Mind Mapping Model in Learning Semarangan Batik Painting

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Abstract—Learning to paint batik in elementary school is one of the means to develop love for the motherland, appreciation and work ability. From the results of observations and pre-research interviews, there were several problems showing that students were less creative in generating ideas, hard to remember, experiencing confusion over the object being studied and also difficulties in planning new tasks. Moreover they were less interested in batik painting activities. To overcome this problem, the teacher applied a mind mapping model in learning activities of batik painting. The techniques of data collection used were: observation, documentation, interviews and field notes. The sampling technique was purposive sampling with a total of 39 students. While the data analysis technique used was qualitative analysis with descriptive methods. The results showed that the mean score of learning outcome in Semarangan batik painting was 80.1, the lowest score was 66 and the highest score was 92. The learning outcomes were obtained from the scores of student activities and skills. The student activities included: 1). Doing appreciation activities of batik painting learning, 2). Loving the Semarangan local culture, 3). Being independent and active in learning, 4). Implementing a good attitude, 5). Being enthusiastic in learning, 6). Being pleased to ask questions and look for new experiences. The results of Semarangan batik painting skill were: 1). Suitability of the theme, 2). Creativity and color composition, 3). Painting skill, 4). Neatness and cleanliness. The conclusion of the study was: the mind mapping model used by the teacher had not been optimally applied could help students be more active, skilled, and creative in learning to paint batik, because there were various kinds of activities carried out by students. It included question and answer, discussion, practice, and delivering opinions in front of the class.

Keywords—mind mapping, learning, painting, Semarangan batik

1. INTRODUCTION

Learning is a change in behavior or appearance with a series of activities e.g. reading, observing, listening, imitating, making, and so on. In addition, learning is better if the subject learns it by doing. So, it is not only verbalistic. Learning as an individual activity is actually individual stimuli sent by the environment [8]. Like studying, painting batik requires activities that can facilitate children to be creative, active, happy, loving, caring, and easy to create works.

Batik is one of the works of the Indonesian nation which has been widely admired until now, and it is in demand by various nations. Batik is a product of Indonesian culture that is very unique, characterized, as a cultural property that must be preserved and cultivated. One way to make it happen is to introduce batik to the next generation from an early age. The effort made in cultivating batik is by introducing batik in learning activities. The activities contain basic competencies of creating batik. It is found in the learning of art, namely in batik painting learning.

Batik painting activities in schools need to be taught because they can instill in children to love local culture. These activities are also carried out by schools in Semarang. They are strategic steps to maintain, preserve and develop the superior potentials and characteristics in Semarang. In addition, it is also done to re-expose batik genuinely from Semarang.

Actually the effort to promote Semarang batik started in 2006 and spearheaded by the Semarang city government. Although there is no generation of original batik craftsmen from Kampung Batik, many batik training courses and socialization of Semarangan batik have been held. But its popularity until now has not been as strong as in other cities. On July 24, 2007, the Semarang city government held a seminar discussing the motif and identity of batik. It was agreed that Semarang batik is one produced by people or residents of Semarang city with motifs or decorations related to Semarang icons. [8]

But in reality it was found data that some schools in Semarang had not implemented batik painting activities as a form of high appreciation for the Semarang potential. Based on observations and interviews with the fifth grade teacher of SDN Gugus Drupadi, Semarang city, there were several problems in learning painting Semarangan batik motifs. The learning model used by the teacher had not been optimally implemented. It led to some effects on students, namely: 1). Students’ motivation was low when they participated in learning to paint Semarangan batik, 2). Students were less active in learning to paint Semarangan batik, 3). Students are less creative in painting Semarangan batik, 4). They had not known the identity of Semarang.

The solution of this problem is that the teacher uses the mind mapping model in learning to paint Semarangan batik. The mind mapping model can create a fun learning and improve student learning outcomes.
Some studies that support this research is one that was conducted by Aykac in 2015. This research shows that mind maps can help understanding the concepts in a fun and creative way. [1]

II. METHOD

Data Collection Techniques

Data collection techniques are the most important step in research, because the main purpose of research is to obtain data. Without knowing the data collection techniques, the researcher will not get data that meet the specified data standards. In this study, the following techniques were used in collecting data:

1. Documentation

   Documentation was obtained from documents and written sources. The researcher investigated the written sources such as books, research results, magazines, documents, regulations, and diaries. In this study, researchers also used photo and video documentation as evidence of the implementation of the study. In addition, the researcher also completed data by including a Lesson Plan (RPP), learning syllabus, and a list of student scores.

