The Influence Of Mind Mapping Model And Motivation on The Learning Outcomes Of PPKn Class III Students Of SDN 05 Mesjid Lama, Batu Bara Regency 2020/2021

Annisa Suci Lestari¹
Universitas Negeri Medan
Email : annis.suci.lestari@gmail.com

Ramli Nur²
Universitas Negeri Medan
Email : ramli.nur@gmail.com

Dede Ruslan³
Universitas Negeri Medan
Email : dede.ruslan@gmail.com

Abstract

This study was based background by educational purposes to prepare individuals who have the ability and skills become more good. The objectives of this study were (1) To determine the effect of the Mind Mapping learning model on the motivation and learning outcomes of PPKn in grade III students at SDN 05 Mesjid Lama, Batu Bara Regency. (2) To determine the comparison of students’ motivation and learning outcomes of PPKn by applying the Mind Mapping learning model with a conventional learning model for grade III students at SDN 05 Mesjid Lama, Batu Bara Regency. (3) To determine the interaction between the Mind Mapping learning model and learning motivation on the learning outcomes of PPKn in grade III students at SDN 05 Mesjid Lama, Batu Bara Regency. This research uses a quantitative approach. Data analysis using Tuckey-test. The results showed that (1) There was an effect of the Mind Mapping learning model on the learning outcomes of PPKn in grade III students at SDN 05 Mesjid Lama, Batu Bara Regency. (2) There is an effect of student motivation on student PPKn learning outcomes in grade III students at SDN 05 Mesjid Lama, Batu Bara Regency. (3) There is an interaction between the Mind Mapping learning model and learning motivation on PPKn learning outcomes in grade III students at SDN 05 Mesjid Lama, Batu Bara Regency.

Keywords: Mind Mapping Learning Model, Motivation and Learning Outcomes.
A. Introduction

Improving the quality of human resources is a series of efforts to realize the whole human being and the whole Indonesian society, which includes human development, both as a human being and as a development resource. Human development as a human being and a development resource emphasizes on human dignity, rights and obligations. One of the subjects that students must succeed in following is Pancasila and Citizenship Education or PPKn.

One learning model that is thought to improve student motivation and learning outcomes is the Mind Mapping learning model. This is according to Buzan's explanation in Bobbi Deporter and friends (2014: 225) Mind Mapping is a creative note-taking method that makes it easier for us to remember a lot of information. The notes form a pattern of interrelated ideas, with the main topic in the middle while the subtopics and details become the branches. The best Mind Mapping is Mind Mapping which is colorful and uses lots of pictures and symbols.

B. RESEARCH METHODS

Types of research

This type of research is a quasi-experimental research (quasi-experimental), which is research that aims to determine whether there is an effect or result of something caused to the subject, namely students.

The quasi-experimental method was chosen because the population in this study was confirmed to be heterogeneous and did not form new groups. In a quasi experiment, it is also not possible to control all external variables that can affect the implementation of the experiment. In this quasi experiment, the subjects were not randomly grouped, but the authors accepted the subject's circumstances.
In this quasi experiment, the samples taken in this study were divided into two classes, namely the experimental class. These two classes receive different treatment. In the first experimental class, learning treatment was given with the Mind Mapping learning model in terms of motivation, while in the second experimental class, learning treatment was given with conventional learning models in terms of motivation.

The research design was a 2 x 2 factorial design with a two-way analysis technique (ANAVA) as shown in Table 1.

<table>
<thead>
<tr>
<th>Motivation (B)</th>
<th>Learning Model (A)</th>
<th>Mind Mapping (A1)</th>
<th>Conventional (A2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (B1)</td>
<td>µA1B1</td>
<td>µA2B1</td>
<td></td>
</tr>
<tr>
<td>Low (B2)</td>
<td>µA1B2</td>
<td>µA2B2</td>
<td></td>
</tr>
</tbody>
</table>

**Information:**

- A1 = Mind Mapping Learning Model
- A2 = Conventional Learning Model
- B1 = High motivation
- B2 = Low Motivation

µA1B1 = The average PPKn learning outcomes of students who are taught with the Mind Mapping learning model for groups of students who have high motivation.

µA2B1 = The average student learning outcomes are taught with conventional learning models for groups of students who have high motivation.

µA1B2 = The average student learning outcomes taught with the Mind Mapping learning model for groups of students who have low motivation.

