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Forewords

Praise and gratitude to Allah SWT, because of Allah’s love for us so that we are still given a long life and can carry out our various daily activities. May all our activities become our acts of worship, Aamiinnn

in accordance with the commitment of the Jurnal Serambi Ilmu Journal to continue to improve the quality of its manuscripts since the volume 22 number 1 has been published full in English.

We are also be proud that the number of submitted manuscripts is quite large, but only a few are acceptable and worthy of publication. This means that Jurnal Serambi Ilmu has become one of the scientific publications that are considered by experts and education enthusiasts.

For this reason, Jurnal Serambi Ilmu is committed to continuing to maintain the quality, service and discipline that applies in scientific publications.

September 30, 2021

Editor in chief,

Dr. Abubakar, M. Si
Improve Narrative Writing Ability Using Model Problem Based Learning Based on Mind Mapping

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Abstract
The purpose of this study is to find out how to increase students' narrative skills by using a mind mapping-based problem-based learning model, to find out how effective the use of mind mapping-based problem-based learning models in writing scientific narratives. Sources of the data were students of class V Elementary School 1 Lambheu totaling 52 students consisting of two classes, namely class A totaling 26 students and class B totaling 26 students. One class as an experimental class by using the problem base learning method based on mind mapping and the other class as a control class is a class whose learning is not given treatment. The data processing tool is using statistics with the help of SPSS for Windows Version of the Standard 16.0. The results showed that the ability of students to write narratives who received learning using the problem base learning method based on mind mapping was better than students who received conventional narrative learning as a whole.

Keywords: narrative, problem based learning, mind mapping

INTRODUCTION
Writing skill is an important aspect in the communication process. Writing is a benchmark for assessing the progress of a country (Tarigan, 2013). Writing is the last skill that is difficult to master after listening, reading, and speaking skills.

Data from the National Center for Education Statistics (NCES) in 2012 shows that the writing skills of elementary school students to college students are very low due to lack of creativity which causes high plagiarism (Cahyani, Isah et al., 2019.

In fact, the ability to write is one of the initial literacy that must be possessed by every individual to live life in the 4.0 industrial revolution era. Considering the new literacy includes data literacy, technological literacy, and human literacy. The importance of writing activities since elementary school is also emphasized in the 2013 curriculum by containing the fourth core standard, namely presenting factual knowledge in clear, systematic and logical language, in aesthetic works (Mulyasa, 2013). Systematic and logical which is the hallmark of writing a narrative.

Writing narratives is considered difficult by students because of the low level of understanding (Wardah, 2020). Conventional writing learning used by teachers so far is still oriented to the product, not the writing process. It is necessary to strive for a
model or method to develop writing skills (Prayidno, 2014). The right learning model or media can increase the effectiveness of learning, motivation, enthusiasm and interest of students to learn (Sohibun, 2017).

The learning model is a series of learning that is structured, systematic and organized in order to help achieve learning objectives (Sani, 2016). Learning has very important role in creating an effective and interesting learning activity model. In learning activities there are a series of effective activities between educators and students. One important aspect for achieving learning effectiveness is the selection of appropriate learning methods or models by educators to hone students' thinking skills in order to bring out their understanding and creativity. The right learning model or media can increase learning effectiveness, motivation, enthusiasm for learning and students' interest in learning in class (Sohibun, 2017).

Wulandari's research (2013) shows that problem-based learning can improve learning outcomes better than the demonstration model. This is in line with research conducted [1]. The results showed that students' ability to write narratives using the PBL model increased, especially in obtaining creative ideas. Student responses to learning using problem based learning in writing narratives are very positive.

By using a problem based learning model, it can make it easier for students to understand narrative writing materials so as to increase students' interest in learning to write narratives. while it is effectively applied to Indonesian language learning, the difference is that Gudu applies the research model carried out (Gudu 2020; Wahyuni, 2020) showing the Problem based learning method for writing argumentative texts and Wahyuni on writing procedure texts. These studies only use problem based learning models, without the help of other models or media. In contrast to Yuliana's research (2020) using a problem based learning model assisted by Powtoon and Alwasilah (2019) using a problem based learning model assisted by Plotagon (a 3D animation-making software).

