THE IMPLEMENTATION OF BRAINSTORMING METHOD IN DEVELOPING HIGHER ORDER THINKING SKILLS (HOTS) TO THE STUDENTS IN TEACHING READING

(An Experimental Research for the Second Year of Students at MAN 1 Banda Aceh in Academic Year 2017/2018)

THESIS

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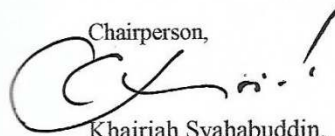Khairiah Syahabuddin, M. Hsc. Esl., M. TESOL, Ph.D   Azizah, M. Pd

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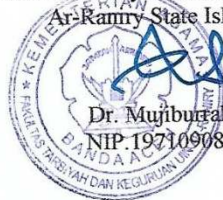
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ABSTRACT

This study was conducted based on the fact that the thinking ability of Indonesian students, especially at the level of higher order thinking skills as well as analyzing, understanding, creating a new idea and applying the knowledge in literacy is below the average.Hence, this research was led to investigate the effect of using brainstormingmethod to develop higher order thinking skillsin teaching reading to the studentsof MAN 1 Banda Aceh and to know the students' perception toward the implementation of brainstorming method to develop HOTS in learning reading. This experimental research involved one class to be given the treatment which was class XI-Bahasa in MAN 1 Banda Aceh in the academic year 2017/2018totaling 33 students. The data were obtained through pre-tests,post-testand the questionnaire. The findings of this research showed that the students' higher order thinking skills improve as a result of implementing brainstorming method. This can be understood from the t-test result, where the calculated value of t-scoreis higher than t-table (5.09>2.74).In addition, the result of the questionnaire indicated that majority of students were happy learning reading by using brainstorming method and most of them believed that brainstorming method could facilitate them to accomplish the questions at the level of HOTS in learning reading. In conclusion,the implementation of brainstorming method in teaching reading generates meaningful progress todevelop higher order thinking skills of the students of MAN 1 Banda Aceh.

Keywords: *Brainstorming method, higher order thinking skills, thinking ability.*

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بِسْمِ اللَّهِ الرَّحْمَٰنِ الرَّحِيمِ

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Banda Aceh, 14 july 2018

The writer

Dea Varadita

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CHAPTER I
INTRODUCTION

A. Background of Study

Nowadays, students are expected to have some capability criteria to be able to compete in their future career and society. Sulaiman et al., (2017) agrees that these criteria are as well asto be a problem solver, thoughtful decision maker and lifelong learner. Making the thinking skill, especially at the level of higher order thinking becomes a crucial thing to be developed. According to Yahya et al., (2012) higher order thinking is a concept that refers to the Bloom taxonomy of the cognitive domain. Thinking in cognitive domain is categorized into six levels of thinking. The hierarchical level identifies the lower level to the higher level of cognitive processing. The first three levels of Bloom's taxonomy domain are lower higher order thinking skills (LOTS) as well as knowledge, comprehension and application. Meanwhile, the other three levels are higher order thinking skill (HOTS) as well as analysis, synthesis and evaluation (Forehand, 2010, pp. 41-47).

According to Thomas and Throne (2009) higher order thinking skill requires students to have thinking ability rather than memorize the fact and the concept. Students should understand, analyze, categorize, create a new idea and apply the knowledge. In learning English, the development of higher order thinking skill, not only can help students to minimize "recall" activity, but also can develop students' knowledge in order to transfer the concept into other concepts, apply the knowledge and solve problems or issues that will certainly improve students' ability in learning English (Thomas & Throne, 2009). This

statement agrees with Vygotsky (1962) that states learning process could only be useful for students if they are directly involved in the thinking process.

However, based on the survey undertaken by Programme for International Student Assessment (PISA) in 2015, the performance of Indonesian students in thinking ability as well as analyzing and critical thinking in science, literacy, and mathematics was ranked 61, 62 and 63 out of 69 countries. The PISA result reflects that Indonesia is still struggling remembering the result was significantly below the average. According to OECD (2018) the way of teaching is strongly associated with students' performance. For instance, in almost all education systems, the students score higher when the teachers are able to support students to explain ideas, discuss their questions and demonstrate the ideas (OECD, 2018).

In addition, teacher-centered is one of teaching strategy commonly used by the most of the teachers in Indonesia for teaching English. This way will only promote students to recall the information from their teacher making students are not used to think deeply. As the result, thinking ability of students is not explored effectively. Whereas, according to Buhungo (2015), one ofthe demands in the implementation of 2013 curriculum as the current official curriculum in Indonesia is the students are demanded to think at the level of analysis, evaluation, and creation (higher order thinking).

Therefore, changing how teachers teach becomes an important topic. Teachers as the important roles in education should develop the eligible strategies which can effectively develop students' higher order thinking skills. Teachers should apply creative methods as well as total physical response (TPR), communicative language teaching, contextual teaching learning and brainstorming

methods. All of the methods should be varied and accommodated to achieve active learning in the classroom. It is supported by Sener et al., (2015) that also believes nowadays, pedagogy should focus on developing teaching methods which support student-centered and independent learning, project-based learning and collaborative learning, as well as authentic assessment.

Brainstorming method is one of the effective ways in creating student-centered learning by doing discussions and giving fast response. According to Hedgcock and Ferris (2009) brainstorming is a process of several discussion questions or free writing prompts that could help students to recall relevant experiences. Brainstorming method intends to activate background knowledge in which students learn to generate ideas (Amidianti, 2011). By using this method, the students are asked to brainstorm on new topic given by teachers to generate the concept. Brainstorming can create some crucial impacts as well as it can develop students' curiosity about material given and make them mentally and psychologically prepared to know the material content. So, students gradually will think at the level of higher order thinking and active learning will be achieved. Regarding with the explanation above, the researcher would like to investigate the implementation of brainstorming method in developing higher order thinking skill to students in teaching English.

B. Research Question

Based on the background of the research, the research question can be formulated as follows:

1. Is there a statistically significant effect at the level of significance ($\alpha 0.05,$) for using brainstorming method in developing higher order thinking to the students in teaching reading?

2. What are students' perception toward the implementation of brainstorming method in developing higher order thinking skills in teaching reading?

C. The aim of Study

Based on the problems of the research above, the aims of the study are:

1. To investigate the statistically significant effect at the level of significance ($\alpha 0.05,$) for using brainstorming method in developing higher order thinking to the students in teaching reading.

2. To know the student perceptions toward the implementation of brainstorming method in developing their higher order thinking skillin teaching reading.

D. Significance of the Research

This study may have some implications for English teaching and research. First, it may intend to give an additional study for other researchers related to the implementation of brainstorming method in the real teaching learning process in the classroom and its effects in developing higher order thinking skills. And finally, this study may contribute to give valuable information for English teachers about the effect of brainstorming method in developing higher order thinking skills of students. These implications can be applied by teachers in the classroom as the teaching strategy.

E. Terminology

To avoid misunderstanding, it is necessary to clarify some terms provided in this study. There are shown as follows:

1. Brainstorming Method

According to Hedgcock and Ferris (2009) brainstorming is a process of several discussion questions or free writing prompts that could help students to recall relevant experiences. Then, Allman (2000) defines that brainstorming is a technique to develop a list of ideas into various responses without blaming other ideas. In this method, the teacher guides students to think individually about a topic before discussing it together.

Therefore,in this research, the researcher is aimed to apply Brainstorming method in order to teach English actively in the classroom by attracting students to ask questions, think independently and connect the ideas with their background knowledge. This method makes them to be used to think deeply but freely, then the problem will be discussed together (Allman, et al., 2000).

2. Higher Order Thinking

Higher order thinking (HOT) is the level of thinking that includes some cognitive domains as well as analysis, synthesis and evaluation (Yahya et al., 2012; Forehand, 2010). HOT is aimed to reduce recall activity and to make students to be used to transfer the concept into other concepts, apply the knowledge and solve problems or issues. According to Brookhart (2013) including higher order thinking skill in teaching can actually improve ability not only in mastering knowledge but also in understanding.

In this research, the researcher focuses on developing higher order thinking skills to the students by giving them chances to accomplish some problems or questions at the level of HOTS. This way will help them to be used to understand the material rather than memorize the concept. This statement agrees with Vygotsky (1962) that states learning process could only be useful for students if they are directly involved in the thinking process.

F. Scope of study

The sample of this study arestudents of class XI-Bahasa in academic year 2017/2018 totalling 33 students. This study discussesabout the implementation of brainstorming method in developing higher order thinking skills in teaching reading. Thus, findings are limited to those discussions within the applied procedures. The brainstorming method type used in the experimental teaching is starbusting type to teach narrative text material. In order to test the students the researcher only develops questions at the level of higher order thinking skills such as analysis, synthesis and evaluation.

G. Hypotheses

The hypothesis of this research can be stated as follows:

Ha   : The implementation of brainstorming method has a statistically significant effect at the level of significance (α0.05) in developing higher order thinking to the studentsin teaching reading.

Ho   : The implementation of brainstorming method does not have a statisticallysignificanteffect at the level of significance (α0.05) in developing higher order thinking to the studentsin teaching reading.

H. Previous Studies

The following information discusses about some studies conducted before that are relevant to this research. First, Yoke et al., (2015) conducted a research about innovating with HOTS for ESL reading class. This study was conducted based on the reason that students have been found to be passive and teachers have been found to lack creativity in innovating their lessons. Thus, the thinking skills should be introduced in teaching reading. This quasi-experimental study aims at investigating how HOTS can be integrated in the ESL reading classroom and to what extent students perceive this idea as applicable for them to develop critical thinking skills. The background and the aim of study of this previous study is the same as the current study but the current study using additional method which is brainstorming method as the strategy in developing HOTS in teaching reading. Then, the subject material in this study is same as the current study which is English subject but the differencesare the level of participants and strategy in doing experimental teaching. This previous study has been involved 30 students of undergraduate students. The students were exposed to two treatments: (1) online reading response task (2) offline reading response task. In both treatments, they were required to discuss a given issue in groups and then to read an article on the issue before posting their views. A selected number of 10 students were then subjected to a set of structured interview session. Another difference is this previous study used a descriptive analysis while the current study used statistical analysis. The results of the previous study showed that HOTS gives positive impacts in teaching reading indicated by the students favoured the given tasks and

believed that it was innovative and out-of-the-box, with recommendations that the tasks should be continued and recommended to other ESL reading classrooms.

Then, Ghabanchi & Behrooznia (2014) conducted a research entitled the impact of brainstorming method on reading comprehension and critical thinking ability of EFL learners. The aim of this study is to investigate the impact of brainstorming as a pre-reading strategy for reading comprehension ability as well as critical thinking (CT) ability. The aim of this previous study is same as the currentstudy but the difference is the previous study used critical thinking rather that higher order thinking skills. This previous study used experimental research with 25 participants for experimental group and 29 participants for control group in university Mashad, Iran. The result ofthis research was the experimental group performed significantly better thanthe control group (t.2.66, p=01). So, based on the result of this study indicated that brainstorming strategies have a positive significant effect on both CT ability as well as reading comprehension ability of the participants.

After reviewing the previous studies above, the current research aims to fill in some gaps and generate new ideas related to the brainstorming method in developing higher order thinking skills to the students in teaching reading.

CHAPTER II
LITERATURE REVIEW

The researcher provides the collection of sufficient references for giving the theoretical explanations in order to carry out this research.

A. English Language Teaching in Senior High School

English is one of subject in senior high school directed to develop four language skills. According to Depdiknas (2006) level of literacy of senior high school students includes performative, functional, informational and epistemic. These levels are related to reading, listening, writing and speaking skill. Students are expected to master some capabilities in English subject:

1. Developing competence to communicate in oral examination and written form to achieve the level of information literacy.

2. Having awareness of the nature and importance of English to improve the competitiveness of nations in a global society.

3. Learners develop an understanding of the interrelationships between the language of the culture. (Depdiknas, 2006).

Buhungo (2015) explains some demands of 2013 curriculum as current official curriculum in Indonesia that should be applied by the teacher in the teaching and learning process:

1. Students are the subject of learning that has to think independently (discovery learning).

2. Students are demanded to think at the level of analysis, evaluation, and creating (higher order thinking).

3. Teachers should develop contextual learning in the classroom.

B. Brainstorming Method

1. Definition of Brainstorming Method

Allman, et al., (2000) defines that brainstorming is a method that used to generate ideas and give responses without judging other's ideas. This process is important for students because they have chances to think independently and freely to collect their ideas. Then, Claxton (2008) states that brainstorming is a process of "listing" various ideas. This process can be individual or group to think about a topic. In other word, it is a fast "respond and record" practice without judging but discussing the topic together.Hedgcock and Ferris (2009) admits that brainstorming is a process of several discussion questions or free writing prompts that could help students to recall relevant experiences.

