various perspectives. With these characteristics, the ability to think creatively plays an important role in the learning process and daily life, because it can help individuals find innovative solutions, adapt to changes, and develop their potential optimally.

7. Indicators of Creative Thinking Ability

Indicators of Creative Thinking according to (Munandar, 1999), the characteristics of creative thinking ability, are:

- a. **Fluency** (fluent thinking skills) is having characteristics such as triggering many opinions, answers and problem solving, providing many ways or suggestions in doing various things and always thinking of more than one answer.
- b. **Flexibility** (flexible thinking skills) is the skill of giving ideas, answers or questions that are varied, being able to see a problem from different perspectives, looking for many alternatives, different solutions and being able to change the way of approach.
- c. **Originality** is the ability to come up with new and unique ideas, think of unusual ways to express oneself and be able to make unusual combinations.
- d. **Elaboration** is the ability to enrich and develop an idea or product, and add or detail a situation to make it more interesting.

B. Learning Model

1. Inquiry Learning Model

Inquiry learning is a learning activity in which learners are encouraged to learn through their active involvement with concepts and principles, and teachers encourage learners to have experiences and conduct experiments that allow learners to discover principles for themselves. (Hulu et al., 2023). Inquiry Learning is an innovative learning model to help students learn to formulate problems and test their own opinions and have awareness of their

own abilities, learning begins with the submission of a problem and question. Students are required to think logically, analytically, and critically in searching, investigating, and finding answers, solutions to the problems that are the questions (Tohir, 2020).

2. Features of the Inquiry Learning Model

According to (Sugianto et al., 2020) Presenting the characteristics of the inquiry learning model, namely:

- a. Includes resources for the learning model phase of the inquiry.
- b. Can be completed with instructions for Analyze learning activities in a controlled environment.
- c. In relation to the idea of education and the search for knowledge.
- d. Have responsibilities or directions that come from their own school.

3. Steps of the Inquiry Learning Model

According to (Prasetyo & Rosy, 2021) states that there are a series of processes involved in inquiry learning, namely:

- a. Orientation
Steps to foster an accommodating learning environment that enhances critical thinking and problem-solving skills.
- b. Summarizing the problem
One way to direct students to a problem in a puzzle is to have them formulate the problem.
- c. Hypothesis
An idea is being investigated as a potential short-term solution; The truth must be confirmed.
- d. Collect data
Data collection for the purpose of testing theory. Conducting trials or

experiments is one way of collecting data.

- e. Testing hypotheses

The measures used to ensure a satisfactory response based on facts obtained through empirical research.

- f. Summing up the conclusion

The method used to describe the results of hypothesis testing.

4. Advantages and Disadvantages of Inquiry Learning Models

The advantages and disadvantages of the Inquiry learning model are as follows, (Prasetyo & Rosy, 2021) as follows:

- a. Pros

Emphasizing learning strategies through the development of several cognitive, affective, psychomotor aspects so that they can produce meaningful learning, can provide opportunities for students to learn according to their own abilities and styles, creating effective learning techniques requires hard work from various aspects, including cognitive, emotional, and psychomotor development. This can give children the opportunity to learn in a way that works best for them. Modern learning theories also state that this approach is suitable, as they define learning as behavior change through experience. Highly talented learners can benefit from this approach.

- b. Disadvantages

Learning with the inquiry method is less effective when used on students whose intelligence is not above average and only relies on

instructions from teachers. In addition, large classes will have difficulty implementing learning with the inquiry method because not all students have the required critical thinking skills, and teachers must also actively participate in the continuous learning process.

5. Discovery Learning Model

The *discovery learning* model is one of the learning models where the teacher does not directly provide final results, answers, solutions or conclusions from the subject matter he presents. Rather, students are given the opportunity to search and find the results they want to obtain. So that this learning process will be more meaningful that will be remembered by students all the time, so that the results it can achieve are not easily forgotten (Rahmadini, 2024). Based on this, *Discovery Learning* can be defined as a learning strategy that encourages students to actively participate in the learning process with the aim of acquiring new information, ideas, or concepts. Learners are given about a topic, by the teacher in this approach will create an environment that encourages their curiosity and allows them to learn through practice, investigating, observing, experimenting, and analyzing.