Research on the mind mapping model conducted by Lestari (2019) and Aprelia et al (2019) showed an increase in narrative writing skills. Likewise with Wardah's research (2020) learning using mind mapping can stimulate and motivate students in writing, the difference is that Wardah applies the mind mapping model to the material of writing exposition texts. The results of Mirnawati's research (2020) show that the mind mapping learning model can be used as a guide for teachers in learning to write narratives in elementary schools.

Previous studies related to problem based learning and mind mapping only used one approach, both problem based learning and mind mapping. Researchers did not find a model that combines problem based learning with mind mapping. In fact, both have great potential in improving the ability to write narratives in particular. So in this study, researchers will combine a mind mapping-based problem-based learning approach to overcome students' problems in exploring ideas and organizing ideas in a structured way in writing narratives. Therefore, this research has a strong urgency for the success of government programs in building Indonesian literacy culture.
Writing Narrative

Writing skill is one of the basic Indonesian language skills that are learned at the school level. Mastery of writing skills is very important to express ideas, ideas, thoughts in written form and is useful for students to take notes, do schoolwork (Musyawir and Loilatu, 2020, Mardhatillah & Akmalia, 2017). Meanwhile, according to Lestari (2019), the ability to write requires skills that are complex and require the ability to think logically, orderly, creatively and in effective language according to the rules of good writing.

Narrative is a form of conversation or writing that aims to convey or tell a series of events or human experiences based on developments from time to time. According to Semi (2003:30) narrative writing has a simple pattern, namely the beginning of the event, the middle of the event, and the end of the event. The initial part aims to bring the reader and attract the reader to a certain atmosphere, or explain the background of events or can be in the form of imagining things that will happen in the middle or end of the story. The middle part of the narrative is the part that explains at length about the event until it reaches the climax. While the ending is an anti-climax part that leads to completion.

According to Ramadhani (2017), narratives can be classified into expository narratives (information in straightforward language) and suggestive narratives (information in imaginative language and conflict). Writing is one of the most difficult language skills for students at school. For example, the ability to write narratives for fourth grade students at SDN Jabung 2 Paketan, Magetan Regency is still lacking because students feel burdened and complain when given the task of writing narratives (Rulviana, 2020).

While the ability to write narratives for fifth grade students of SD Sukorejo is still low, there are only 15 students (48.87%) out of 32 students who can complete essays on time (Kurniasih, 2020). Likewise, the ability of fourth grade students at SDIT Nurul Ilmi is still low in writing narratives because students have difficulty determining themes, composing sentences, lack of mastery of language rules and boredom in learning to write (Lestari and Nurmairina, 2020). The purpose of this theme is not only to master the concepts in a subject, but also its relation to concepts from other subjects. "The determination of the theme starts from the closest environment and is recognized by students" (Rusman, 2012:262).

Problem Based Learning

Problem based learning (PBL) learning model is a learning model individually or in groups in order to develop students' ability to think critically (scientific), and systematically to solve a problem.

The application of PBL in learning can develop students' knowledge, help students have a good memory of the material being studied and encourage collaboration skills among students. In the application of this PBL model, the teacher
acts as a facilitator to direct and guide students in solving problems while achieving the goal of achieving competence (Alwasih, 2019).

Problem Based Learning (PBL) is one of the learning models that can help students to improve the skills needed in the current era of globalization. This learning model presents a real problem for students as the beginning of learning then solved through investigation and applied using a problem solving approach.

The Problem Based Learning model is characterized by the use of real-life problems as something that students must learn. With the Problem Based Learning model, it is expected that students will gain more skills than memorized knowledge. Starting from problem solving skills, critical thinking skills, group work skills, interpersonal and communication skills, as well as information search and processing skills.