From some definitions from experts above, the researcher can conclude that brainstorming is a method that can be used for teaching by attracting students to think independently, generate ideas related to the topic and connect the ideas with their background knowledge. This method makes them to be used to think deeply but freely, then the problem will be discussed together (Allman, et al., 2000).

2. Advantages and Disadvantages of Brainstorming Method

Al-Maghrawy(2012) defines brainstorming as a forum for a group creativity to generate general ideas. The brainstorming method usually involves oral and pre-writing performance in helping the studentsin expressing ideas It is a technique that is used to develop discussion in the classroom (AlMutairi, 2015). According to Sayed (2009) brainstorming has a great importance in the teaching process, as follows:

1. Supports students to be a problem solver by giving an innovative solution.

2. Supports students to be inspired by the ideas of others through the development and build on the ideas in the classroom.

3. Assiststhe teamwork of the students and build relationships among them and assess the views of others.

Then, according to Humaidan (2005) other significances of brainstorming method as well as assisting the teacher to conclude ideas that are broader than students' thinking solutions, making the teacher more democratic and respectful of the students' different points of view, helping students to promote thinking and decision-making skill as well as foster different viewpoints and opinions and it may equally be used in all key areas of learning.

However, according to AlMutairi (2015) the brainstorming method has the some limitationsbecause of some factors, as follows:

1. Brainstorming method is generally not suitable for younger levels.The level of reasoning required the structured procedures to work.

2. The brainstorming method requires teachers to make more effort in teaching as well as teachers must equallybe able to guide and give helps as necessary considering the class environment as such considerations often determine the outcomes, the teacher must carefully design the lesson plan to reach the desired learning outcomes and the group interacts in response to questions, and the teacher also refrains from entering the discussion as an active participant.

3. Students are encouraged to learn about the subject by actively sharing information, experiences, and opinions. Because of that, the students are required

to have the flow of communication that is a transaction among all the students rather than recitation and response between individual students and the instructor.

3. Brainstorming in Teaching English

In the language classroom, brainstorming is used in teaching specific skills. This method is commonly used for teaching writing by using some brainstorming types as well as free-association and word-mapping is often included in the pre-writing or warm-up phase (Wray, 2002, p. 25). Then, brainstorming is also usually used for teaching other skills in learning English including teaching reading. Brainstorming is one of the popular strategy of pre-reading activity (Wallace, 1992). This activity usually involves students' calling out words and concepts that they associate with a key word. Some teachers and instructors have provided their students with a chart of three columns so that the students can write down what they have already known about a subject in the first column, indicate what they want to know about the subject in the second column, complete the third column after reading about the subject by writing answers to the questions that they asked in the second column (Ogle's, 1986).

Brainstorming has been seen as a tool that helps the first language (L1) readers to activate their prior knowledge and facilitates the reading process (Feather, 2004). This technique enables readers to create and share their prior knowledge to solve problems to reach the goal. In this method, they have to think to generate the ideas from their mind toward the topic that they are going to read, thus bring their storm many different meanings that they have already known about the subject matter of the text (Isaksen, 1992, pp. 99-135). In addition, brainstorming states a purpose for reading. After recording the brainstormed ideas

in a list, readers start reading and verifying whether what was brainstormed is correct or wrong. Thus, they will be reading with a purpose in mind (Feathers, 2004).

Brainstorming method is also commonly used to teach English in general. Amidianti (2011) explains that brainstorming is an ideal "warm-up" usually used at the beginning of teaching before explaining the material. It is used to persuade students to think individually before given a real explanation by the teacher. Then, Klinger et al., (2007) also suggest that the teacher should do brainstorming in the beginning of teaching in order to predict what students already know and guide students to think what they think and they will learn. Many activities include in the process of brainstorming. Wray (2002) gives the example of the activities that the teacher begins to explain the idea of topic webs and the students brainstorm information connected with the topic.

3. Types and Procedures of Brainstorming Method

There are some procedures of brainstorming that can be implemented in teaching English. These types can help students to encourage their ideas. According to Lee (2016) there are three types of brainstorming can be applied in the teaching - learning process:

a) Post-it Trhowdown

Post-it Trhowdown is a global design for consulting the ideas discovered in Palo Alto, California. This technique is famous with its out-of-the-box ideas and creative approach to questions. Post-it Trhowdown includes some tools as

well as Post-it notes, markers, and a white board. This technique is commonly used among school and firm design.

As one of brainstorming technique, the ideas of Post-it Trhowdownis to create a discussion situation in which there is no judgement. Because of that reason, when there is a new idea presented, participants are not allowed to turn down the ideas. But they should encourage the ideas. So that, the aim of this technique is to create as many ideas as possible within a short amount of time. The following are some steps of applying Post-it trhowdown technique:

Step 1: Gather all students into a circular arrangement.

Step 2: Provide students with markers and a pile of Post-it notes.

Step 3: Explain the goal of brainstorm.

Step 4: Encourage students to draw their ideas

Step 5: Specify the timer that usually about 10-15 minutes

When the students finish the steps, they raise the Post-it noteand quickly explain their ideas to the classroom. Every student should pay attention to the new ideas and stop drawing. This fast-paced brainstorming technique will yield many crazy ideas. Thus,at the end teacher gives feedback by encouraging students' ideas and turning them into reality (Lee, 2016).

b) Do the Opposite

According to Lee (2016) this technique usually used to yield many creative ideas. There are two ways to apply it in the classroom. First, students can reverse the entire problem and Brainstorm for that. Or second, students can reverse one aspect and do the opposite what everyone else doing. For example:

- *Problem*   : How can we make it **easier** to wake up in the morning?

- *Reverse Problem*   : How can we make it **more difficult** to wake up in the morning?

c) Mind Map

Mind map or commonly known as clustering or idea mapping is a strategy that allows someone to explore the relationship between ideas. Students will be able to think surprising ideas.Word-mapping can be useful for creating groups of similar things, for example animals or food. Phrase-mapping can be useful for developing topics or functions.

As one of the strategy of brainstorming method, the teacher usually writes a word or phrase in the center of a page. All the other words or phrases should link off this in a logical manner. The following are the complete steps of this technique:

Step 1: Describe the problem in 1-3 words and circle it.

Step 2: Think the words that are related to the original word or idea. Write all these words and circle them. Draw the line to connect the ideas.

Step 3: Once all ideas stuck for the first layer, go around and do the same. Do this until the paper is filled or until the good idea is found.

Use the mindmaping to inspire students that usually will be difficult to come out the ideas. This is great for ideation and thinking the difficult concepts (Lee, 2016).

In addition, according to "Generating Ideas," 2102) the following are the other types of brainstorming method that commonly applied in teaching:

1. Freewriting

Freewriting is the process of writing whatever ideas that come to mind without worrying the grammatical errors. This technique can be helpful when the students do not know what to write. It also helps students to get the creative ideas. The role of teachers in this technique is to review what the students have written and give a chanceto the students to correct the errors.

2. The Journalist Approach: *Starbusting*

The purpose of this technique is to generate a list of questions about the issue. Write the topic at the top of a page and list the questions by using who, what, where, when, why, and how. This technique can be drawn into a more visual approach called *starbusting*. To use the starbusting, draw the six-pointed star in the middle of the page and write the topic in the center of the star.Next, generate the questions and record them into the diagram. This technique may help students to lead them to a more complete understanding about a topic or a text. For example:

The topic is about political conflict in the Middle East. Students could begin by asking some questions:

- **Who** is involvedin the conflict?
- **What** issues most clearly divide those engaged in the dispute?
- **When** did the troubles in the Middle East begin?

- **Where** does the conflict seem most heated or violent?

- **Why** have those living in the area found in so difficult to resolve the situation?

- **How** might this conflict be resolved?

The following is the example of the starbusting diagram:

Figure 1: Starburst diagram for a new product
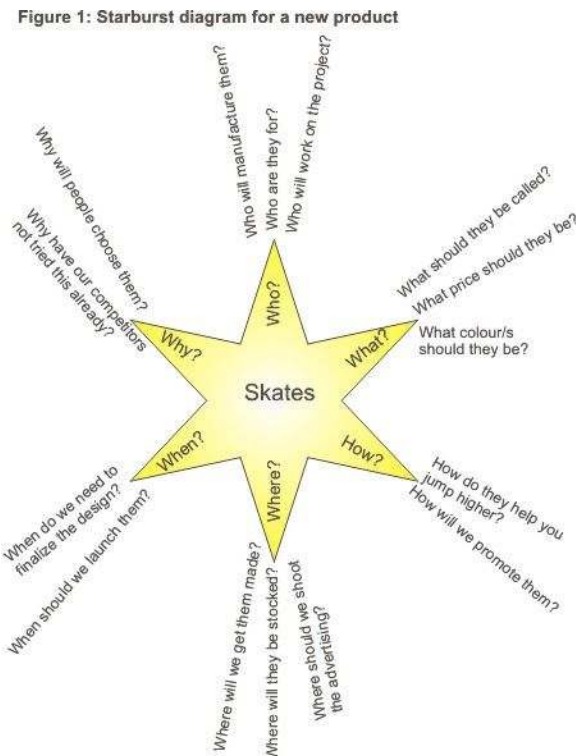
C. Higher Order Thinking

1. Definition of Higher Order Thinking Skill

Higher order thinking is one of thinking skills that should be mastered by the students. Brookhart (2010, pp. 3-7) in her book stated that higher order thinking skill is divided into three categories: (1) Higher order thinking for "transfer" that is considered as "Meaningful learning", (2) Higher order thinking for "critical thinking" that expects students "being able to think" and (3) Higher

order thinking for "problem solving". In addition, Brookhart (2013) stated that including higher order thinking skill in teaching can actually improve ability not only in mastering knowledge but also in understanding.

Cognitive domain or the ability of thinking categorized into six levels of thinking among are knowledge, comprehension, application, analysis, synthesis and evaluation (Yahya et al., 2012). The hierarchical level identifies the lower level to a higher level of cognitive processing (Clark, 2010). The first three levels of Bloom's taxonomy are lower higher order thinking skills (LOTS) such as knowledge, comprehension and application. Meanwhile, the other three levels are higher order thinking skill (HOTS) such as analysis, synthesis and evaluation (Yahya et al., 2012; Forehand, 2010).

Moreover, the 2013 curriculum as the current official curriculum in Indonesia is expected pedagogy to involve the higher order thinking to be implemented in the classroom. According to Buhungo (2015) some demands in the implementation of 2013 curriculum are: First, students are the subject of learning that have to think independently (discovery learning). Second, students are demanded to think at the level of analysis, evaluation, and creating (higher order thinking) and the last, teachers should develop contextual learning in the classroom.

2. Developing Higher Order Thinking Skills

There are two basic ways to teach higher order thinking skills that have been suggested by the researchers (Rajendran, 2001, 2002; Zohar, 2013; Zohar & Schwartzer, 2005, cited in Yen & Halili, 2015):

1. Infusion approachrefers to teaching of HOT in a content-specific setting. In this approach, teachers integrate HOT explicitly with the teaching of specific content.

2. Separate-subject approach is teaching HOT as general strategies used across subject domains. In this strategy, teachers teach HOT as a set of skills or strategies to be applied.

Limbach and Waugh (n.d) propose the five steps of the process in developing HOTS thatcan be applied virtually in any teaching or training setting to create active learning:

Step 1 : Determine the learning objective.

Step 2 : Teach trough questioning.

Step 3 : Practice before assessment.

Step 4 : Review, refine and improve.

Step 5 : Provide feedback and assessment of learning.

3. Assessment of Higher Order Thinking Skill

According to Brookhart (2010), assessment brings teacher up to speed on how to develop and use test questions and other assessments that reveal how well the students can do higher order thinking activities as well as analyze, reason, solve problems and think creatively. An assessment for any year level of students can include multiple-choice and constructed-response (essay) items plus performance assessment tasks in the following areas: analysis, evaluation and creation; logic and reasoning; judgement; problem solving; creativity and creative thinking. Whether teachers want to create formative or summative assessments.

Well designed assessments can bring thinking out of students' heads and make it visible in their words and actions. These types of test can be used periodically to know the improvement of higher order thinking skill of students. It is supported by Quellmalz (1985) statingthe assessment of Higher order thinking skills must be clear, valid and coordinated.