6. Features of the Discovery Learning Model

Discovery learning is a learning model that regulates the teaching process in such a way that children acquire knowledge that they did not previously know not through notification, but found themselves". As for the characteristics in *Discovery learning*, activities or learning in such a way that

students can find concepts and principles through their own search process. To find answers or solutions, students must make observations, classify, make conjectures, explain, draw conclusions and so on to finally find some concepts or things he wants (Lesma Wati, 2022).

7. Steps of the Discovery Learning Model

According to (Sunarto & Amalia, 2022), the steps of the *Discovery Learning* learning model are:

- a. Interesting stimuli are introduced to the class to arouse their interest.
- b. The teacher poses a problem and encourages students to gather as much information as possible about the problem in order to formulate a hypothesis.
- c. Data Collection: Teachers give learners the opportunity to collect as much relevant data as possible to validate hypotheses.
- d. Data Processing: This stage involves learners processing the information and data they found in the previous step.
- e. Make sure everything goes according to plan by asking students and teachers to check in with each other.
- f. Extrapolation: Make inferences from the results of the verification process.

8. Advantages and Disadvantages of the Discovery Learning Model

a. Pros

According to (Sunarto & Amalia, 2022), the *Discovery Learning* learning model has advantages in learning activities, namely: 1. Improving students' ability to solve problems, 2. Strengthening the

concept of student confidence, because it gains confidence to be able to work with other students, 3. Encouraging student active involvement, 4. Making the learning situation more aroused, 5. Training students become more independent, 6. Making students active in learning activities, 7. Help students become better problem solvers, 8. Instill confidence in learners as they develop the courage to work together with their peers, 8. Motivation of students to play an active role, 9. Determine a more engaging learning context, 10. Instill a sense of independence in students, 11. Allows learners to actively participate in the classroom.

b. Disadvantages

The disadvantages of the *Discovery learning model*, according to (Rahmadini, 2024), are:

- a. The learning process with a discovery approach often takes a relatively long time because students have to go through the stages of exploration, problem identification, and conclusion drawing independently. This can be an obstacle, especially if the material taught is quite extensive or the learning time is limited.
- b. Not all students have the ability to think abstractly or have adequate learning experience to find their own concepts, so teachers must provide intensive guidance so that there is no confusion or misinterpretation in understanding the material.

C. Social Studies Learning

1. Social Studies Learning Objectives

When discussing the educational goals of social studies, experts often draw connections between pedagogical focuses and different areas of interest. Gross mentions in the book *Etin* in (Agustin et al., 2024) The purpose of the social studies curriculum is to "prepare students to become well-functioning citizens in a democratic society" and, furthermore, to help students develop into productive members of society. Teaching students to think critically and reach the right conclusions in the face of uncertainty is another goal of the social studies curriculum. At the same time, students' individual interests, strengths, and opportunities for development can be optimally fulfilled through the emphasis of the social studies curriculum on teaching fundamental skills and knowledge. The purpose of the details is detailed below:

- a. Acquire a basic understanding of civics, economics, geography, history, and sociology through educational and psychological means.
- b. Fostering analytical and imaginative thinking, investigation, problem-solving, and interpersonal competence.
- c. Increase understanding and support for social and humanitarian principles.
- d. Fostering better skills and teamwork in an increasingly diverse society at the national and international levels.

2. Social Studies Learning Principles

According to (Agustin et al., 2024) Generally, the principles of social studies The concepts that form the

basis of social studies education are as follows:

- a. Give children opportunities and encourage them to engage emotionally, physically, cognitively, and socially in their own learning.
- b. Give learners the freedom to put forward their own ideas, beliefs, and methods for interacting with the world around them.
- c. It can be applied in the daily lives of students.
- d. Teachers should be seen as people who help students learn.
- e. Create a fun and safe learning environment for children to relax and focus while encouraging their imagination.