µA2B2 = The average student learning outcomes taught by conventional learning models for groups of students who have low motivation.
**Location and Time of Research**

This research conducted in SDN 05 Mesjid Lama, Batu Bara Regency, North Sumatra. This research activity was carried out in the first semester of the 2020/2021 academic year. The research schedule was determined according to the schedule set by the Principal. The subject matter chosen in this study is the theme I of the family and the sub-theme of the reflection of one Nusa and one nation, as well as the material of the Youth Pledge.

**Population and Sample**

The population in this study were all grade III students at SDN 05 Mesjid Lama Batu Bara Regency which consisted of 2 classes totaling 62 people, with the following details:

a. Class III-A : 31 students  
b. Class III-B : 31 students

The sample in this study was the entire population, namely 62 grade III students at SDN 05 Mesjid Lama, Batu Bara Regency who were divided into two different classes. In determining the experimental class and control class, it was carried out randomly. From these random results, class III-A was selected as an experimental class that was taught using the Mind Mapping learning model with a total of 31 students. While class III-B was chosen as the control class which was taught using conventional learning models with a total of 31 students.

**Variable Research**

The variables in this study are:

a. The independent variable is the Mind Mapping learning model  
b. The dependent variable is learning outcomes  
c. The moderate variable is student motivation
Research procedure

1. Initial Stage (Preparation and Planning)
   - Making observation instruments.
   - Determine the location and time of research.
   - Make direct observations at school.
   - Determine the problem from the results of the observations made.
   - Determine the research title and research schedule.
   - Conducting consultations with supervisors about research problems.
   - Creating a Learning Implementation Plan (RPP) for the experimental class with the Mind Mapping learning model and the control class using conventional methods.
   - Prepare research instruments to be used (multiple choice questions) and perform instrument validation.
   - Perform validation tests on questions to be tested on students.

2. Implementation Stage
   - Determine two sample classes, namely class III-A as the experimental class and class III-B as the control class.
   - Distributing questionnaires to two sample classes to determine student motivation towards the material being taught.
   - Analyzing the questionnaire data, namely the normality test and the homogeneity test.
   - Give a pretest to both classes to find out student learning outcomes of the material that has been taught before getting treatment.
   - Performing the pretest data analysis, namely the normality test and homogeneity test.
- Provide treatment to both classes. The experimental class was treated with the Mind Mapping learning model, while the control class was treated with a conventional learning model.

- Give posttest to both classes to find out student learning outcomes of the material that has been taught after receiving treatment.

- Analyzing the posttest data, namely the normality test, homogeneity test, and hypothesis testing with two-way ANOVA.

- Make conclusions based on research data.

3. Reporting Stage

   At this stage, the preparation of data analysis and research conclusions will be carried out in the form of a research thesis in accordance with applicable scientific principles.
The research implementation scheme is as follows:

1. Preliminary studies
2. Instrument Validity
3. Research
4. Pretest: Learning Outcomes Before
   - Learning model: Mind Mapping
   - Motivation Questionnaire
   - Learning model: Conventional
5. Postes: Learning Outcomes After
6. Research Data
7. Data processing
8. Data analysis
9. Conclusion

Figure 1. Research Procedure Flowchart
C. RESULT AND DISCUSSION

1. RESULT

Student Learning Outcomes Data with High Motivation Taught Use Model Mind Mapping (A1B1)

Based on the data obtained from the results of the PPKn learning posttest students with high motivation were taught use model Mind Mapping in the appendix and the frequency distribution data can be described as follows: the calculated average value (X) is equal to 80.38; Variance = 75.05; Standard Deviation (SD) = 8.66; maximum value = 96; Minimum value = 64 with a range of values (Range) = 32. The meaning of the results of the variance above is the learning outcomes of PPKn students with high motivation being taught use model Mind Mapping have that value diverse or different from one student to another, because we can see that the variance value exceeds the highest value from the data above.

Learning PPKn students with high motivation to be taught that use model Mind Mapping it was found that: the number of students who received very poor grades did not exist, in the category of having less people or by 4.76%, with a sufficient category score of 5 people or 23.81%, with a good category score of 12 people or 57.14%, with a very good category score of 3 people or as much as 14.29%. With mean = 80.38 then the average PPKn learning outcomes of students with high motivation who are taught using the Mind Mapping learning model are categorized as Good.

Student PPKn Learning Outcomes Data with High Motivation Taught Using Conventional Models (A2B1)

Based on the data obtained from the PPKn learning outcomes posttest students with high motivation were taught using conventional
models and frequency distribution data in the attachment can be described as follows: the calculated average value (X) of 76.00; Variance =135.11; Standard Deviation (SD) =11.61; Maximum value = 92; The minimum value = 56 with a range of values (Range) = 36. The meaning of the results of the above variance is that the learning outcomes of high-motivation students who are taught using conventional models have very diverse or different values from one student to another, because we can see that the variance value exceeds the highest value of the data above.