3. The Typical Questions for Higher Order Thinking Skill

According to Quellmalz (1985) here are some examples of higher order thinking skill in literature domain:

a) Analysis

This section is about seeing patterns in what you study and recognizing the implications. The typical question types would be: identify components of literary, expository, persuasive discourse, arrange, separate, classify, compare meaning, themes, plots etc. Then, explain why.

b) Synthesis

Synthesis is the ability to draw conclusions from giving facts and generalizations. The question types are: infer characters' motivation, infer cause and effect, and predict such as what if, and how will you design / plan.

c) Evaluation

Evaluation is about assessing the merit of what you have learned, knowing its uses, and limitations; giving out reasoned arguments, etc. The typical question types are: Evaluate form, believability, significance, completeness, clarity, recommend / judge such as what do you conclude, and rank in the order of something.

CHAPTER III
RESEARCH METHOD

A. Brief Description of Research Location

This research was conducted at MAN1 Banda Aceh, which is located at Jl. PocutBaren No. 116, Keuramat, Banda Aceh.The more information about this school is as follows:

1. Historical Background

MAN 1 Banda Aceh is a state Islamic educational institute established in 1957 and operated at the same year by SMI &SMIA foundation. At the first time the science of religion program is the only one major in this school that was lead by Ust. H. Ahmad Nurdin Hanafi. Then, the leadership was replaced by Ust. Tgk. Sulaiman Jalil that officially changed this school to be a state Islamic educational institute on August 7th, 1968 by using name of MAAIN (Madrasah Aliyah Agama Islam Negeri) Banda Aceh. In 1978, MAAIN was changed the name to be MAN (Madrasah Aliyah Negeri) Banda Aceh. Year by year the school keep growing with the commutation of the head master. In 1984, MAN Banda Aceh officially opened 4 programs of study that were the science of religion, the science of physics, the science of Biology and the social science. Nowadays, MAN 1 Banda Aceh has 4 different programs that are language program, science program, social program and religion program.

2. The Teachers

The teacher is a key person in teaching learning process. There are about 60 teachers in MAN 1 Banda Aceh. Especially for English teachers, there are 2 English teachers for the first grade, 2 English teachers for second grade and 1

English teacher for the third grade of MAN 1 Banda Aceh. However, there are also some honorer teachers who help in carrying the educational process out in MAN 1 Banda Aceh.

3. The Students

This school has 960 students which consists of 333 students for the first year students, divided into nine classes (X-IPA1 X-IPA2 X-IPA3 X-IPA4 X-IPA5 X-IPS1 X-IPS2 X-Agama X-Bahasa). Then, 318 students for the second year students, divided into nine classes (XI-IPA1 XI-IPA2 XI-IPA3 XI-IPA4 XI-IPA5 XI-IPS1 XI-IPS2 XI-Agama XI-Bahasa) and 309 students for the third year ones, divided into nine classes (XII-IPA1 XII-IPA2 XII-IPA3 XII-IPA4 XII-IPA5 XII-IPS1 XII-IPS2 XII-Agama XII-Bahasa.

4. The Facilities

According to the data given by Tata Usaha of MAN 1 Banda Aceh, MAN 1 Banda Aceh has qualified facilities to encourage the process of teaching and learning especially for English teaching. MAN 1 Banda Aceh has enough books as learning sources to learn English in the library. Then, students are also provided a language laboratory to learn specific skills in English such as listening and speaking. Another facility to support students in learning English is an auditorium. In this room, students usually present their talents as well as story telling and drama in English.

B. Research Design

The researcher used an experimental study in order to obtain information from implementation of using brainstorming method to develop higher order thinking to senior high school students of MAN 1 Banda Aceh. The researcher selected experimental study because it was best fit to measure the research object by taking place naturally in the students' classroom. So, the students did not feel being experimented.

The writer used one kind of pre- experimental teaching designs, namely the one-group pre-test and post-test design that describes a project in which data are collected from the treatment group taking pre-test and post-test. Then, the researcher compares before-treatment score to after-treatment score (Sowell, 2001). Cohen, Manion & Marrison (2000, p.213) illustrates the one group pre-test and post test design as follows:

$$0_1 \quad \text{x} \quad 0_2$$

Note: 0_1 : Pre-test $\qquad 0_2$: Post-test

X : Treatment

The pre-test was given before undergoing the treatment (0_1)and the post test was given afterthe treatment (0_2). The treatment was done between the pre-test and post-test in order to determine the development of the participants after the treatment. In this research, the tests were only given to the treatment group without any control group. The effectiveness of the treatment would be established after comparing the pre-test and the post test results.

C. Population and Sample

Creswell (2008, p.151-152) states that a population is a group of individuals who have the same characteristic. Therefore, a population is the total of all the individuals who have certain characteristics and are being the interest a researcher. The population in this research was all the second year students of MAN 1 Banda Aceh in academic year of 2017/2018. The total number of population was 318 students, which were divided into 9 classes (XI-IPA1 XI-IPA2 XI-IPA3 XI-IPA4 XI-IPA5 XI-IPS1 XI-IPS2 XI-Agama XI-Bahasa). Each class consisted of 34-38 students.

Creswell (2008, p.152) argues that a sample is a subgroup of the target population that the researchers plan to study for generalizing the findings to the target population. Therefore, the sample of this research was 33 students in class XI-Bahasa that consisted of 9 male students and 24 female students.

D. Sampling Technique

To choose the sample, the researcher used purposive sampling. According to William (2008) in his website states that purposive sampling can be very useful for situations where the researcher need to reach a targeted sample quickly and where sampling for proportionality is not the primary concern. Moreover, in MAN 1 Banda Aceh, the classroom is separated based on the program of study where language program is one of program in MAN 1 Banda Aceh.

The researcher took class XI-Bahasa which consisted of 33 students because the class was the only one of language program class which they have additional time in learning English than science program, social program and religion program. Moreover, after interviewing one of English teachers of MAN 1Banda

Aceh, she said that language program also offered the higher level of material than other 3 programs. In addition, they got quite similar basic competence and high motivation in learning English. So, the researcher considered they have got the requirements to be the sample of this research.

E. Techniques for Data Collection

There were three techniques used to collect the data of this pre-experimental research namely test and questionnaire. Each technique will be discussed as follows:

1. Test

In this research, the researcher used the test as the instrument to investigate the effectiveness of the implementation of brainstorming method in developing higher order thinking skill to the students. According to Postlethwaite (2005, p.36) test is an instrument aimed to get students' response. In this research, the pre-test was used in order to know the students' pre-existing ability, meanwhile the post test was used to identify the improvement of the students after implementating brainstorming method in developing higher order thinking skill of the students.

The pre-test and the post-test would be administered and scored in a consistent manner. The pre-test and post-test contained different questions, but still at the same level of cognitive domain which was at the level of higher order thinking skills. The model of questions was objective test that included 10 questions of multiple choices. The test used English language due to assess

students' ability in understanding the text and also to familiarize them to the English text.

Then, in creating a good test it is important to do validity and reliability test. According to Bonate (2000, p.28) the valid test is when the things are measuring are a really thing wanted to measure. Validity test uses a statistical test to determine how valid an item of questions. In order to gain the validity of the test, the researcher used face validity. Heaton (1998, p.159) in his book stated that face validity is a test item that look right to other testers, teachers and moderators. The researcher consulted the item of questions with the supervisor and an English teacher who had been following HOTS training from government.

Then, in order to test the reliability of the test, the researchers used the statistical test. According to Poslethwaite (2005, p.41) a reliable test should have a consistent score for a group of individual in several occasions or repeated measures. In order to analyze the reliability of the whole test, the researcher used the formula that suggested by Heaton (1988, p.164):

$$r_{11} = \frac{N}{N-1}\left(1 - \frac{\bar{X}(N-\bar{X})}{N(SD)^2}\right)$$

Note: r_{11} = Reliability of instrument

N = Total of sample

$\bar{X}$ = The mean score of the test

SD = The standard deviation of the test

According to Sudjana (2005, p.269) the interpretations of r-score as stated below:

    a. If r_{11} is bigger than 0.70, it means that the test holds a high reliability or is reliable.

    b. If r_{11} is smaller than 0.70 means that the test does not hold a high reliability or is unreliable.

2. Questionnaire

The questionnaire consisted of 10 questions asked about the implementation of brainstorming method in developing higher order thinking skills. The form of questionnaires was closed-ended questions. The questionnaire was given at the end of the whole sessions of this pre-experimental research considering the students as the subject of this study also have parts in tis research, so that knowing their opinion and feeling after following the treatment and test was also needed. The researcher used Bahasa in the questionnaire aimed to help students to express their perceptions by using their colloquial language without bothering them to think the word in English.

F. Procedures of Data Collection

This research was conducted at MAN 1 Banda Aceh, which the researcher took one class to be the sample, then treated in the experimental class by using brainstorming method. The experimental teaching was done for five meetings which were three meetings for experimental teaching and two meetings were for giving pre-test and post-test. During the experimental teaching, the researcher used*Starbusting* type which is one of brainstorming method type in teaching narrative text.The following are the details of each meeting in experimental teaching:

1. First meeting

In this meeting, the researcher introduced herself as well as told the students about the purpose of her presence. The researcher asked students' condition and what they had learned in their last meeting. Then, the researcher explained to the students what they would do in the next four meetings. The last, the researcher distributed the pre-test sheet and gave a clear instruction in order to know their ability before treatment. At this meeting, the writer gave the students pre-test sheet about narrative text consisted of 10 questions that had to be answered by them.

2. Second Meeting

At this meeting, the researcher started to teach narrative text type by using the brainstorming method. First, the researcher attracted students by asking some questions such as, what kind of story do you like? Etc. This process was kind of brainstorming strategy aimed to activate students' background knowledge as the main purpose of brainstorming method. Then, the researcher asked students to enjoy a text entitled Malin Kundang given by the researcher. After reading the text, the researcher started to introduce *Starbusting* techniques to the students by asking questions in order to provoke them to think and remember what they had read, then the researcher drew the questions into the diagram on the whiteboard.

The researcher gave feedbacks for the students' answer.Next, the researcher gave some explanations about narrative text related to the social function, text organization and generic structure.

3. Third Meeting

At this meeting, the researcher asked the students what they had learned last meeting telling them that in this meeting would also have a relation with previous material. The students would discuss what they have learned before. First, the students were divided into groups. Then, the researcher gave the worksheets containing narrative text that students had to discuss and generate some questions by using starbusting type. Next, students were asked to answer the questions that they had made in the same sheet.

The last, students were asked to present the discussion result in front of the classroom. The researcher asked other students to give comments and advices. And finally, the researcher gave feedback by appreciating students' answer and giving additional information about the aim of starbusting type and the procedures.

4. Fourth Meeting

In this meeting, the researcher used laptop and projector as media in teaching. The researcher taught the students also by using brainstorming method in order to explain them the way of constructing a narrative text. It helped them to retell the narrative text correctly based on the text organization and the language feature. First, the students were asked to watch the movie about Bawang merah and bawang putih displayed by the researcher. After repeating the video about three times, the researcher asked students to retell what they remembered from the story.

Individually, students were asked to do *Starbusting type* about the story before. Then, the students presented what they had done in front of the classroom.

The last, the researcher gave the feedbacks and comments related to the students' answer.

5. Fifth Meeting

At the last meeting, there were two activities undertaken by the students. First, the post-test was administered in order to know their improvement after doing the treatment as the comparison data for the pre-test. The post-test consisted of 10 questions which the same level as the pre-test. After answering the questions, the students were asked to fill the questionnaire in order to know their perspectives after following the treatment.

G. Technique for Data Analysis

According to Creswell (2014) analysis is the systematic process of implementing the statistical techniques to describe and illustrate, condense and recap, and evaluate data. The following is the data analysis of this research:

1. The Analysis of Test Result

The data analysis involved independent sample t-test. Independent sample t-test aims to know the comparison of two groups that do not depend on each others. In analyzing the test results, the writer uses several formulas. The formulas are necessary for finding out the mean score, standard deviation, and t-score.

a. Mean

Mean is utilized to find out the average of the whole sample. In order to know the mean, the researcher used formula suggested by Arikunto (2010, p. 284).

$$\bar{X} = \frac{\sum X}{N}$$

Note:

$\bar{X}$:   Mean

$\sum X$:   The sum of the scores

N   :   Total students

b.   Standard Deviation

Steven (2007) argues that **standard deviation** is a statistic that describes the amount of variation in a measured process characteristic. Specifically, it measures the amount of an individual measurement should be expected to deviate from the mean on average. As shown below, the larger the standard deviation, the more dispersion there is in the process data.