The procedure for implementing the concept approach in learning goes through three stages, namely (Uno, 2008):

1. First, the teacher presents the data to the students. Each data is an example and not a separate example. The data can be in the form of events, people, objects, stories, and others. Students are told that in the list of data presented there are several data that have similarities. They were asked to name the concept and explain the definition of the concept based on its characteristics.

2. The second stage, students test their concept acquisition. The first is by identifying other additional examples that refer to the concept. Or secondly by coming up with their own examples. After that, the teacher confirmed the truth of the students' assumptions about the concept, and asked them to revise the concept that was still not quite right.

3. The third stage, invites students to analyze/discuss strategies until they can get the concept. In the actual situation, surely the concept tracing they do is different. Some start from the general, some start from the special, and so on. However, the difference in strategies among students is a lesson for others to choose which strategy is the most appropriate in understanding a particular concept.

Mind Mapping

According to Buzan (in Subakti and Handayani, 2020:173) Mind mapping models are effective when used to bring up hidden ideas they have. The mind mapping model is useful for organizing the information that you already have. This model itself is a diagram that is used to present words, ideas (thoughts), and tasks that are connected from the main idea.

Mind Mapping makes the human brain well explored and works according to its function. The human brain consists of the right brain and the left brain. In mind mapping, both brain systems are activated simultaneously according to their portions. The combination of colors, images and branches, will be visually stimulating. Therefore, the information from mind mapping is easy to remember.

Thinking skills are one of the means to achieve learning objectives through the active involvement of students in solving a problem. One of the thinking skills that
must be developed is creative thinking skills. Creative thinking in writing narratives can be optimized by using the mind mapping method. Mind mapping, which means a mind map, utilizes and focuses the whole brain for creative thinking so that it creates high imagination power (Swadarma, 2013).

The steps of the Mind Map Learning Model According to Tony Buzan (2011:15) are as follows:
1. start from the middle of the blank paper whose long side is placed horizontally,
2. use pictures or photos for your central idea,
3. use color,
4. Connect the main branches to the central drawing and connect the branches of level two and three to level one and two, and so on,
5. make a curved line, not a straight line,
6. use one keyword for each line, and
7. Use pictures.

The advantage of the mind mapping model is that students can express opinions freely. Mind mapping is a learning technique by making creative notes individually by students, so that they can express their ideas freely, or can take notes on the materials provided by the teacher using their own language. Another advantage is that notes are more focused on the core material. Faiq (2013) mentions several advantages of the mind mapping learning model, including:
1. Increase creativity and individual and group activities. Mind mapping allows students to express all their ideas in the form of creative visualization. If students use a mind map to record the learning information they receive, it will certainly make them more creative. The use of symbols, pictures, choosing certain keywords to paint or write on a mind map can stimulate creative thinking patterns.
2. Make it easier for the brain to understand and absorb information quickly. Notes made in the form of a mind map can be easily understood by others, especially by the maker himself.
3. Make it easier for students to remember. Typical notes made with mind maps are specific and have special meaning for each student who makes them. Mind mapping only records important things in the form of keywords on a sheet of paper with various colors and images, making it easier for students to remember and learn something by looking at the relationships formed from existing keywords, colors, and images.
4. Focus students' attention. During the process of making mind maps, students' attention will be focused on understanding and interpreting the information received, so that learning activities are more effective.
5. Fun for students. Mind maps use color components, images, symbols, and curved lines. This is certainly fun for students. Fun activities will then create a positive atmosphere in learning activities in the classroom.
6. Activate all parts of the brain. While making a mind map, the use of both brains will be maximized. Students not only use the left hemisphere for logical thinking, but
they can also use the right hemisphere by triggering their feelings and emotions in the form of certain colors and symbols during mind map making.