3. Social Studies Learning Function

According to Etty Ratnawati in (Agustin et al., 2024) Education in social studies should provide students with the intellectual and social tools they need to have a positive impact on the world, as well as social awareness and community involvement that will make them effective agents in achieving the nation's educational goals. Social studies has an important goal in preparing students to be able to understand and participate intelligently in society. With these functions, social studies learning not only emphasizes knowledge, but also develops students' social skills and character, so that they are ready to face social life intelligently and responsibly.

4. Characteristics of Social Studies Learning

According to (Agustin et al., 2024) the characteristics of social studies subjects include:

- a. Social studies covers a wide range of disciplines, including but not limited to: economics, geography, history, sociology, civics, religion, education, and humanities.
- b. The scientific frameworks of sociology, geography, history, and economics provide the foundation for the basic competencies of social studies, organized into themes and subthemes.
- c. Social studies skills also cover a wide range of social topics that have been developed through interdisciplinary and transdisciplinary methods.
- d. By using concepts such as cause and effect, territoriality, adaptation to different types of environmental management, structures, processes, and social problems, and the struggle for survival including meeting needs, gaining power, achieving justice, and ensuring security, the basic competencies of social studies can be linked to events and changes in society.
- e. The Basic Social Sciences Competency includes the study and understanding of human life and social phenomena through the use of three dimensions.

The data in this study are data on critical thinking ability and creative thinking skills obtained from *the pretest* and *posttest results*. The data of *the pretest* results were given before the students received treatment using the Inquiry and *Discovery Learning learning models*. The *posttest results* were given after the students received treatment using the Inquiry and *Discovery Learning learning models* to determine the participants' critical thinking skills and creative thinking abilities educated.

The description of the data that has been obtained is as follows:

Normality Test

- a. Data from the normality test on the pretest score of critical thinking ability, it was found that the data in conventional classes, classes with the Inquiry learning model and classes with *the Discovery Learning* learning model were distributed normally. This is shown by the significance value of the three classes having a $\alpha > 0.05$.
- b. Data from *the normality test posttest* results showed that the three treatment groups had a significance value of α greater than 0.05. In the normality test, the data is said to be normal if the significance value of α must be greater than 0.05. In the conventional group, the significance value is 0.116 which means it is greater than 0.05. Therefore, it is concluded that the data in the conventional group has met the requirements for the normality test. In the Inquiry group, the significance value was $0.152 > 0.05$. This indicates that the data is distributed normally. In the *Discovery Learning* group, the significance value was $0.128 > 0.05$. So the data in this group is also concluded to be normally distributed. The conclusion is that the data on these three groups can be continued for further tests.
- c. The data from *the pretest results* on the pretest value of creative thinking ability, it was found that the data in conventional classes, classes with the Inquiry learning model and classes with *Discovery Learning* were normally distributed. This is shown by the significance value of the three classes having a value of $\alpha > 0.05$.
- d. The data on *the posttest* results in the Conventional group with a sample of 26 ($df = 26$), obtained a statistical value of 0.158 with a significance value (Sig.) of

0.094. Because the Sig. value is $0.094 > 0.05$, the data in the Conventional group is declared to be normally distributed. In the Inquiry group with a sample of 27 ($df = 27$), the statistical value obtained was 0.148 with a significance value (Sig.) of 0.133. Given the value of Sig. $0.133 > 0.05$, it can be concluded that the data in the Inquiry group is normally distributed.