The formula of standard deviation is as follows:

$$SD^2 = \frac{\sum f\,(X - \bar{X})^2}{N - 1}$$

Note :   SD   :   Standar deviation

$\sum f$:   The sum of frequency

$\bar{X}$:   Mean

$\sum X^2$:   The sum of score squared

N   :   The number of sample

c.   T-score

The writer used t–score to find out whether pre-test and post-test have a significant difference. The formula for t–score was taken from Sudijono (2011, p. 241-243).

$$t - score = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\left(\frac{SD_1^2}{n_1}\right) + \left(\frac{SD_2^2}{n_2}\right)}}$$

Note: t   : T-Score

$\bar{x}_1$: Mean of the Post-test

$\bar{x}_2$: Mean of the Pre-test

SD_1 : Standard Deviation of Post-test

SD_2 : Standard Deviation of Pre-test

N   : Total students

2. The Analysis of Questionnaire

In analyzing the questionnaires, the researcher used the percentage formula as follows:

$$P = \frac{f}{n} x\ 100\%$$

Which:

P = percentages

f = frequency of respondent

n = number of sample

100 = constant value

CHAPTER IV

FINDING AND DISCUSSION

This chapter discusses about the finding of the research related to the implememtation of Brainstorming method in developing higher order thinking to the students that was done at MAN Model Banda Aceh. The following is the explanation related to finding and discussion of the research as well as the analysis of the test, the analysis of questionnaire and hypotheses testing.

A. Finding of the Research

1. The Analysis of Test Result

The data got from both pre-test and post-test are statistically calculated in order to identify the mean of the scores, the reliability of the tests, and to analyze whether there is a significant difference between pre-test and post-test.

The first step of calculating the data is tabulating the result of both pre-test and post-test as described in the table below.

NO	STUDENTS' INITIAL	PRE-TEST SCORE	POST TEST SCORE
1	AS	65	90
2	AJ	60	75
3	AFI	50	75
4	AW	50	75
5	AFS	60	75
6	CNC	65	80
7	FA	50	60
8	FS	60	75
9	GT	55	75
10	JF	60	70
11	LD	50	65
12	MRG	65	70
13	MW	65	65

14	NH	70	85
15	NM	65	75
16	NR	70	80
17	NA	65	80
18	NF	75	85
19	RF	80	85
20	SA	65	80
21	SN	60	75
22	SD	85	95
23	SRT	70	80
24	SKM	65	75
25	SNF	75	85
26	SDR	65	85
27	SFT	65	80
28	SN	65	80
29	TRN	65	85
30	TG	65	85
31	UP	65	80
32	UH	70	75
33	VSC	85	95

The highest score
The Lowest score

Based on the table presented above, it can be seen that the highest score for the pre-test was 85 and the lowest one was 50. Meanwhile, the highest score for post-test was 95 and the lowest one was 60.

Following is the further statistical analysis of each test result, pre-test and post-test:

1. **Result of Pre-Test**

The researcher shows the score of Pre-Test from the lowest score up to the highest score to calculate the mean of the pre-test score:

50	50	50	50	55
60	60	60	60	60
65	65	65	65	65
65	65	65	65	65
65	65	65	65	70

70	70	70	75	75
80	85	85		

Then the writer determined the range of pre-test presented above by using the following formula:

R = Hs-Ls

   = 85-50

   = 35

After finding the range score, the researcher finds out the number of interval, and the result is:

K = 1+3.3 Log n

   = 1+ 3.3 Log 33

   = 1 + 3.3 (1.51)

   = 1+ 4.98

   = 5.98 (taken 6)

So, the length of interval is 6. After knowing the length of interval, the researcher counted the class interval by using the following formula:

$$P = \frac{R}{K}$$

$$= \frac{35}{6}$$

$$= 5.83 \text{ (taken 6)}$$

Based on the calculated data, the frequency distribution of pre-test can be formulated as follows:

Table 4.1. The Frequency Distribution of Students' Pre-test Score

No.	Students' Score	F	X_1	$X_1.\bar{X}$	$(X1-\bar{X})^2$	$F_1[X1\bar{X})^2$
1.	50-55	5	52.5	-11.5	132.25	661.25
2.	56-61	5	58.5	-5.5	30.25	151.25
3.	62-67	14	64.5	0.5	0.25	3.5
4.	68-73	4	70.5	6.5	42.25	169
5.	74-79	2	76.5	12.5	156.25	312.5
6.	80-85	3	82.5	18.5	342.25	1,026.5
	Total Score	**33**	-	-	-	**2,324**

Moreover, in order to calculated the mean of pre-test the following formula is used.

$$\bar{X} = \frac{\Sigma X}{N}$$

$$\bar{X} = \frac{(50x5)+(60x5)+(65x14)+(70x4)+(75x2)+(80x3)}{33}$$

$$\bar{X} = \frac{250+300+910+280+150+240}{33}$$

$$\bar{X} = \frac{2,130}{33}$$

$$\bar{X} = 64$$

After calculating the mean of students' pre-test, the researcher used standard deviation to measure how much an individual measurement should be expected to deviate from the mean on average. The formula of the deviation standard of pre-test is as shown below:

$$SD^2 = \frac{\Sigma f (X-\bar{X})^2}{N-1}$$

$$SD^2 = \frac{2,324}{33 - 1}$$

$$SD^2 = \frac{2,324}{32}$$

$$SD^2 = 72.625$$

$$SD = \sqrt{72.625}$$

$$SD = 8.52$$

Because all needed calculations for pre-test result have been done, the researcher would like to identify the reliability of the pre-test. In order to analyze the reliability of pre-test, the writer would use formula as suggested by Heaton (1988, p. 164), as follows:

$$r_{11} = \frac{N}{N-1}\left(1 - \bar{X}\ \frac{(N - \bar{X})}{N(SD)^2}\right)$$

$$r_{11} = \frac{33}{33-1}\left(1 - 64\ \frac{(33 - 64)}{33(8.52)^2}\right)$$

$$r_{11} = \frac{33}{33-1}\left(1 - 64\ \frac{(33 - 64)}{33(72.5)}\right)$$

$$r_{11} = \frac{33}{32}\left(1 - 64\ \frac{(-31)}{(2,392.5)}\right)$$

$$r_{11} = \frac{33}{32}(1 - 64\,(-0.012)$$

$$r_{11} = \frac{33}{32}(1 - (-0.76))$$

$$r_{11} = \frac{33}{32}(1 + 0.76)$$

$$r_{11} = 1.03x1.76$$

$$r_{11} = 1.81$$

According to the interpretation of r-score proposed by Sudijono (2011) as in the following,

a. If r_{11} is bigger than 0.70, it means that the test holds a high reliability or is reliable.

b. If r_{11} is smaller than 0.70 means that the test does not hold a high reliability or is unreliable.

It can be concluded that the pre-test is reliable because the r-score result is 1.81 which is bigger than 0.70.

2. Result of Post-Test

In order to calculate the mean of the post-test score, it is required to arrange the score from the lowest up to the highest as follows:

60	65	65	70	70
75	75	75	75	75
75	75	75	75	75
80	80	80	80	80
80	80	80	85	85
85	85	85	85	85
90	95	95		

Then, the writer determined the range of post-test presented above by using the following formula:

R = Hs-Ls
= 95-60
= 35

K= 5.98 (taken 6)

So, the length of interval is 6. By knowing the length of interval, the writer counted the class interval by using the following formula:

$$P = \frac{R}{K}$$

$$= \frac{35}{6}$$

$$= 5,83 \text{ (taken 6)}$$

Based on the calculated data, the frequency distribution of post-test can be formulated as follows:

Table 4.2. The Frequency Distribution of Students' Post-test Score

No.	Students' Score	Frequency	X_1	$X_1.\bar{X}$	$(X1 - \bar{X})^2$	$f_1[X1\bar{X})^2$
1.	60-65	3	62.5	-12.5	156.25	468
2.	66-71	2	68.5	-6.5	42.25	84
3.	72-77	10	74.5	-0.5	0.25	2.5
4.	78-83	8	80.5	5.5	30.25	240
5.	84-89	7	86.5	11.5	132.25	924
6	90-95	3	92.5	17.5	306.25	918
	Total Score	**33**	-	-	-	**2,636.5**

Then, in order to calculate the mean of post-test the following formula is used.

$$\bar{X} = \frac{\Sigma X}{N}$$

$$\bar{X} = \frac{(60x3)+(70x12)+(75x10)+(80x8)+(85x7)+(90x3)}{33}$$

$$\bar{X} = \frac{2,485}{33}$$

$$\bar{X} = 75.3$$

After calculating the mean of students' post-test, the writer used standard deviation to compute how much an individual measurement should be expected to deviate from the mean on average. The formula of the deviation standard of post-test is as shown below:

$$SD^2 = \frac{\sum f \ (X - \bar{X})^2}{N - 1}$$

$$SD^2 = \frac{2,636.5}{33 - 1}$$

$$SD^2 = \frac{2,636.5}{32}$$

$$SD^2 = 82.37$$

$$SD = \sqrt{82.37}$$

$$SD = 9.07$$

Since all required calculations for post-test result have been done, the writer would like to identify the reliability of the post-test. To analyze the reliability of post-test the writer used formula as suggested by Heaton (1988, p. 164), as follows:

$$r_{11} = \frac{N}{N-1}\left(1 - \bar{X} \ \frac{(N - \bar{X})}{N(SD)^2}\right)$$

$$r_{11} = \frac{N}{N-1}\left(1 - \bar{X} \ \frac{(N - \bar{X})}{N(9.08)^2}\right)$$

$$r_{11} = \frac{33}{33-1}\left(1 - 75 \ \frac{(33 - 75)}{33(82.2)}\right)$$

$$r_{11} = \frac{33}{32}\left(1 - 75\ \frac{(-42)}{(2,712)}\right)$$

$$r_{11} = \frac{33}{32}\left(1 - 75\ (-0.015)\right)$$

$$r_{11} = \frac{33}{32}\left(1 - (-1.16)\right)$$

$$r_{11} = \frac{33}{32}\left(1 + 1.16\right)$$

$$r_{11} = 1.03 x 2.16$$

$$r_{11} = 2.22$$

According to the interpretation of r-score proposed by Sudijono (2011) as in the following,

1. If r_{11} is bigger than 0.70, it means that the test holds a high reliability or is reliable.
2. If r_{11} is smaller than 0.70 means that the test does not hold a high reliability or is unreliable.

It can be concluded that the post-test is reliable since the obtained r-score is 7.33 which is bigger than 0.70.

3. T-score Calculation

The writer used t–score to find out whether there is a significant difference between pre-test and post-test. The calculation is as follows:

$$t - score = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\left(\frac{SD_1^2}{n_1}\right) + \left(\frac{SD_2^2}{n_2}\right)}}$$

$$t - score = \frac{75 - 64}{\sqrt{\left(\frac{82.37}{33}\right) + \left(\frac{72.62}{33}\right)}}$$

$$t - score = \frac{11}{\sqrt{2.49 + 2.20}}$$

$$t - score = \frac{11}{\sqrt{4.69}}$$

$$t - score = \frac{11}{2,16}$$

$$t - score = 5.09$$

4. Hypothesis Testing

In examining the hypothesis, the writer used the result of t-score analysis. Based on the t-table at the level of significance α 0.05, according to Bungin (2005, p.185) the testing criterion used for measuring hypothesis result is; if t-test > t-table, it means that the alternative hypothesis (H$_a$) was accepted and null hypothesis (H$_0$) was rejected.

After hypothesis were examined by t-score. The result of the t-score was 5.50. Then, the next step is interpreting t-score by determining *degree of freedom* (df). df= N-K = 33-2= 31. From the result, the writer comparing t-score to significant t-table (see appendix) with df 31 sig, value 5% and 1%. The writer obtained that t$_{t.sv5\%}$= 2.04 and t$_t$.sv1%= 2.74. It is clear that t-score of this research was bigger than t-table.

2.43<5.09>2.74

Referring to the criteria above, t-score was higher than t-table which means the alternative hypothesis (H_a) of this study was accepted and the null hypothesis is rejected. It can also be infered that there was significant difference between pre-test and post-test scores after gived the treatment. In conclusion, brainstorming method can develop higher order thinking of the students at MAN Model Banda Aceh.

2. The Analysis of Questionnaire

In analyzing the questionnaires, the researcher used the percentage system as well as:

$$P = \frac{f}{n} x \ 100\%$$

Which:

P = percentages

f = frequency of respondent

n = number of sample

100 = constant value

The questionnaire consisted of ten questions and it was given at the last meeting after implementing the experimental teaching. Thie questionnaire was designed to know the perception of the students toward the implementation of Brainstorming Method in developing Higher Order Thinking skill to the students. Here are the result of questionnaire analysis:

Table 4.3. Students' opinion about their interest in learning English by using Brainstorming Method.