PPKn learning outcomes of students with high motivation who are taught using conventional models are obtained that: the number of students who get very poor grades does not exist, with the category of less people or equal 10%, with enough category scores 4 person or as big 40%, with a good category score of 4 people or 40%, with a very good category score there is one or 10%. With mean =76.00 then the average PPKn learning outcomes of students with high motivation who are taught using conventional learning models are categorized as Good.

**Student PPKn Learning Outcomes Data with Low Motivation Taught Use Mind Mapping (A1B2)**

Based on the data obtained from the post-test of PPKn learning outcomes, low motivation students are taught use Mind Mapping on and frequency distribution data in the attachment can be described as follows: the calculated average value (X) of 65.20; Variance =57.07; Standard Deviation (SD) =7.55; Maximum value = 76; Minimum value = 52 with a range of values (Range) = 24. The meaning of the results of the above variance is learning PPKn students with low motivation being taught use Mind Mapping have that value diverse or different from one student to another, because we can see that the variance value exceeds the highest value from the data above.
learn PPKn students with low motivation are taught use *Mind Mapping*. It is found that: the number of students who get very poor grades does not exist, in the category of less than 5 people or by 50%, with a sufficient category score of 4 people or equal to 40%, with either 1 person or 10%, with no excellent category value. With mean = 65.20 then the average PPKn learning outcomes of students with low motivation who are taught using the Mind Mapping learning model are categorized as Enough.

**Student PPKn Learning Outcomes Data with Low Motivation Taught Use Model Conventional (A2B2)**

Based on the data obtained from the PPKn learning outcomes posttest students with low motivation were taught use model conventional and frequency distribution data in the appendix can be described as follows: the calculated average value (X) is equal to 59.81; Variance = 115.96; Standard Deviation (SD) = 10.77; Maximum value = 84; the minimum value = 32 with a range of values (Range) = 52. The meaning of the results of the above variance is the learning outcomes of students with low motivation who are taught use model Conventional values have very diverse or different values from one student to another, because we can see that the variance value exceeds the highest value from the data above.

PPKn learning outcomes of students with low motivation who are taught using conventional models are obtained that: the number of students who get very poor grades is one or 4.76%, with a less category of 13 people 61.90%, with a sufficient category score of 5 people or 23.81%, with a good category score of 2 people or as much as 9.52%, with no excellent category score or 0%. With mean = 59.81 then the average PPKn
learning outcomes of students with low motivation taught using conventional learning models are categorized as Less.

**Data on Learning Outcomes of PPKn Students with High and Low Motivation Taught Using the Mind Mapping Model (A1)**

Based on the data obtained from the PPKn learning outcomes posttest of students with high and low motivation who were taught using the Mind Mapping model, the frequency distribution data in the appendix can be described as follows: the average value \(X\) is 75.48; Variance =119.19; Standard Deviation (SD) =10.92; Maximum value = 96; the minimum value = 52 with a range of values (Range) = 44. The meaning of the results of the above variance is that the learning outcomes of PPKn students with high and low motivation who are taught using the Mind Mapping model have different or different values from one student to another, because we can see that the variance value exceeds the highest value from the data above.

PPKn learning outcomes of students with high and low motivation who are taught using the Mind Mapping model are found that: the number of students who get very poor grades does not exist, with less categories as many as 6 people or equal to19.35%, with a sufficient category score of 9 people or equal to 29.03%, with a good category score of 13 people or equal to 41.94%, with a very good category score of 3 people or 9.68%. With mean =75.48 then the average high and low PPKn learning outcomes of students who are taught using the Mind Mapping learning model are categorized as Good.
Student PPKn Learning Outcomes Data with High and Low Motivation Taught Using Conventional Models (A2)

Based on the data obtained from the PPKn learning outcomes posttest of students with high and low motivation who are taught using conventional models, the frequency distribution data in the appendix can be described as follows: $65.03; \text{Variance} = 177.03; \text{Standard Deviation (SD)} = 13.31; \text{Maximum value} = 92; \text{Minimum value} = 32$ with a range of values (Range) = 60.

The meaning of the above variance results is PPKn learning outcomes of students with high and low motivation who are taught using conventional models have very diverse or different values from one student to another, because we can see that the variance value exceeds the highest value from the data above.