Homogeneity Test

- a. The homogeneity test shows *Pretest* score data using *the levene test*. The data tested is homogeneous data according to the requirements for follow-up testing. This is indicated by a significance value of $\alpha > 0.05$. This shows a relatively uniform distribution of scores. Thus, *the pretest* data meets one of the requirements to conduct parametric statistical analysis at the next stage of analysis.
- b. The homogeneity test showed that the data from the three treatment groups were homogeneous due to a significance value of more than 0.05. For the associated data, it is homogeneous if the significance value is $\alpha > 0.05$. This value is seen based on the significance value that exists on *the based on median*. The data used has a *Livene Statistic* value of 2,727 and a significance value of $0.72 > 0.05$. So it can be concluded that the data used is homogeneous. With the fulfillment of normal and homogeneous data requirements, Anova testing can be carried out.
- c. Test the homogeneity of the Pretest score data for creative thinking ability using *the levene test*. The data tested is homogeneous data according to the requirements for follow-up testing. This is indicated by a significance value of $\alpha > 0.05$. This shows a relatively uniform distribution of scores.

- d. The homogeneity test of the learning outcome variable, obtained a *Levene Statistic* value (based on Mean) of 1.036 with the degree of freedom $df_1 = 2$ and $df_2 = 77$. The significance value (Sig.) produced is 0.360. Because the Sig. value is $0.360 > 0.05$, it can be concluded that the variance of data from the three treatment groups (Conventional, Inquiry, and *Discovery Learning*) is the same or homogeneous. In addition, tests based on Median and Trimmed Mean also showed significance values above 0.05 (0.513 and 0.350), which further strengthens the evidence that the data meet the criteria of homogeneity.

Hypothesis Test

a. Differences in Conventional Learning Models, Inquiry and *Discovery Learning* on Students' Critical Thinking Skills Before Treatment

One Way ANOVA Test Critical Thinking Ability In the *Pretest*, it can be seen that the significance value of the ANOVA test in all three groups is 0.471. The value was greater than $\alpha > 0.05$ which means there was no significant difference between the three groups. This proves that the results of the critical thinking skills of each group of students before treatment are relatively the same.

b. Differences in Conventional Learning Models, Inquiry and *Discovery Learning* on Students' Critical Thinking Skills After Treatment

The *One Way* ANOVA test of critical thinking ability after treatment found that the significance of the difference in the three treatment groups was 0.000. The value is less than 0.05 ($0.000 < 0.05$). This means that there are significant differences in treatment outcomes in the three groups. To find out more clearly, a

follow-up test was carried out, namely the LSD test.

The conventional group with the Inquiry group had a significance value of $\alpha = 0.002$. With a *mean difference* value of -1.407. The significance value is $0.002 < 0.005$, so there is a significant difference between the conventional group and the Inquiry group. Conventional groups have differences with *Discovery Learning* groups. This is indicated by a *mean difference* of -2.926 with a significance of 0.000. This shows a very significant difference.

In the Inquiry group with the conventional group, the *mean difference* value was 1.407 with a significance of $0.002 < 0.005$. This shows that the Inquiry method is significantly more influential on the critical thinking skills of learners than conventional methods. The Inquiry group with the *Discovery Learning* group had a mean differential value of -1.519 with a significance value of $0.001 < 0.05$. This shows that the effectiveness of Inquiry is still lower than that of *Discovery Learning*.

The *Discovery Learning* group with the conventional group had a mean difference value of 2.926 with a significance of $0.000 < 0.05$. This shows that *Discovery Learning* is superior to improving students' critical thinking skills compared to conventional. The *Discovery Learning* group with Inquiry had a mean difference of 1.519 with a significance value of $0.001 < 0.05$. This shows that the *Discovery Learning* method is significantly superior compared to the Inquiry method.

c. Differences in Conventional Learning Models, Inquiry and *Discovery Learning* on Students' Creative Thinking Skills Before Treatment

The *One Way* ANOVA test of creative thinking ability found that the significance value of the ANOVA test in the three groups was 0.172. The value is greater than $\alpha > 0.05$. Which means there is no significant difference between the three groups. This proves that the results of the creative thinking ability of each group of students before treatment are relatively the same.

d. Differences in Conventional Learning Models, Inquiry and Discovery Learning on Students' Creative Thinking Skills After Treatment

The *One-Way* ANOVA test to find out if there is a significant mean difference simultaneously between the three treatment groups tested. The significance value (Sig.) obtained is 0.000. Because the Sig. value is $0.000 < 0.05$, it can be concluded that there is a statistically significant difference in average learning outcomes between the learning groups with the Conventional Method, Inquiry, and *Discovery Learning methods*. With the discovery of significant differences, a PostHoc LSD follow-up test was carried out to see which group was more dominant.