No	Options	Frequency	Percentage %
1	a. YES	25	75,76%
	b. NO	8	24,24%
	Total	33	100%

Based on the table above, there were 25 students (75,76%) who were interested or happy learning English by using Brainstorming Method and 8 students (24,24%) who were not really interested or happy learning English by using Brainstorming Method. It shows that most of students indicated by more than 50% of students were happy in learning by using Brainstorming Method.

Table 4.4. Students' opinion about the improvement of their English language competence after learning by using Brainstorming Method.

No	Options	Frequency	Percentage %
2	a. YES	18	54,55%
	b. NO	15	45,45%
	Total	33	100%

According to the table above, it shows that there were 18 students (54,55%) claimed that applying the Brainstorming Method in teaching English

really improved their English language competence while 15 students (45,45%) stated that their language competence were not really improved. It means that many students agreed that Brainstorming Method in teaching English really improved their English language competence.

Table 4.5. Student's opinion about Brainstorming Method provokes them to think at the level of higher order thinking.

No	Options	Frequency	Percentage %
3	a. YES	17	51,50%
	b. NO	16	48,50%
	Total	33	100%

Based on the information above, there were 17 students (51,50%) balieved that learning by using the Brainstorming Method could provoke them to think at the level of higher order thinking. Meanwhile, there were 16 students (48,50%) stated that the Brainstorming method could not provoke them to think at the level of higher order thinking. The percentage is slightly the same but still "Yes" option is higher than "No" option. It means that learning English by using the Brainstorming Method provokes students to think at the level of higher order thinking.

Table 4.6. Student's perception about Brainstorming Method facilitates them to analyze the social fanction, language feature and generic structure of narative t text.

No	Options	Frequency	Percentage %
4	a. YES	23	69,70%
	b. NO	10	30,30%
	Total	33	100%

The information than can be inferred from the table above is that 23 students (69,70%) believed that using the Brainstorming method facilitated them to to analys the social fanction, language feature and generic structure of narative text. While 10 students (30,30%) did not feel the method could facilitate them to to analys the social fanction, language feature and generic structure of narative text . It indicated that learning English by using the Brainstorming method facilitate most of students to easily analys the social fanction, language feature and generic structure of narative text.

Table 4.7. Student's opinion about Brainstorming Method facilitates them to evaluate the social fanction, language feature and generic structure of a text.

No	Options	Frequency	Percentage %
5	a. YES	26	78,79%
	b. NO	7	21,21%
	Total	33	100%

Based on the table, there were 26 students (78,79%) who agreed that Brainstorming Method facilitated them to evaluate the social fanction, language

feature and generic structure of a text. However, there were 7 students (21,21%) who disagreed. So, we can conclude that learning English by using Brainstorming Method could facilitate students to easily evaluate the social fanction, language feature and generic structure of a text.

Table 4.8. Student's opinion about Brainstorming Method facilitates them to compose a short text.

No	Options	Frequency	Percentage %
6	a. YES	13	39,40%
	b. NO	20	60,60%
	Total	33	100%

According to students' answer above, there were 13 students (39,40%) agreed about the statement that Brainstorming method facilitates them to compose a short text.. On the other hand, there were 20 students (60,60%) disagreed with the statement. So we can conclude that learning English by using Brainstorming Method could not facilitates students to compose a short text.

Table 4.9. Student's opinion about Brainstorming Method facilitates them to accomplish the questions at the level of higher order thinking.

No	Options	Frequency	Percentage %
7	a. YES	17	51,51%
	b. NO	16	48,49%

	Total	33	100%

Based on the table abobe, there were 17 students agreed Brainstorming Method could facilitate them to accomplish the questions at the level of higher order thinking. however, the rest of them did ot feel the same. So, from the explanation above altought the deviation is quite slight but we can conclude that learning English by using Brainstorming method could facilitate students to accomplish the questions at the level of higher order thinking.

Table 4.10. Student's opinion about Brainstorming Method is compatible to be used for developing their higher order thinking skill

No	Options	Frequency	Percentage %
8	a. YES	23	69.70%
	b. NO	10	30,30%
	Total	33	100%

From the describtion on the table obove, there were 23 students (69,70%) thought that Brainstorming method was compatible to be used for developing higher order thinking skill to the students. While, only 10 students (30,30%) stated that Brainstorming methods was not really compatible to be used. So, we can conclude that Brainstorming method is compatible to be used for developing higher order thinking skill to the students.

Table 4.11. Student's agreement about Brainstorming Method is boring to be implemented in the classroom.

No	Options	Frequency	Percentage %
9	a. YES	11	33,33%
	b. NO	22	66,67%
	Total	33	100%

Based on the students' answer, there were 11 students (33,33%) who thought that learning English by using Brainstorming Method was boring to be implemented in the classroom. But, there were 22 students (66,67%) who thought that learning English by using Brainstorming Method did not make them bored. From the explanation above we can conclude that learning English by using the Brainstorming Method did not make them bored.

Table 4.12. Students' agreement the Brainstorming Methode should be applied in learning English in the classroom in order to develop higher order thinking skill to the students.

No	Options	Frequency	Percentage %
10	a. YES	25	75,76%
	b. NO	4	12,12%
	Total	33	100%

Based on the students' answer, 25 students (75,75%) agreed that learning English in the Brainstorming Methode should be applied in learning English in the classroom in order to develop higher order thinking skill to the students. While, only 4 students (12,12%) disagreed. So, the Brainstorming Method should be applied in teaching English in the classroom to develop higher order thinking.

B. Discussion

The first aim of this research was to investigate the statistical affect for implementing Brainstorming method in developing higher order thinking to the students. Regarding to the score of the test, the Brainstorming method generates meaningful progress to the students in developing higher order thinking skill. It is proved by the result of hypotheses testing; t-test>t-table which 5.09>2.43. It means the result of study is higher than the t-table that causes the Ho is refused and Ha is accepted. It answers the first research question of this research; Is there a statistically effect at the level of significance (α 0.05,) for using brainstorming method in developing higher order thinking to the students?, that the implementation of Brainstorming impacts a significant different in the result before and after applying method.

According to Feather (2004) Brainstorming method enables readers to create and share their prior knowledge to solve problems to reach the goal. This is relevant with this research that asked students to think and generate some ideas into diagram or map then share the idea in front of classroom to solve the probelm, in this research the problem was some questions given by the researcher.

Basically, Brainstorming method provokes students to think and generate ideas independently so, this process is an important process to develop higher

order thinking of the students. Osborn (1953) agreed that Brainstorming can also encourage creative thinking and create a working atmosphere. After doing research it was proven that the students' higher order thinking skill were improved after implementing brainstorming method. It was can be seen after compare students' achievement before treatment and after the treatment.

The last purpose of this research is to know students' perception after participating in this research. Based on the score of questionnaires, the following are some perceptions of the students: First, teaching reading by using the brainstorming method is more effective rather than usual method because brainstorming method is more interesting, fascinating, exciting, and innovating. Second, most of them were strongly agree that the brainstorming method can be applied in order to develop higher order thinking skill of the students in learning English. Based on the previous explanation, it can be inferred that the brainstorming method is compatible to be used and able to develop students' higher order thinking skill in learning reading.

The findings of this study are appropriate with the previous study done by Klinger et al., (2007). He suggested that the teacher should do brainstorming in the beginning of teaching in order to predict what students already know and guide students to think what they think they will learn. This process may persuade students to built more their curiousity and interest than conventional method. This research proved that the students were more curious and interested and felt happy during teaching process.

CHAPTER V
CONCLUSION AND SUGGESTION

In this chapter the researcher would like to present the conclusion and suggestion that have been found after implementing the brainstorming method in developing higher order thinking skill to the students.

A. Conclusion

After conducting the research on the implementation of brainstorming method in developing higher order thinking skill to the students, the researcher would like to draw some conclusions as follows:

1. The implementation of brainstorming method to the second grade of students at MAN 1 Banda Aceh in teaching reading generates meaningful progress in developing higher order thinking skill. It is proved by the result of hypotheses testing; *t-test>t-table* which 5.09>2.43. So, the Ho was refused and Ha was accepted, it means that there was a significant difference in the result before and after applying this method.

2. Teaching reading by using the brainstorming methodcould develop higher order thinking skills to the students. It was proved by the students'answers on the questionnaires of the study that are the majority of students were happy learning reading by using brainstorming method and most of them believed that brainstorming method could facilitate them to accomplish the questions at the level of HOTS in learning reading.

B. Suggestion

After drawing the conclusion, the researcher would give several suggestions, those are:

1. All teachers should apply a variety of strategies in teaching reading to attract students' interest in studying, create an interesting learning process and improve students' competence.

2. The researcher recommended teachers to apply brainstorming method as a method for their teaching, especially in developing higherorder thinking to the students. Because the brainstorming method affected to develop higher order thinking skills the students. It was able to upgrade students' interest in learning a new topic by making them felt curious, happy, interesting, fascinating, more being motivated and active in the classroom.

3. The researcher recommended other researcher to conduct more studies discussing about this method and its relation to other variables such as critical thinking and doing more studies by using other samples from different study and age level.

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SURAT KEPUTUSAN DEKAN FAKULTAS TARBIYAH DAN KEGURUAN UIN AR-RANIRY
Nomor : B-578/UN.08/FTK/KP.07.6/01/2018
TENTANG
PENGANGKATAN PEMBIMBING SKRIPSI MAHASISWA FAKULTAS TARBIYAH DAN KEGURUAN UIN AR-RANIRY

DEKAN FAKULTAS TARBIYAH DAN KEGURUAN UIN AR-RANIRY

Menimbang	:	a.	bahwa untuk kelancaran bimbingan skripsi dan ujian munaqasyah mahasiswa pada Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry Banda Aceh, maka dipandang perlu menunjuk pembimbing skripsi tersebut yang dituangkan dalam Surat Keputusan Dekan;
		b.	bahwa saudara yang tersebut namanya dalam surat keputusan ini dipandang cakap dan memenuhi syarat untuk diangkat sebagai pembimbing skripsi.

Mengingat	:	1.	Undang-undang Nomor 20 Tahun 2003, tentang Sistem Pendidikan Nasional;
		2.	Undang-undang Nomor 14 Tahun 2005, tentang Guru dan Dosen;
		3.	Undang-undang Nomor 12 Tahun 2012, tentang Pendidikan Tinggi;
		4.	Peraturan Pemerintah Nomor 74 Tahun 2012 tentang Perubahan atas Peraturan Pemerintah RI Nomor 23 Tahun 2005 tentang Pengelolaan Keuangan Badan Layanan Umum;
		5.	Peraturan Pemerintah Nomor 4 Tahun 2014, tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Perguruan Tinggi;
		6.	Peraturan Presiden RI Nomor 64 Tahun 2013; tentang Perubahan IAIN Ar-Raniry Banda Aceh Menjadi UIN Ar-Raniry Banda Aceh;
		7.	Peraturan Menteri Agama RI Nomor 12 Tahun 2014, tentang Organisasi dan Tata Kerja UIN Ar-Raniry Banda Aceh;
		8.	Peraturan Menteri Republik Indonesia No. 21 Tahun 2015, tentang Statuta UIN Ar-Raniry;
		9.	Keputusan Menteri Agama Nomor 492 Tahun 2003, tentang Pendelegasian Wewenang, Pengangkatan, Pemindahan dan Pemberhentian PNS di Lingkungan Departemen Agama Republik Indonesia;
		10.	Keputusan Menteri Keuangan Nomor 293/KMK.05/2011 tentang Penetapan Institut Agama Islam Negeri Ar-Raniry Banda Aceh pada Kementerian Agama sebagai Instansi Pemerintah yang Menerapkan Pengelolaan Badan Layanan Umum;
		11.	Keputusan Rektor UIN Ar-Raniry Nomor 01 Tahun 2015, tentang Pendelegasian Wewenang kepada Dekan dan Direktur Pascasarjana di Lingkungan UIN Ar-Raniry Banda Aceh;

Memperhatikan	:	Keputusan Sidang/Seminar Proposal Skripsi Prodi Pendidikan Bahasa Inggris Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry Tanggal 12 Desember 2017

MEMUTUSKAN

Menetapkan	:	
PERTAMA	:	Menunjuk Saudara:

1. Khairiah Syahabuddin, M.Hsc. Esl., M.TESOL, Ph.D   Sebagai Pembimbing Pertama
2. Azizah, M.Pd   Sebagai Pembimbing Kedua

Untuk membimbing Skripsi :

Nama	:	**Dea Varadita**
NIM	:	**140203108**
Program Studi	:	**Pendidikan Bahasa Inggris**
Judul Skripsi	:	**The Implementation of Brainstorming Method in Developing Higher Order Thinking Skill (Hots) of the Students**

KEDUA	:	Pembiayaan honorarium pembimbing pertama dan kedua tersebut diatas dibebankan pada DIPA UIN Ar-Raniry Banda Aceh Tahun 2018;
KETIGA	:	Surat keputusan ini berlaku sampai akhir semester Genap Tahun Akademik 2017/2018
KEEMPAT	:	Surat Keputusan ini berlaku sejak tanggal ditetapkan dengan ketentuan segala sesuatu akan diubah dan diperbaiki kembali sebagaimana mestinya apabila kemudian hari ternyata terdapat kekeliruan dalam penetapan ini.