PPKn learning outcomes of students with high and low motivation who are taught using conventional models. It is found that: the number of students who get very poor grades is one or 3.23%, with a less category of 15 people or equal to 48.39%, with a sufficient category score of 8 people or 25.81%, with a good category score of 6 people or 19.35%, with a very good category score, there is a person or 3.23%. With an average = 65.03 then the average PPKn learning outcomes of students with high and low motivation who are taught using conventional learning models are categorized as sufficient.

Student Learning Outcomes Data with High Motivation Taught Use Mind Mapping and Conventional Models (B1)

Based on the data obtained from the results of the PPKn learning posttest students with high motivation were taught using Mind Mapping and conventional models, the frequency distribution data in the appendix can be described as follows:
The calculated average value \( X \) is equal to 78.97; Variance = 94.90; Standard Deviation (SD) = 9.74; Maximum value = 96; the minimum value = 56 with a range of values (Range) = 40. The meaning of the results of the above variance is learning PPKn students with high motivation being taught use Mind Mapping and conventional models have very diverse or different values from one student to another, because we can see that the variance value exceeds the highest value from the data above.

PPKn learning outcomes of students with high motivation who were taught using the Mind Mapping and Conventional models found that: the number of students who received very poor grades was not there, with a less category of 2 people or by 6.45%, with a sufficient category score of 9 people or equal to 29.03%, with good category scores as many as 16 people or 51.61%, with very good category scores there were 4 people or 12.90%. With mean = 78.97 then the average PPKn learning outcomes of students with high motivation who are taught using the Mind Mapping and Conventional learning models are categorized as Good.

**Student Learning Outcomes Data with Low Motivation Taught Use Mind Mapping Model And Conventional (B2)**

Based on the data obtained from the results of the PPKn learning posttest students with low motivation were taught use Mind Mapping and Conventional models, the frequency distribution data in the appendix can be described as follows: the calculated average value \( X \) is equal to 61.55; Variance = 100.99; Standard Deviation (SD) = 10.05; Maximum value = 84; minimum value = 32 with a range of values (Range) = 52. The meaning of the above variance results is the learning outcomes of students with low motivation who are taught use Mind Mapping and Conventional models
have very diverse or different values from one student to another, because we can see that the variance value exceeds the highest value from the data above.

Student learning outcomes with low motivation are taught use The Mind Mapping and Conventional models show that: the number of students who get very poor grades is one person or 3.23%, with a less category of 19 people or 61.29%, with a sufficient category score of 8 people or 25.81 %, with good category scores as many as 3 people or 9.68%, with no very good category scores. With mean =61.55 then the average PPKn learning outcomes of students with low motivation are taught use Mind Mapping and Conventional models are categorized as Less.

2. DISCUSSION

The findings of the first hypothesis conclude that: there is an effect of the PPKn learning outcomes of students who are taught using the Mind Mapping learning model better than students who are taught with conventional learning models on the Youth Pledge material. This is in accordance with Bobbi Deporter and friends (2014: 225) that Mind Mapping learning is a creative note-taking method that makes it easier for us to remember a lot of information. The notes form a pattern of interrelated ideas, with the main topic being the middle while the subtopics and details become the branches. Therefore, to achieve their personal goals, group members must help their teammates to do whatever it takes to make their group successful, and perhaps more importantly, encourage members of one group to do their best. In other words, group rewards based on group performance (or the sum of individual performances) create an interpersonal reward structure in
which group members will provide or block social triggers (such as praise and encouragement) in response to efforts related to group assignments.

Thus, between one student and another student in the group can provide the answer in their own way. Without realizing it, students have been doing creative thinking activities, because each student will try to answer questions in a different way from his friends, besides that they also pay attention to the quality of the answers given.

This first hypothesis is also in line with what was proposed by Piaget and Vigotsky. Piaget explained that the interaction between students and their peer groups is very important. Because the cognitive development of students will occur in interactions between students and their peer groups rather than with people who are more mature. Likewise, Vigotsky points out in Saiful Bahri (2010: 276), that skills in mental functioning develop through direct social interaction.

In the teaching and learning process, it is hoped that there will be many directions of communication that will allow the expected activities or thinking power of students. This can be seen in the Mind Mapping learning model that students are required to understand and understand individually and in groups. So in this lesson students interact with friends by discussing and exchanging answers to realize their responsibilities as members of the group. With the discussion and answer exchange activities will help students to get answers that are varied and varied. This also encourages students to socialize well with each other.