The conventional group with the Inquiry group had a significance value of $\alpha = 0.000$. With a *mean difference* of -2.984. The significance value is $0.000 < 0.005$, so there is a significant difference between the conventional group and the Inquiry group. Conventional groups have differences with *Discovery Learning groups*. This is indicated by a *mean difference* of -3,651 with a significance of 0.000. This shows a very significant difference.

In the Inquiry group with the conventional group, there was a *mean difference* value of 2,984 with a significance of $0.000 <$

0.005. This shows that the Inquiry method has a significant influence on students' critical thinking skills than conventional methods. The Inquiry group with *the Discovery Learning* group had a mean difference value of -2,667 with a significance value of $0.000 < 0.05$. This shows that the effectiveness of Inquiry is still lower than *that of Discovery Learning*.

The *Discovery Learning* group with the conventional group had a mean difference value of 3.651 with a significance of $0.000 < 0.05$. This shows *that Discovery Learning* is superior to improving students' critical thinking skills compared to conventional. In *the Discovery Learning* group with Inquiry, there was a mean difference of 2,667 with a significance value of $0.000 < 0.05$. This shows that there is a significant difference between the creative thinking outcomes of students who use the Inquiry method and those of students who use *the Discovery Learning* method.

e. The Effect of Using Inquiry, Discovery Learning and Conventional Learning Models on Critical Thinking Skills

The results of the hypothesis test using variance analysis (ANOVA) found a significant influence of the use of learning models on students' critical thinking skills in Social Studies Class VIII subjects at MTs Negeri 1 Lebong. Statistical evidence shows an F-count value of 22.719 with a significance value of 0.000. Because the Sig. value is $0.000 < 0.05$, it can be concluded that the difference in learning models has a different impact on the critical thinking acuity of students. These findings are in line with research (Putra, R. A. Cimari, 2024) which shows that differences in learning methods result in significant

differences in students' critical thinking skills through the one-way ANOVA test.

Discovery Learning proven to have the most powerful and positive influence. This can be seen from the significant advantages of this model over the other two models. Against the Conventional method, *Discovery Learning* superior by an average difference (*Mean Difference*) of 2.926 ($p = 0.000$). Against the Inquiry model, *Discovery Learning* Superior with an average difference of 1.519 ($p = 0.001$). It shows independence in finding concepts (*Discovery*) in social studies material triggers students to analyze and evaluate information in more depth than just following a structured inquiry procedure. This is in line with research conducted by (Hanipah, 2023) which found *Discovery Learning* Improve students' ability to think critically for their progress in the future. The Inquiry Model also has a significant influence in improving critical thinking skills when compared to Conventional methods. The data showed an average difference of 1.407 with a Sig. value of 0.002. The involvement of learners in formulating problems and testing hypotheses through the research process has been shown to be more effective than passive learning.

This result is in line with the research conducted by (Husni, M., Rosad, 2025) although in the context of this study the results are still below the achievement of the *Discovery Learning model*.

Conventional methods have the least influence on the development of critical thinking. This is evidenced by the Mean Difference value which is always negative when compared to Inquiry (-1,407) and *Discovery Learning* (-2,926). One-way learning (*expository*) tends to limit students' cognition to the level of

memorization only, so that students' critical thinking skills are not optimally stimulated.