Ditetapkan di: Banda Aceh
Pada Tanggal: 12 Januari 2018
An. Rektor
Dekan,

Mujiburrahman

Tembusan

Nomor : B-2122/Un.08/TU-FTK/ TL.00/02/2018   20 Februari 2018

Lamp : -

Hal   : Mohon Izin Untuk Mengumpul Data
Menyusun Skripsi

Kepada Yth.

Di -
   Tempat

Dekan Fakultas Tarbiyah dan Keguruan (FTK) UIN Ar-Raniry Darussalam Banda Aceh dengan ini memohon kiranya saudara memberi izin dan bantuan kepada:

N a m a	: Dea Varadita
N I M	: 140 203 108
Prodi / Jurusan	: Pendidikan Bahasa Inggris
Semester	: VIII
Fakultas	: Tarbiyah dan Keguruan UIN Ar-Raniry Darussalam.
A l a m a t	: Komplek Pantierek Cinta Kasih Barat 10 No.29 Lhong Bata

Untuk mengumpulkan data pada:

MAN Model Banda Aceh

Dalam rangka menyusun Skripsi sebagai salah satu syarat untuk menyelesaikan studi pada Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry yang berjudul:

The Implementation of Brainstorning Method in Developing Higher Order Thinking Skill (Hots) of the Students

Demikianlah harapan kami atas bantuan dan keizinan serta kerja sama yang baik kami ucapkan terima kasih.

An. Dekan,
Kepala Bagian Tata Usaha,

M. Said Farzah Ali

Kode 6782

KEMENTERIAN AGAMA REPUBLIK INDONESIA
KANTOR KEMENTERIAN AGAMA KOTA BANDA ACEH
Jln. Mohd. Jam No.29 Telp. 27959 – 22907 Fax. 22907
BANDA ACEH (Kode Pos 23242)

Nomor	:	B- 393 /Kk.01.08/4/TL.00/03/2018	1 Maret 2018
Sifat	:	Biasa	
Lampiran	:	Nihil	
Hal	:	**Rekomendasi Melakukan Penelitian**	

Yth, Kepala MAN 1
Kota Banda Aceh

Assalāmu'alaikum Wr. Wb.

 Sehubungan dengan surat Dekan Fakultas Tarbiyah dan Keguruan (FTK) UIN Ar-Raniry Banda Aceh Nomor : B-2122/Un.08 /TU-FTK.1/TL.00/02/2018 tanggal 20 Februari 2018 , perihal sebagaimana tersebut dipokok surat, maka dengan ini kami mohon bantuan Saudara untuk dapat memberikan data maupun informasi lainnya yang dibutuhkan dalam rangka memenuhi persyaratan bahan penulisan *Skripsi,* dengan judul "**The Implementation of Brainstorming Method in Developing Higher Order Thingking Skill (Hots) of the Students**" kepada saudara :

Nama	:	**Dea Varadita**
NIM	:	140 203 108
Prodi/Jurusan	:	Pendidikan Bahasa Inggris
Semester	:	VIII
Alamat	:	Komplek Panteirek Cinta Kasih Barat, Lueng Bata

Dengan ketentuan sebagai berikut :

1. *Harus berkonsultasi langsung dengan kepala madrasah yang bersangkutan dan Sepanjang Tidak mengganggu proses belajar mengajar*
2. Tidak memberatkan madrasah.
3. Tidak menimbulkan keresahan-keresahan lainnya di Madrasah.
4. Bagi yang bersangkutan supaya menyampaikan foto copy hasil penelitian sebanyak 1 (satu) Eksemplar ke kantor kementerian agama kota banda aceh

Demikian rekomendasi ini kami keluarkan, atas perhatian dan kerja sama yang baik kami ucapkan terima kasih.

Kasi Pendidikan Madrasah,

Aiyub

Tembusan :

KEMENTERIAN AGAMA REPUBLIK INDONESIA
KANTOR WILAYAH KEMENTERIAN AGAMA PROVINSI ACEH
MADRASAH ALIYAH NEGERI 1 BANDA ACEH
Jalan Pocut Baren No. 116 Keuramat Banda Aceh
Telp. 0651-636804 Fax. 0651-29466
Website: manmodelbna.sch.id, Email: mandelbandaaceh@gmail.com

19 Juli 2018

Nomor   : B-1957/Ma.01.90/TL.00/07/2018
Lamp   : -
Hal   : Telah Melakukan Penelitian

Kepada
Yth. Dekan Fakultas Tarbiyah dan Keguruan (FTK)
UIN Ar-Raniry Darussalam Banda Aceh

Assalamu'alaikum, wr.wb.

Memenuhi maksud surat Saudara Nomor : B-2122/Un.08/TU-FTK/TL.00/02/2018 tanggal 20 Februari 2018, perihal sebagaimana tersebut dipokok surat, maka dengan ini menyatakan bahwa :

Nama   : Dea Varadita
N I M   : 140203108
Program Studi : Pendidikan Bahasa Inggris
Semester   : VIII

Telah melaksanakan tugas melakukan penelitian untuk mengumpulkan data Skripsi dengan judul *"The Implementation of Brainstorning Method in Developing Higher Thinking Skill (Hots) of the Student"* pada Madrasah Aliyah Negeri 1 Banda Aceh.

Demikian surat ini kami sampaikan untuk dimaklumi dan dapat dipergunakan seperlunya.

Kepala,

Mukhlis

Sekolah   :

Kelas / Semester   :

Mata Pelajaran   :Bahasa Inggris

Materi Pokok   :Narative Text

Alokasi Waktu   : 4X 45 menit (6JP) (3 Pt)

A. Kompetensi Inti (KI)

KI 1   : Menghargai dan menghayati ajaran agama yang dianutnya

KI 2   :Menghargai dan menghayati perilaku jujur, disiplin, tanggungjawab, peduli (toleransi, gotong royong), santun, percaya diri, dalam berinteraksi secara efektif dengan lingkungan sosial dan alam dalam jangkauan pergaulan dan keberadaannya

KI 3   :Memahami dan menerapkan pengetahuan (faktual, konseptual, dan prosedural) berdasarkan rasa ingin tahunya tentang ilmu pengetahuan, teknologi, seni, budaya terkait fenomena dan kejadian tampak mata.

KI 4   :Mengolah, menyaji, dan menalar dalam ranah konkret (menggunakan, mengurai, merangkai, memodifikasi, dan membuat) dan ranah abstrak (menulis, membaca, menghitung, menggambar, dan mengarang) sesuai dengan yang dipelajari di sekolah dan sumber lain yang sama dalam sudut pandang/teori.

B. Kompetensi Dasar (KD) & Indikator

Kompetisi Dasar	Indikator
3.10 Menganalisis fungsi sosial, struktur teks, dan unsur kebahasaan pada teks naratif sederhana berbentuk legenda rakyat, sesuai dengan konteks penggunaannya.	3.10.1 Mengidentifikasi fungsi sosial pada teks naratif sederhana berbentuk legenda rakyat. 3.10.3 Menentukan kalimat *past tense* pada teks naratif sederhana berbentuk legenda rakyat, sesuai dengan konteks penggunaannya

	3.10.2 Membedakan struktur teks pada teks naratif sederhana berbentuk legenda rakyat.
4.15 Menangkap makna teks naratif tulis berbentuk legenda sederhana	4.15.1 Menyimpulkan teks naratif tulis berbentuk legenda sederhana
	4.15.2 Menceritakankembali teks naratif tulis berbentuk legenda sederhana

C. Tujuan Pembelajaran

Melalui pembelajaran teks naratif , peserta didik dapat mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan dari teks narrative sederhana berbentuk cerita rakyat serta mampu manangkap makna teks narrative sederhana berbentuk cerita rakyat.

D. Materi Pembelajaran

- *Fungsi sosial* : meneladani nilai-nilai moral, cinta tanah air, menghargai budaya lain.
- *Struktur teks*:

Struktur teks naratif dapat berupa:

Orientation, complication, resolution.

- *Unsur kebahasaan*

Tenses yang sesuai digunakan dalam teks naratif adalah: *Past tense*

The Legend of Toba Lake

Once upon time, there <u>was</u> a handsome man. His name <u>was</u> Batara Guru Sahala. He <u>liked</u> fishing. One day, he <u>caught</u> a fish. He <u>was</u> surprised to find out that the fish <u>could</u> talk. The fish <u>begged</u> him to set it free.

E. Metode Pembelajaran
- Pendekatan   : Scientific approach
- Metode   : Brainstorming method(Starbusting Type)

F. Media, Alat dan Sumber Pembelejaran
- Media   : papan tulis

- Bahan   : Print out bahan tambahan:

- Sumber belajar:
  https://adeulfayani.files.wordpress.com/2012/06/029.jpg
  http://3.bp.blogspot.com/-jLx3-F33qdM/UibitMByJyI/AAAAAAAAHc/53awflfRlQU/s1600/MUSSAL.jpg

G. Kegiatan Pembelajaran

1. Pertemuan Pertama (2 JP)

Indikator :

3.10.1 Mengidentifikasi nilai moral pada teks naratif sederhana berbentuk legenda rakyat.

3.10.2 Membedakan struktur teks pada teks naratif sederhana berbentuk legenda rakyat.

A. Pendahuluan (10 menit)	
Tahap	**Kegiatan**
Salam tegur sapa	- Apersepsi dan motivasi - Penyampaian tujuan pembelajaran - Penyampaian cakupan materi dan uraian kegiatan
B. Kegiatan inti (70 menit)	
Stimulation	
Teacher	**Student**

Teacher	Student
• Guru menanyakan pertanyaan pembuka seperti: • what kind of story do you like? Etc	• Siswa menjawab pertanyaan guru sesuai dengan pendapat mereka.

Problem Statement

Teacher	Student
• Guru menampilkan contoh teks narrative tentang Maling Kundang. • Guru meminta siswa untuk membaca dan mengamati teks narative Malin Kundang • Guru menjelaskan fungsi sosial dan struktur teks dari teks narrative.	• Siswa menyimak contoh teks legenda yang diberikan oleh guru • Siswa membaca teks narative • Siswa mengamati fungsi sosial dan struktur teks dari teks narative • Siswa menanyakan tentang hal yang belum di mengerti.

Data Collection

Teacher	Student

• Guru menggali ide dan pendapatsiswa dengan menggunakan *Starbusting type*tentang teks bacaan dengan menulis pertanyaan di papan tulis:
  - What is your opinion about this story?
  - Who was the wife of Malin Kundang?
  - Where did Malin Kundang meet his mother?
  - How you evaluate the bad deeds of Malin Kundang from this story?
  - When Malin Kundang was cursed by his mother?
• Guru memberi feedback dengan menyeleksi jawaban-jawaban penting dari pendapat-pendapat peserta didik sesuai dengan teks
	• Siswa menuliskan pendapatnya secara bergantian pada diagran starbusting yang dibuat oleh guru di papan tulis

Penutup (10 menit)

Penutup	
	• Siswa menyimpulkan hal-hal yang telah dipelajari. • Guru memberi umpan balik terhadap materi • Guru memberi penugasanagar siswa membuat *galery wall* tentang teks naratif beserta struktur teks nya. • Menyampaikan rencana kegiatan yang akan

	datang.