The findings of the second hypothesis concludes that: there is an effect of student learning outcomes with high motivation is better than learning outcomes of students with low motivation on the Youth Pledge material. This is in accordance with Oemar Hamalik's (2003: 106) explanation that motivation is a change in energy in a person's
personality. characterized by the emergence of affective or feelings and reactions to achieve goals. This means that a person must process a whole new change in behavior as a result of his own experience in interaction with his environment. Through peer-to-peer relationships, children get the opportunity to learn social skills that are important for life, especially the motivation needed to initiate and maintain social relationships. Other than that, motivation can also prevent social conflict from breaking down. Teachers are required to be able to create various ways so that student motivation can emerge and develop properly. Students with high motivation certainly have high learning motivation too and will strive for success in learning. If this effort is fruitful, students will feel satisfied because all of it was obtained because of an effort, not luck. Students who have a high interest in learning always try continuously to achieve the goals they aspire to, which will be successful in solving any learning problems they face, and have a strong enough response to solve problems that seem to require concentration of thought. Teachers are required to be able to create various ways so that student motivation can emerge and develop properly. Students with high motivation certainly have high learning motivation too and will strive for success in learning. If this effort is
fruitful, students will feel satisfied because all of it was obtained because of an effort, not luck. Students who have a high interest in learning always try continuously to achieve the goals they aspire to, which will be successful in solving any learning problems they face, and have a strong enough response to solve problems that seem to require concentration of thought. students will feel satisfied because all of it is obtained because of an effort not luck. Students who have a high interest in learning always try continuously to achieve the goals they aspire to, which will be successful in solving any learning problems they face, and have a strong enough response to solve problems that seem to require concentration of thought. students will feel satisfied because all of it is obtained because of an effort not luck. Students who have a high interest in learning always try continuously to achieve the goals they aspire to, which will be successful in solving any learning problems they face, and have a strong enough response to solve problems that seem to require concentration of thought.

The findings of the third hypothesis concludes that: There is an interaction between the learning used on student learning outcomes with high and low motivation. As previously discussed in the background of the problem, the model used in the teaching and learning process has an effect in determining student learning outcomes.

With the varied learning given to students, students' social skills can be formed and pushed out. Besides the activities and creativity that are expected in a learning process that requires balanced interaction, the intended interaction is the interaction or communication between students and students and between students and teachers. In the learning process, it is hoped that there will be many directions of communication that allow the expected activities to occur. This of course depends on the
learning model used, because the model used will help display the intended learning outcomes. In addition, the learning model determines whether students can interact with students only or between students and teachers.

In this case the choice of the Mind Mapping learning model can help students communicate in many directions, with the Mind Mapping learning model students will interact in their groups, possibly discussing with their colleagues if the problems given are not resolved. Thus this proves that the learning given to students interacting with peers. Based on the findings described above, the findings in this study illustrate that the learning outcomes of students with high and low social skills can be developed using the Mind Mapping learning model where in this study. in accordance with constructivism learning theory which emphasizes the interaction between peers. Piaget and Vigotsky's ideas both According to Piaget and Vigotsky's views in Rusman (2012: 202) there is a social nature of a learning process and also about the use of study groups with the abilities of various members, resulting in conceptual changes. Where in the Mind Mapping learning model students will discuss and practice to solve the problems given. In addition, it was concluded that with the motivation given by peers, students would be more motivated and motivated to do something in a better direction. For example, when discussing students will be encouraged to submit answers to their group members. Therefore, There are no students who become passive because all want to give their opinion by submitting different answers with various solutions. This shows that students are thinking critically because they are trying to find a different solution from their other friends. This has also shown that students have exerted their social skills.
D. Conclusion

Based on the research results that have been obtained, as well as the problems that have been formulated, the authors make the following conclusions:

1. There is the influence of users of the Mind Mapping learning model and conventional learning models on learning outcomes in class III SDN 05 Mesjid Lama. Where the learning outcomes of students taught using the Mind Mapping learning model with an average value of 75.48 are higher than students taught using the model conventional learning with an average value of 65.03.

2. There is an effect of high and low motivation student PPKn learning outcomes who are taught using the Mind Mapping learning model. Where the average value of student PPKn learning outcomes with high motivation is 78.97, while the average value of student PPKn learning outcomes with low motivation is 61.55.

3. There is a significant interaction between the learning model and student motivation on the learning outcomes of students who have motivation in class III SDN 05 Mesjid Lama. Where there is an interaction with Fcount (84.03)> Ftable (4.16).

Bibliography


Indonesian Journal of Science and Education, Volume 3, Number 1, April 2019.