RESEARCH METHODS
This research was conducted using an experimental method with a quantitative approach. There are two sample groups, namely the experimental group which is given treatment in the form of learning that applies the PBL (problem based learning) model with mind mapping and the control group which uses the conventional model that is usually done. Both groups were given a pre-test and a post-test, using the same test instrument. The design of this study was in the form of a pretest posttest control group design.

The data collection in this study used a type of test instrument, namely a narrative writing ability test used in the initial and final tests. The questions are arranged in the form of a description test. The sample in this study was the fifth grade students of SDN 1 Aceh Besar.

Research Sample
The sample in this study was class V Elementary School 1 Lambheu totaling 52 students consisting of two classes, namely class A totaling 26 students and class B totaling 26 students. One class as an experimental class is a class that uses the problem base learning method based on mind mapping and the other class as a control class is a class whose learning is not given treatment.

Analyzed Data
The data analyzed is quantitative data in the form of narrative writing ability test results using a basic learning problem model with mind mapping. The statistical test used in this study is the average difference test with the following steps:
1. determine the score of the initial test and the final test of the ability to write narratives using mind mapping-based problem based learning for the experimental class and the control class.
2. determine the score for improving narrative writing skills using the normalized N-gain formula as introduced by Hake (in Mahmuzah, 2017). The results of the N-gain calculation are then interpreted using the following classification.

<table>
<thead>
<tr>
<th>N-Gain Level Criteria</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>g &gt; 0.7</td>
</tr>
<tr>
<td></td>
<td>0.3 &lt; g ≤ 0.7</td>
</tr>
<tr>
<td></td>
<td>g ≤ 0.3</td>
</tr>
<tr>
<td>Criteria</td>
<td>Very good</td>
</tr>
<tr>
<td></td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>Low</td>
</tr>
</tbody>
</table>

Source: Mahmuzah 2017

1. Test the normality of the initial test score data and N-gain using the Kolmogrof Smirnov one sample statistical test.
2. To test the homogeneity of the variance of the initial test scores and N-gain using the Levene Statistics test which was calculated with the help of SPSS 16.
3. After the data meets the normal and homogeneous requirements, then the test for the difference in the average score of the initial test is carried out using the t-test, namely the independent sample t-test. If the distribution of the data is normal and not homogeneous, then the test is done with the t-test. If the data is not normally distributed, then the test uses a non-parametric test, namely the Mann-Whitney.

4. To find out the difference in the improvement of narrative writing skills between students who received learning using the problem based learning model assisted by mind mapping and students who received conventional learning as a whole also used the free sample t test.

RESULTS AND DISCUSSION
Research result
The results obtained from the research conducted at SDN 1 Lambheu Aceh Besar, namely increasing the ability to write narratives using the Mind Mapping-Based Problem Base Learning method. In accordance with the data processing techniques that have been determined, the data will be processed based on predetermined criteria. Data processing using SPSS 16.0 with a significance level of \( \alpha = 0.05 \).

A total of 52 students involved in this study were divided into two different classes. A total of 26 students were in the experimental class, namely the class that received learning to write narrative essays using the problem base learning method based on mind mapping and 26 students were in the control class who received conventional learning.

Before using the difference test, the data obtained were tested for normality and homogeneity to determine the type of difference test to be used. This test was conducted to see the difference in the improvement of students' ability to write narrative essays between classes that received learning using the Mind mapping-based Problem base learning method (experimental class) and classes that received learning using a conventional approach. The results of the data processing will be described as below.