2. Pertemuan Kedua (2 JP)

Indikator :

3.10.3 Menentukan kalimat *past tense* pada teks naratif sederhana berbentuk legenda rakyat, sesuai dengan konteks penggunaannya
4.15.1 Menjawab pertanyaan terkait dengan teks cerita rakyat yang dibaca

Pendahuluan (10 menit)	
Tahap	**Kegiatan**
Salam tegur sapa	• Apersepsi dan motivasi • Penyampaian tujuan pembelajaran • Penyampaian cakupan materi dan uraian kegiatan
Kegiatan inti (70 menit)	
Data Processing	
Teacher	**Student**
• Guru membagi siswa dalam kelompok. • Guru membagikan lembar kerja dan memberikan penjelasan terhadap soal • Guru meminta siswa untuk berdiskusi secara berkelompok.	• Setiap kelompok mendiskusikan soal pada lembar kerja yang diberikan guru kemudian hasilnya dibuat dalam bentuk peta konsep.
Verification	
Teacher	**Student**
• Guru meminta siswa untuk memaparkan hasil diskusi kelompok di depan kelas	• Siswa memaparkan hasil diskusi mereka di depan kelas.
Penutup (10 menit)	
Penutup	• Siswa menyimpulkan hal-hal yang telah dipelajari. • Guru memberi penjelasan terhadap materi • Guru memberikan penugasan

3. Pertemuan Ketiga (2 JP)

Indikator :

4.15.2 Menceritakan kembali teks naratif tulis berbentuk legenda sederhana

Pendahuluan (10 menit)	
Tahap	**Kegiatan**
Salam tegur sapa	• Apersepsi dan motivasi • Penyampaian tujuan pembelajaran • Penyampaian cakupan materi dan uraian kegiatan

Kegiatan inti (70 menit)	
Stimulation	
Teacher	**Student**

• Guru menanyakan pertanyaan pembuka seperti:
  - What kind of film do you like?
  - Do you like Harry Potter movie?Etc
	• Siswa menjawab pertanyaan guru sesuai dengan pendapat mereka

Problem Statement	
Teacher	**Student**
• Guru menampilkan video singkat berjudul Bawang Putih dan Bawang Merah. • Guru meminta siswa untuk menceritakan kembali cerita Bawang Putih dan Bawang Merah di depan kelas dengan menanyakan text organizationnya.	• Siswa menyimak video singkat yang ditampilkan oleh guru • Siswa menanggapi pertanyaan guru
Data Collection	
Teacher	**Student**
• Guru meminta siswa untuk membuat pertanyaan terkait dengan teks dalam bentuk diagram starbusting. • Guru memberi umpan balik dengan menyeleksi konsep-konsep penting dari pendapat-pendapat peserta didik sesuai dengan teks	• Siswa membuat diagram starbusting
Data Processing	
Teacher	**Student**

Teacher	Student
• Guru meminta siswauntuk menjawab pertanyaanyang telah di buat oleh siswa dalam diagram *starbusting.*	• Siswa menjawab pertanyaan yang telah dibuat secara individu

Verification	
Teacher	**Student**
• Guru meminta siswa membacakan jawaban mereka secara bergiliran.	• Siswa membacakan jawaban secara bergiliran sesuai urutan masing-masing

Penutup (10 menit)

Penutup	• Siswa menyimpulkan hal-hal yang telah dipelajari. • Guru memberi penekanan terhadap materi • Guru memberikan test kepada siswa tentag keseluruhan materi teks narative

I. TEKNIK PENILAIAN

a. Teknik Penilaian

1. Sikap   : Observasi dan Jurnal
2. Pengetahuan   :Tes Tulis
3. Ketrampilan   : Unjuk Kerja

b. Bentuk Penilaian

1. Sikap   : Lembar observasi kerjasama dan sikap disiplin

2. Pengetahuan   : Lembar kerja siswa

3. Ketrampilan   : Rubrik Diskusi dan Presentasi

Mengetahui,

Kepala sekolah   Guru Mata Pelajaran

                                          Dea Varadita

                                          Nim. 140203108

Indikator Pencapaian Kompetensi
3.10.1 Mengidentifikasi nilai moral pada teks naratif sederhana berbentuk legenda rakyat.

3.10.2 Membedakan struktur teks pada teks naratif sederhana berbentuk legenda rakyat.

The Legend of Malin Kundang

A long time ago, in a small village near the beach in West Sumatra, a woman and her son lived. They were Malin Kundang and her mother. Her mother was a single parent because Malin Kundang's father had passed away when he was a baby. Malin Kundang had to live hard with his mother.

Malin Kundang was a healthy, dilligent, and strong boy. He usually went to sea to catch fish. After getting fish he would bring it to his mother, or sold the caught fish in the town. One day, when Malin Kundang was sailing,he saw a merchant's ship which was being raided by a small band of pirates. He helped the merchant.

With his brave and power, Malin Kundang defeated the pirates. The merchant was so happy and thanked to him. In return the merchant asked Malin Kundang to sail with him. To get a better life, Malin Kundang agreed. He left his mother alone. Many years later, Malin Kundang became wealthy. He had a huge ship and was helped by many ship crews loading trading goods. Perfectly he had a beautiful wife too. When he was sailing his trading journey, his ship landed on a beach near a small village.

The villagers recognized him. The news ran fast in the town; "Malin Kundang has become rich and now he is here". An old woman ran to the beach to meet the new rich merchant. She was Malin Kundang's mother. She wanted to hug him, released her sadness of being lonely after so long time. Unfortunately, when the mother came, Malin Kundang who was in front of his well dressed wife and his ship crews denied meeting that old lonely woman. For three times her mother begged Malin Kundang and for three times he yelled at her. At last Malin Kundang said to her "Enough, old woman!

I have never had a mother like you, a dirty and ugly woman!" After that he ordered his crews to set sail. He would leave the old mother again but in that time she was full of both sadness

and angriness. Finally, enraged, she cursed Malin Kundang that he would turn into a stone if he didn't apologize. Malin Kundang just laughed and really set sail

.

In the quiet sea, suddenly a thunderstorm came. His huge ship was wrecked and it was too late for Malin Kundang to apologize. He was thrown by the wave out of his ship. He fell on a small island. It was really too late for him to avoid his curse. Suddenly,he turned into a stone.

Meeting II

LEMBAR KERJA SISWA (LKS)

Create the starbusting type diagram by making questionsand the answer from the text below!

Group   :

Name of Members   :

True Friends

Once upon a time, there were two close friends who were walking through the forest together. They knew that anything dangerous can happen any time in the forest. So they promised each other that they would always be together in any case of danger.

Suddenly, they saw a large bear getting closer toward them. One of them climbed a nearby tree at once. But unfortunately the other one did not know how to climb up the tree. So being led by his common sense, he lay down on the ground breathless and pretended to be a dead man.

The bear came near the one who was lying on the ground. It smelt in his ears, and slowly left the place because the bears do not want to touch the dead creatures. After that, the friend on the tree came down and asked his friend that was on the ground, "Friend, what did the bear whisper into your ears?" The other friend replied, "Just now the bear advised me not to believe a false friend."

Group   :

Name of Members   :

The Ant and the Dove

One hot day, an ant was searching for some water. After walking around for some time, she came to a spring. To reach the spring, she had to climb up a blade of grass. While making her way up, she slipped

and fell into the water.

She could have drowned if a dove up a nearby tree had not seen her. Seeing that the ant was in trouble, the dove quickly plucked off a leaf and dropped it into the water near the struggling ant. The ant moved towards the leaf and climbed up there. Soon it carried her safely to dry ground.

Not long after at that time, a hunter nearby was throwing out his net towards the dove, hoping to trap it.

Guessing what he was about to do, the ant quickly bit him on the heel. Feeling the pain, the hunter dropped his net. The dove was quick to fly away to safety.

Group :

Name of Members :

Fox and A Cat

One day a cat and a fox were having a conversation. The fox, who was a conceited creature, boasted how clever she was. 'Why, I know at least a hundred tricks to get away from our mutual enemies, the dogs,' she said.

'I know only one trick to get away from dogs,' said the cat. 'You should teach me some of yours!'

'Well, maybe some day, when I have the time, I may teach you a few of the simpler ones,' replied the fox airily.

Just then they heard the barking of a pack of dogs in the distance. The barking grew louder and louder – the dogs were coming in their direction! At once the cat ran to the nearest tree and climbed into its branches, well out of reach of any dog. 'This is the trick I told you about, the only one I know,' said the cat. 'Which one of your hundred tricks are you going to use?'

The fox sat silently under the tree, wondering which trick she should use. Before she could make up her mind, the dogs arrived. They fell upon the fox and tore her to pieces.

Lampiran 1

LEMBAR PENILAIAN AFEKTIF

Petunjuk :

- Lembar / instrumen ini digunakan setelah pembelajaran berlangsung
- Berilah tanda cek (√) pada kolom untuk aspek sesuai dengan pengamatan

No	Aspek yang diamati	Dilakukan		Skor				Keterangan
		Ya	Tidak	4	3	2	1	
1	Kehadiran siswa							
2	Persiapan awal							
3	Partisipasi dalam kegiatan							
4	Kerjasama kelompok dalam mengerjakan LKS							
5	Aktivitas diskusi							
6	Presentasi hasil kegiatan							
	Jumlah Skor							

RUBRIK PENILAIAN AFEKTIF

No	Aspek yang diamati	Rubrik	Keterangan
1	Kehadiran siswa	4. Tepat waktu 3. Terlambat kurang dari 15 menit 2. Terlambat lebih dari 15 menit 1. Tidak hadir	
2	Persiapan awal	4. Lengkap 3. Agak lengkap 2. Kurang lengkap 1. Tidak lengkap	
3	Partisipasi dalam kegiatan	4. Sangat aktif 3. Aktif	

		2. Kurang aktif	
		1. Tidak aktif	
4	Kerjasama kelompok dalam mengerjakan LKS	4. Sangat aktif 3. Aktif 2. Kurang aktif 1. Tidak aktif	
5	Aktivitas diskusi	4. Sangat aktif 3. Aktif 2. Kurang aktif 1. Tidak aktif	
6	Presentasi hasil kegiatan	4. Penyaji 3. Aktif menjawab pertanyaan 2. Aktif membantu 1. Tidak aktif	
	Jumlah Skor		

Lampiran II

LEMBAR PENILAIAN KOGNITIF

Lampiran III

LEMBAR PENILAIAN KETRAMPILAN

Rubrik Penilaian Presentasi

Aspek	Keterangan	Score
Pronounciation	Speaking with correct pronounciation Speaking with several incorrect pronounciation Speaking with incorrect pronounciation but still understandable Speaking words incomprehensibly	4 3 2 1
Performance Skill	Speaking clearly and loudly, good facial expression and communicative Speaking in soft voicebut can be understood, good facial expression and communicative enough Mumbling, flat facial expression and less	4 3 2

	communicative	
	Speaking in volume which is almost inaudible, no facial expression and mot communicative	1

Pedoman penskoran :

$$\frac{Skor\ Perolehan}{Skor\ Maksimal}X100$$

Pedoman Skor Akhir :

$$\frac{Skor\ A + Skor\ B}{2}$$

Kriteria Ketuntasan Minimal (KKM) : 70

The implementation of Brainstorming Method on Developing Higher Order Thinking Skill of Students

Nama :

Kelas :

The text below will be used to answer question 1-10!

Once there was a farmer from Laos. Every morning and every evening, he ploughed his field with his buffalo. Oneday, a tiger saw the farmer and his buffalo working in the field. The tiger was very surprised to see a big animal listening to a small animal. The tiger wanted to know more about the big animal and the small animal.

After the man went home, the tiger spoke to the buffalo; "you are so big and strong. Why do you do everything the man tells you?" The buffalo answered; "oh, the man is very intelligent".The tiger asked; "can you tell me how intelligent he is?". "No, I can't tell you", said the buffalo; "but you can ask him"

So the next day the tiger asked to the man; "Can I see your intelligence?". But the man answered; "it at home". "Can you go and get it?" asked the tiger. "Yes" said the man; "but I am afraid you will kill my buffalo when I am gone. Can I tie you to a tree?"

After the man tied the tiger to the tree, he didn't go home to get his intelligence. He took his plough and hit the tiger. Then, he said; "Now you know about my intelligence even you haven't seen it.