From the results of the study, it was found that *Discovery Learning* and Inquiry has a higher influence than conventional models in improving critical thinking skills. This is due to the *Discovery Learning* and Student inquiry plays an active role in building their knowledge. Learning *Discovery Learning* and Inquiry leads students to rely on themselves in finding learning resources. On *Discovery Learning* and Teacher inquiry plays a role as a facilitator in the learning process. Meanwhile, in the conventional model, the main material provider is charged to the teacher. The learning experience that students have is also different in each learning method. In conventional learning, students must accept and memorize the material provided. Learning *Discovery Learning* and Inquiry help learners to discover and build on the knowledge they possess.

f. The Effect of Using Inquiry, *Discovery Learning* and Conventional Learning Models on Creative Thinking Skills

Hypothesis test using variance analysis (ANOVA) found a significant influence of the use of learning models on students' creative thinking skills in Social Studies Class VIII subjects at MTs Negeri 1 Lebong. Statistical evidence shows an F-count value of 43.889 with a significance value of 0.000. Because the Sig. value is $0.000 < 0.05$, it can be concluded that the difference in the learning model applied has a significant impact on the level of student creativity.

Discovery Learning It was proven to have the strongest influence on creative thinking skills with the highest average score (13.07). Based on the LSD table,

this model is significantly superior to the conventional method by an average difference (*Mean Difference*) by 3.651 ($p = 0.000$). The process of self-discovery in this model provides space for students to explore new and original ideas, which is at the core of creative thinking skills. These results are in line with research conducted by (Sari & Ag, 2023) finding that *Discovery Learning* produces a higher average score than conventional learning, with a significance of $0.000 < 0.05$ and states that *Discovery Learning* affect students' creative thinking ability.

The Inquiry Model also had a significant influence on increasing student creativity compared to the Conventional method, with an average difference of 2.984 ($p = 0.000$). Through the activities of investigation and the formulation of solutions to social problems, students are trained to think divergently. This proves that active student engagement is much more effective than relying solely on lecture methods. This is in line with research (Shima, S. N., & Hadi, 2022) that found that inquiry learning improves students' ability to think creatively.

An interesting finding in this study is that there is no statistically significant difference in influence between the Inquiry model and *Discovery Learning* to creativity. This is shown by a Sig. value of $0.108 > 0.05$. In the context of developing creativity, these two active models have equal qualities. During student-centered learning (*student-centered*), students' creative potential will be optimally increased, both through Inquiry and discovery schemes. The Conventional Method has the lowest influence with an average score of only 9.42. The one-way nature of learning and the tendency to memorize facts leads to aspects of

creativity such as flexibility (*flexibility*) and novelty (*Originality*) does not develop in students.

Overall, the results of the research at MTs Negeri 1 Lebong confirm that the active learning model (*Discovery Learning* and Inquiry) has a much greater and positive influence on students' creative thinking skills than conventional methods. Teachers have the flexibility to use either of the two active models to create a creative social studies classroom climate, albeit in a purely numerical way *Discovery Learning* give the most maximum impact.

Conclusion

Based on the results of the research and data analysis that has been described, it can be concluded that:

1. There was a significant influence of the use of Inquiry, *Discovery learning* and Conventional learning models on students' Critical Thinking skills ($F = 22.719$ with Sig. = 0.000).
 - a. There is a significant difference in the critical thinking skills of students who use the inquiry learning model and *Discovery learning*. *Discovery Learning* was more effective with a mean difference of 1.519 (Sig. 0.001).
 - b. There was a significant difference in the critical thinking skills of students who used the inquiry and conventional learning models with an average difference of 1.407 (Sig. 0.002).
 - c. There was a significant difference between the critical thinking skills of students who used *the Discovery learning* and Conventional learning models with an average difference of 2.926 (Sig. 0.000).
2. There was an effect of the use of Inquiry, *Discovery learning* and Conventional

learning models on students' Creative Thinking skills ($F = 43.889$; Sig. 0.000).

- a. There is a difference in the creative thinking ability of students who use the inquiry learning model and *Discovery learning* which has a value (Sig. 0.000).
- b. There was a difference in the creative thinking ability of students who used the inquiry and conventional learning models with an average difference of 2.984 (Sig. 0.000).
- c. There was a difference in the creative thinking ability of students who used the *Discovery learning* and Conventional learning models with an average difference of 3.651 (Sig. 0.000)

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