Data on students' ability to write narrative essays before and after treatment were obtained through pre-test and post-test. The data to be analyzed in this study include the scores of the initial test, the final test and the N-gain of students' ability to write narrative essays in the experimental class taught using the Mind mapping-based Problem base learning method and the control class students taught with a conventional approach. The test used is in the form of a description. While the statistical description includes the average, standard deviation and the number of students based on the learning used are presented in the table below.
Table 2
Test Results Ability To Write Narrative Essays (Using Mind Mapping-Based And Conventional Problem Base Learning Methods)

<table>
<thead>
<tr>
<th>Kelas</th>
<th>N</th>
<th>Tes</th>
<th>Skor maks</th>
<th>Skor min</th>
<th>x̄</th>
<th>SD</th>
<th>Var</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eksperimen</td>
<td>26</td>
<td>Pre-test</td>
<td>15</td>
<td>9</td>
<td>12.42</td>
<td>1.67</td>
<td>2.814</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-test</td>
<td>20</td>
<td>12</td>
<td>17.30</td>
<td>1.80</td>
<td>3.262</td>
</tr>
<tr>
<td>Control</td>
<td>26</td>
<td>Pre-Test</td>
<td>14</td>
<td>9</td>
<td>12.11</td>
<td>1.50</td>
<td>2.266</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-Tes t</td>
<td>18</td>
<td>13</td>
<td>15.42</td>
<td>1.65</td>
<td>2.734</td>
</tr>
</tbody>
</table>

Source: processed data, 2021

Table 1 shows that the average score of students' initial ability to write narrative essays for the experimental class is higher than the control class. The average score for the initial ability to write narrative essays in the experimental class was 12.42 with a standard deviation of 1.67, while the average score for the initial test in the control class was 12.11 with a standard deviation of 1.50.

It can also be seen that the standard deviation of the control class is smaller than that of the experimental class, this indicates that the distribution of narrative writing ability in the control class is more varied than the experimental class. For the final test score, it can be seen that the average narrative writing ability of the experimental class is higher than the average control class average. The standard deviation of the experimental class is higher than the control class. That is, the ability to write narrative essays in the experimental class is more spread out than the control class.

Similarity Test Average Initial Test of Students' Ability to Write Narrative Essay

The average similarity test was carried out to see whether there was a difference in the average ability of students to write narrative essays before the treatment was given. Before the average similarity test is carried out, first the normality and homogeneity test of the data from the initial test results will be carried out in the experimental class and control class. Normality test using kolmogorov-smirnov (a). This test uses SPSS 16.0 with a significance level of α = 0.05. The test criteria are: Reject if Sig. < α = 0.05. With the formulation of the hypothesis: $H_0$: Data is normally distributed and $H_1$: Data is not normally distributed

<table>
<thead>
<tr>
<th>Tabel 3 Uji Normalitas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolmogorov-Smirnov^a</td>
</tr>
<tr>
<td>Statistic</td>
</tr>
<tr>
<td>Pretest_of Eksperimen Class</td>
</tr>
<tr>
<td>Pretest_of Class Control</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2021
Sign value. The experimental class and the control class > 0.05, i.e. 0.200 for the experimental class and 0.078 for the control class, so that the data distribution of the two classes is normally distributed. Because the initial test data for writing narrative essays for the two classes followed a normal distribution, then the homogeneity test of the two initial test data was carried out. Homogeneity test (Levene’s test) was conducted to determine whether the initial test data of the two classes were homogeneously distributed. Calculations using SPSS 17.0 with a significance level of 0.05 ($\alpha = 5\%$). The test criteria are “if” sig. < $\alpha = 0.05$ so $H_0$ rejected”. The formulation of the hypothesis is:

$H_0 : \text{Both variances are homogeneous} (\sigma_1 = \sigma_2)$

$H_1 : \text{The two variances are not homogeneous} (\sigma_1 \neq \sigma_2)$

Table 4. Homogeneity Test

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.468</td>
<td>1</td>
<td>50</td>
<td>.497</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2021

The results of the second homogeneity test output from the experimental class and control class obtained the value of sig. = 0.497 mean value Sig = 0.497 > 0.05 so $H_0$ accepted and it can be concluded that the two data are homogeneously distributed.