1. The communicative purpose of this text is....
A. To give a view of an art work
B. To entertain or amuse the readers
C. To inform the readers
D. To describe a thing
E. To explain a place

2. According to the passage, what is the cause making the tiger was very surprised to see the bufallo listening to the man who was smaller that it?
A. The man ususally plowed his field with his buffalo
B. The buffalo do everything for the man
C. The tiger was curious about the man
D. The tiger felt sorry for the buffalo
E. The buffalo always worked dilligently

3. What does the second paragraph tell you about?

A. The buffalo is very useful for the farmer.

B. The bufallo was so dull to work with the farmer

C. The tiger was curious to know man's intelligent

D. The tiger wanted to know other the bufallo's reasons

E. The farmer was very smart

4. What lesson can we learn from the story?

A. Don't leave your intelligence at home.

B. Intelligence can't be judged from appearance.

C. Don't compare man's intelligence to animal's.

D. The bigger a person, the more intelligence he is.

5. What might happen if the tiger did not underestimate the man?
A. The tiger would still alive
B. The tiger and the buffalo would be good friend
C. The tiger might keep the tiger
D. The tiger would not be treated badly by the man

E. The tiger wouldn't know the man's intelligence

6. What is the conclusion of the text?

 A. The tiger finally died
 B. The bufallo proved to tiger that he was not stupid
 C. Intelligence beats physical stenght
 D. The bufallo hit the tiger by the plough

E. Intelligence never could have seen

Questions 7-9

1. The bufallo didn't go home but hit the tiger by the plough
2. Next, the tiger asked about where the man's intelligence is
3. The bufallo said that because the farmer was very intelligent
4. The the man tied the tiger to a tree
5. Then, the tiger was curious to know why the bufallo that was so big and strong but obeyed the man
6. One day, the tiger looked the bufallo was working in the field to help the farmer
7. Farmer in Laos ploughed his field with the bufallo
8. Finally, the man proved that he was not as stupid as the tiger thinking

7. Which is the best arrangement in right sequences of this story?

A. 7,1,4,3,5,6,2,8
B. 7,4,5,2,3,6,1,8
C. 7,6,5,3,2,4,1,8
D. 7,5,6,2,4,1,3,8
E. 7,6,1,2,4,3,5,8

8. What is the *comparison* bewteen point 2 and 5 in term of the generic structure?

A. Both of them are the resolution of the text
B. Both points are the complication of the text
C. Point 2 is the next scene of point 5
D. Point 2 and 2 are the orientation of the text
E. Both points are the introduction of the text

9. Do you defend the statement saying that the tiger has done the bad thing?

A. Yes, because it was arrogant
B. Yes, because it judge others by their appearance
C. Yes, because it laughed at the bufallo
D. No, because it is normal to underestimate other
E. No, because the tiger was honest to itself

10. Compose a letter of apology from kancil to crocodile!

_____

_____.

Source:

Gamma, Widya.(2017). BPM (Buku Pendalaman Materi) Bahasa inggris SMA/MA 2017. Bandung: JYrama Widya.

The implementation of Brainstorming Method on Developing Higher Order Thinking Skill of Students

Nama :

Kelas :

Petunjuk :

1. Pada tes ini terdapat 10 pertanyaan. Pertimbangkan baik-baik setiap pertanyaan dan jawablah dengan jawaban yang tepat
2. Pertimbangkan setiap pertanyaan secara terpisah dengan orang lain.

The text below will be used to answer question 1-10!

The Ducks and the Turtle

Two ducks who lived in a big lake had a friend who was a turtle. One year there was a very little rain and the lake began to dry up. One of the ducks said to the other," Soon, there'll be no water in this lake. Let's go and look for another lake." "Yes." Answered the second duck," But first let's say goodbye to our friend, the turtle."

When they told the turtle they were going to leave, he said," I'll die here without any water and without any friends. Take me within you." The duck answered," We can't. We are going to fly, and you have no wings."

The turtle thought for a minute and then said," Please wait here." Then he went away and found a strong, straight stick. He brought it back to his friends, put the middle of it in his mouth and said," Now if each of you takes me one end of the stick in his mouth, you can lift me up and carry me with you "

"There is one danger," said the ducks," If you try to talk while we're carrying you through the air, you won't be able to hold the stick, so you'll fall down along way and break your shell."

"All right," answered the turtle," I promise not to talk while we're in the air." So the ducks took the stick and flew away, with the turtle between them. All went well until they were flying over a town. Then some people saw them and shouted," Look, those ducks are carrying a cat!"

First the turtle very proud of himself because of his idea he could fly. But when he heard that, the turtle got very angry," A Cat? I am not........," he said, but he didn't get any further because he opened his mouth, the stick came out of his mouth and the poor turtle fell to the ground.

1)The communicative purpose of this text is ....
   A. To entertain or amuse the readers
   B. To give a view of an art work
   C. To inform the readers
   D. To describe a thing
   E. To explain a place

2. Based on the second pharagraph, how did the turtle solve his problem?
   A. By drying up the lake
   B. By flooding the lake
   C. By flying away from the dry lake with the help of the ducks
   D. By flying down over the town by the help of the ducks
   E. By dropping the turtle down

3. What problems faced by the ducks making them want to leave the lake?

   A. A lot of water flows to the lake
   B. Much water flows out of the lake
   C. Long rainy season
   D. Long dry season
   E. Trying to fly

4. What is the moral value that can we learn from the story?

   A. One may proud of himself
   B. One must keep his promise
   C. One may angry to others
   D. One may not too boastfull of himself
   E. One must always be patient to others

5. What might happen if the turtle obey to the ducks?
   E. The ducks would help the turtle
   F. They would arrive to another lake safely
   G. The turtle would be famous
   H. The ducks and the turtle would be really close
   I. The ducks would save the turtle

6. What inference of the third pharagraph?

   E. The ducks and the turtles flied together to find another lake.
   F. The turtle was failed to reach another lake because he broke his promise to the ducks
   G. The turtle's shield was broken because he fell into the ground
   H. The ducks was very upset to know the turtle's condition
   I. The turtles was proud of his idea

Text for question 7-8!

Questions 7-9

1) Finally, he felt to the ground because he opened his mouth.
2) The lake began to dry and the ducks wanted to find another lake.
3) Then, the ducks took the stick and flew away with the turtle between them after the turtle agreed to promise.
4) The turtle offered his idea to use the straight sticks.
5) Suddenly, the turtle asked to bring him too within the ducks.
6) The turtle was very proud of his idea and getting angry when people called him as a cat.
7) The turtle wanted to promise that he would never open his mouth.

7. Arrange the story above in right sequence!

    A. 2, 3,5,7,6,3,1
    B. 2,4, 3,5,6,7,1
    C. 2, 5,4,7,3,6,1
    D. 2,4,6,7,3,5,1
    E. 2, 7,3,4,5,6,1

8. What is the similarity of point 2 and 4 in ther of the generic structure?

    A. Ponit 2 and 4 tell the story related to the introduction of the text
    B. Both ponit 2 and 4 explain the reader about the conflicts
    C. The three kinds of text organization are also used in hortatory exposition text type
    D. Point 2 and 4 have different function in this story
    E. Both points explain the problem solving at the end of the story

9. Do you agree with the action when the turtle to opened his mouth in this story?

    A. No, because he was grumpy
    B. No, because he broke his promise with the ducks
    C. Yes, because he was angry when called as a cat
    D. Yes, because he was not on purpose to do it
    E. No, because the turtle did it accidently

10. How would you evaluate the action of the turtle in this story?

_____

_____.

QUESTIONNAIRE

The implementation of Brainstorming Method in Developing Higher Order Thinking Skill to the Students

Nama :

Kelas :

Petunjuk :

- ✓ Pada kuestioner ini terdapat 10 pertanyaan. Pertimbangkan baik-baik setiap pertanyaan dan jawab sesuai dengan yang kalian rasakan dan alami.
- ✓ Pertimbangkan setiap pertanyaan secara terpisah dengan orang lain.
- ✓ Jawablah setiap pertanyaan dengan jawaban ya/tidak.

1. Apakah anda senang belajar bahasa Inggris dengan menggunakan metodebrainstorming?

   A. Ya   B. Tidak

2. Apakah belajar dengan metode brainstormingdapat meningkatkan kemampuan berbahasa Inggris anda?

   A. Ya   B. Tidak

3. Apakah belajar menggunakan metode brainstormingdapat meningkatkan kemampuan memahami teks bacaan lebih dalam?

   A. Ya   B. Tidak

4. Apakah belajar menggunakan metode brainstorming memudahkan anda untuk menganalisis fungsi sosial, struktur teks dan unsur kebahasaan sebuah teks bacaan?

   A. Ya   B. Tidak

5. Apakah belajar menggunakan metodebrainstorming memudahkan anda untuk memberikan evaluasi terhadap sebuah teks bacaan?

   A. Ya   B. Tidak

6. Apakah belajar menggunakan metode brainstorming memudahkan anda untuk membuat/ mengarang sebuah teks singkat?

A. Ya   B. Tidak

7. Metode brainstorming memberikan banyak manfaat ketika mengerjakan soal pada tingkat HOTS (higher order thinking). Apakah anda setuju?

A. Ya   B. Tidak

8. Apakah belajar menggunakan metode brainstorming cocok digunakan untuk mengembangkan pemikiran tingkat tinggi (HOTS)?

A. Ya   B. Tidak

9. Belajar menggunakan metode brainstorming untuk mengembangkan pemikiran tingkat tinggi (HOTS) sangat membosankan. Apakah anda setuju?

A. Ya   B. Tidak

10. Apakah anda setuju apabila metode brainstorming digunakan untuk mengajar bahasa inggris dikelas untuk mengembangkan pemikiran tingkat tinggi (HOTS)?

A. Ya   B. Tidak

TABEL NILAI KRITIS DISTRIBUSI T

df	One-Tailed Test						
	0,25	0,10	0,05	0,025	0,01	0,005	0,001
	Two-Tailed Test						
	0,50	0,20	0,10	0,05	0,02	0,01	0,002
1	1,000000	3,077684	6,313752	12,706205	31,820516	63,656741	318,308839
2	0,816497	1,885618	2,919986	4,302653	6,964557	9,924843	22,327125
3	0,764892	1,637744	2,353363	3,182446	4,540703	5,840909	10,214532
4	0,740697	1,533206	2,131847	2,776445	3,746947	4,604095	7,173182
5	0,726687	1,475884	2,015048	2,570582	3,364930	4,032143	5,893430
6	0,717558	1,439756	1,943180	2,446912	3,142668	3,707428	5,207626
7	0,711142	1,414924	1,894579	2,364624	2,997952	3,499483	4,785290
8	0,706387	1,396815	1,859548	2,306004	2,896459	3,355387	4,500791
9	0,702722	1,383029	1,833113	2,262157	2,821438	3,249836	4,296806
10	0,699812	1,372184	1,812461	2,228139	2,763769	3,169273	4,143700
11	0,697445	1,363430	1,795885	2,200985	2,718079	3,105807	4,024701
12	0,695483	1,356217	1,782288	2,178813	2,680998	3,054540	3,929633
13	0,693829	1,350171	1,770933	2,160369	2,650309	3,012276	3,851982
14	0,692417	1,345030	1,761310	2,144787	2,624494	2,976843	3,787390
15	0,691197	1,340606	1,753050	2,131450	2,602480	2,946713	3,732834
16	0,690132	1,336757	1,745884	2,119905	2,583487	2,920782	3,686155
17	0,689195	1,333379	1,739607	2,109816	2,566934	2,898231	3,645767
18	0,688364	1,330391	1,734064	2,100922	2,552380	2,878440	3,610485
19	0,687621	1,327728	1,729133	2,093024	2,539483	2,860935	3,579400
20	0,686954	1,325341	1,724718	2,085963	2,527977	2,845340	3,551808
21	0,686352	1,323188	1,720743	2,079614	2,517648	2,831360	3,527154
22	0,685805	1,321237	1,717144	2,073873	2,508325	2,818756	3,504992
23	0,685306	1,319460	1,713872	2,068658	2,499867	2,807336	3,484964
24	0,684850	1,317836	1,710882	2,063899	2,492159	2,796940	3,466777
25	0,684430	1,316345	1,708141	2,059539	2,485107	2,787436	3,450189
26	0,684043	1,314972	1,705618	2,055529	2,478630	2,778715	3,434997
27	0,683685	1,313703	1,703288	2,051831	2,472660	2,770683	3,421034
28	0,683353	1,312527	1,701131	2,048407	2,467140	2,763262	3,408155
29	0,683044	1,311434	1,699127	2,045230	2,462021	2,756386	3,396240
30	0,682756	1,310415	1,697261	2,042272	2,457262	2,749996	3,385185
31	0,682486	1,309464	1,695519	2,039513	2,452824	2,744042	3,374899
32	0,682234	1,308573	1,693889	2,036933	2,448678	2,738481	3,365306
33	0,681997	1,307737	1,692360	2,034515	2,444794	2,733277	3,356337
34	0,681774	1,306952	1,690924	2,032245	2,441150	2,728394	3,349934
35	0,681564	1,306212	1,689572	2,030108	2,437723	2,723806	3,340045
36	0,681366	1,305514	1,688298	2,028094	2,434494	2,719485	3,332624
37	0,681178	1,304854	1,687094	2,026192	2,431447	2,715409	3,325631
38	0,681001	1,304230	1,685954	2,024394	2,428568	2,711558	3,319030
39	0,680833	1,303639	1,684875	2,022691	2,425841	2,707913	3,312788
40	0,680673	1,303077	1,683851	2,021075	2,423257	2,704459	3,306878

Research Documentation

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