Furthermore, the average similarity test was carried out on the two initial test data of students' ability to write narrative essays. Both data are normally distributed and homogeneously distributed, the test will use the t test. Analysis using SPSS 16.0 with a significance level of $\alpha = 0.05$. The test criteria are: Reject $H_0$ if value sig. < $\alpha$. The results of the t test can be seen in the table below

Table 5

<table>
<thead>
<tr>
<th>Test</th>
<th>Mean</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
</tbody>
</table>

|      |      |      |     |    |               |

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Based on Table 4 obtained the value of Sig.(2-tailed) = 0.490 for the value of variance that is not homogeneous (Equal variances not assumed). Value Sig. (2-tailed) = 0.490 > 0.05 As a result, acceptance occurs $H_0$ which means that "there is no difference in the ability to write narrative essays between experimental class students and control class students before treatment". Based on the results of the hypothesis test above, it can be concluded that before being given the treatment the ability to write narrative essays was the same for both classes.

**Normality and Homogeneity Test**

Average N–gain Students' Ability to Write Narrative Essay

Normalized gain (N–gain) is an index of improving learning outcomes (Index of increasing students' ability to write narrative essays). Before testing the mean difference, first, normality and homogeneity tests were performed on the N–gain to determine the statistical test used in hypothesis testing. The following are the results of the descriptive analysis of the N–gain ability to write narrative essays in the experimental class and the control class.

**Table 6**

**Description of Data N – Student Ability Gain Writing narrative essay**

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ngain_Eksperimen</td>
<td>26</td>
<td>0.27</td>
<td>1.00</td>
<td>0.6665</td>
<td>0.17298</td>
<td>0.030</td>
</tr>
<tr>
<td>Ngain_Control</td>
<td>26</td>
<td>0.17</td>
<td>0.75</td>
<td>0.4204</td>
<td>0.17152</td>
<td>0.029</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the description of the data in table 5 that the average N–gain ability of students to write narrative essays in the experimental class is greater than the control class. The standard deviation of the experimental class is higher than the control class. This means that the N-gain ability of the experimental class is more spread out than the control class.

Furthermore, the N-gain data normality test will be conducted on the students' ability to write narrative essays. This test uses SPSS 16.0 with a significance level of $\alpha = 5\%$. The test criteria are: “Reject $H_0$ if Sig $< \alpha = 0.05$”. The results of the normality test for the two N–gain data are presented in the following table:
Table 6
N-gain Normality Test Results of Students' Ability to Write Narrative Essay

<table>
<thead>
<tr>
<th>Test</th>
<th>Kolmogorov-Smirnov(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
</tr>
<tr>
<td>Ngain_Eksperimen</td>
<td>.174</td>
</tr>
<tr>
<td>Ngain_Kontrol</td>
<td>.195</td>
</tr>
</tbody>
</table>

Source: Data Processed 2021

The sign value of the two classes <0.05 is 0.041 for the experimental class and 0.12 for the control class so that the distribution of the two classes is not normally distributed. As a result, it was rejected, meaning that the N-Gain data on the ability of students to write narrative essays in the control class and the experimental class did not follow a normal distribution.

Test the Difference in Average N–gain of Students' Ability to Write Narrative Essays Based on Overall Students

Because the data on the N-gain scores for the ability to write narratives in the experimental and control classes did not follow a normal distribution, the test for the difference in the average N-gain scores for the students' ability to write narrative essays would be used a nonparametric test, namely the Mann Whitney Test.

Tabel 7
Uji Perbedaan Rata-rata Nilai N-gain Kemampuan Siswa Menulis Karangan Narasi

<table>
<thead>
<tr>
<th></th>
<th>Ngain_Combine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>113.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>464.000</td>
</tr>
<tr>
<td>Z</td>
<td>-4.127</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Data Processed 2021

Based on Table 7 obtained Asymp. Sig. (2-tailed) = 0.000, so Sig. (1-tailed) = 0.000/2 = 0.000, 0.000 < 0.05. Based on the test criteria “Reject if Sig. < 0.05”. This results in acceptance \(H_1\). So it can be concluded that the improvement in the ability of students to write narrative essays who get learning by using the problem base learning method based on mind mapping is better than students who get learning to write narrative essays conventionally as a whole. This shows that good media are able to achieve learning objectives efficiently. (sa’adun, 2013) media that is capable of achieving high learning objectives means that the media is effective. The right learning
model or media can also increase learning effectiveness, motivation, enthusiasm for learning and students' interest in learning in class (Sohibun & Ade. 2017).

Based on the results of the research above, creative thinking in writing narratives can be optimized using the Problem base learning method based on mind mapping. Mind mapping which means a mind map, utilizing and focusing the whole brain to think creatively so that it creates high imagination power (Swadarma, 2013) considering that mastery of writing skills is very important to express ideas, ideas, thoughts in written form and is useful for students to take notes, work on school assignments (Musyawir and Loilatu, 2020, Mardhatillah & Akmalia, 2017)

**DISCUSSION**

Data on students' writing skills before and after treatment were obtained through a pretest (pretest) and a final test (posttest). The data that will be analyzed in this study include the scores of pretest, posttest and n-gain narrative abilities of experimental class students who are taught using mind mapping-based problem based learning (PBL) and control class students who are taught using a conventional approach. The test used is in the form of a description. While the statistical description includes the average, standard deviation and the number of students based on learning.

The results of the analysis of the average score of the initial test of the ability to write narrative essays for the two classes obtained an average score of 12.42 with a standard deviation of 1.67 for the experimental class or the class that received learning by using the Problem base learning method based on mind mapping. In the control class or the class that will receive conventional learning, the average score for the initial test is 12.11 with a standard deviation of 1.50. This shows that the mean of the initial test of the two classes is not much different. It can also be seen that the standard deviation value of the control class is lower than that of the experimental class, this indicates that the experimental class's narrative writing ability is more spread out than the control class.

The results of the average analysis of the average score of the final test in the experimental class and control class can be seen that the ability to write narrative essays in the experimental class is better than the control class. The average score of the final test of the ability to write narrative essays in the experimental class (the class that received learning using the problem base learning method based on mind mapping) was 17.30 (out of an ideal score of 20) with a standard deviation of 1.80, while in the control class the average was 15.42 ( of the ideal score of 20) with a standard deviation of 1.65. This shows that learning using the problem base learning method based on mind mapping has an effect in increasing students' ability to write narrative essays compared to conventional approaches. Akbar (2013) said that good media is able to achieve learning objectives efficiently. Media that is capable of achieving high learning objectives means that the media is effective.

The results of the N-gain calculation, the average increase in the ability to write narrative essays in the experimental class is 0.30 (medium) and the control class is 0.29 (low). This shows that the increase in the ability to write narrative essays in the
The high increase in the ability to write narrative essays in the experimental class is because in the experimental class students' writing activities involve visuals, meaning that there is mind mapping, students can write with a good flow. Mind mapping made by students provides an overview of the theme so that students can organize their writing well.

This is in line with Rusman's opinion (2012: 254-255) with a theme it will provide many advantages, including: students are easy to focus on a particular theme, students can learn knowledge and develop various basic competencies between subjects in the same theme.

Understanding of the lesson is more profound and memorable, basic competencies can be developed better by linking other subjects with students' personal experiences, students can feel the benefits and meaning of learning because the material is presented in the context of a clear theme, students can be more passionate about learning because they can communicate in a clear way. real situations, to develop an ability in one lesson while studying other subjects presented in mind mapping.

CONCLUSION

Based on the results of data analysis that has been presented in the previous chapter, it can be concluded that the improvement of students' narrative writing skills who receive learning using a mind mapping-based problem-based learning model is better than students who receive conventional learning. The problem based learning method makes it easier for students to find themes. Mind mapping makes it easier for students to create a series of storylines.

Mind mapping based problem based learning model is considered effective in improving students' ability to write narratives. This can be seen from the difference in the average pretest score of students in the experimental group of 12.42 and the posttest score increased to 17.30.

Acknowledgement

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