2. Observation

   Observation is the activity of observing something simultaneously for being used as an analysis material. In other words, there are two things that need to be considered, namely: 1) Observing of everything about the implementation of the learning process to paint Semarangan batik, and, 2) Recording data and phenomenon occurred that were related to students' activities in painting Semarangan batik. Observations were carried out systematically to make decisions about individuals by using guidelines of test scoring for performance skills in painting Semarangan batik. In this case, the performance test was used to measure students' skills in learning to paint Semarangan batik.

3. Field Note Technique

   Field notes included notes on research activities during learning to paint Semarangan batik. This note contained important events occurred during learning to paint Semarangan batik.

4. Interview Technique

   Interviews were conducted by looking for information from students and teachers through question and answer. They were used to find out things from respondents deeply. In-depth interviews were conducted by asking open questions to students and teachers about activities in batik painting activities.

Data analysis technique

The data analysis technique used was qualitative analysis with descriptive methods. Qualitative data is data expressed in the form of words, sentences, and images. A qualitative research is conducted to produce qualitative techniques by going through the stages of reducing data, presenting research procedures that produce descriptive data in the form of written or oral words from people and observed behavior. In the stage of reducing data, it could be done by analyzing the overall data and then they were selected and specified in detail. It was conducted to give a better understanding when the data were presented. The data were presented by using the step: the detailed data were presented in the form of tables or graphs. While for making a conclusion, it was done by studying data, interpreting, comparing and then drawing a conclusion. [14].

A qualitative research has five characteristics, namely (1) natural settings are used as direct data sources and researchers are used as key instrument, (2). This research is descriptive, (3) it prioritizes processes rather than product, (4). It uses inductive data analysis, and (5) meaning is the main focus. A qualitative research is a research procedure that produces descriptive data in the form of written or oral words from people and observed behavior. Data analysis in qualitative research is carried out before entering the field, during in the field, and after completion in the field. [19]

The Validity of Test Instruments on Skill Performance

Instruments in the form of skills performance tests were adapted to basic competency, indicators, and material learned by the students. The basic competency achieved in this study was to identify the types of Semarangan batik motifs. In this study, the performance assessed was the skill of painting Semarangan batik motifs. While the criteria that must be mastered by students in painting Semarangan batik motifs were the suitability of the theme, creativity and color composition, painting skills, neatness and cleanliness of the work. [2]

In this study, the validity used in the performance test was external validity. External validity was tested by comparing the existing criteria in the instrument with empirical facts in the field to look for correlations of parallels, namely the outcomes of the performance test of Semarangan batik painting with a sample of 39 students.

III. RESULT AND DISCUSSION

The Student Activities in Learning Semarangan Batik Painting

1. Conducting appreciation activities on learning to batik painting

   It was clearly seen that students loved to make batik, loved painting Semarangan batik as local culture, respected the work of others, finished tasks carefully and on time. The appreciation activities were divided into the forms of asem tree motif, peacock and blekok motifs, Tugu Muda motif, puppets Semarangan batik motif, and Samudra motif. [13]. The motifs are presented in the figure 1.
2. Loving Semarangan local culture

This activity included producing works based on the development from mind mapping with themes according to the area where students lived, producing traditional and modern works. In addition, it was conducted by producing works related to activities in Semarangan area e.g. community activities, traditional food, historic buildings such as Lawang Sewu, Blenduk Church, City Hall, Ronggo Warsita Museum, Marina beach, Puri Maerokoco, Great Mosque of Semarang, Pine Forest, Jati Barang Reservoir, Kreo Cave, Asem Tree and so on. The following art is the example of student’s batik painting work at figure 2.

3. Being Independent and Active in Learning

It could be seen from students who had high self-confidence and concentration could produce works based on their own ideas, were able to carry out their tasks independently and take responsibility. The work produced had individual characteristics. They also actively discussed with others to finish student worksheets and arrange plans in the form of mind maps.

4. Implementing a Good Attitude

It could be seen when students had a feeling and emotional stability. Moreover, it was also shown when they appreciated the work of others and respected others’ opinion. They were also united in discussing and willing to help friends. They were careful and diligent in making batik.

5. Being Enthusiastic in Learning

The students were happy and enthusiastic in painting Semarangan batik. They were also active and responsive in responding to the teacher’s explanation. They had a high willingness to paint Semarangan batik. They had full attention to the explanation. They were able to ask questions about things that they had not mastered and they were able to provide ideas or opinions.

6. Being Pleased to Ask Questions and Look for New Experiences

The students had confidence in asking and answering questions. They confirmed what they had already known and transferred knowledge and experiences to others. Moreover, they had high interest and desire to learn by reading many references related to learning material.

The Scores of Semarangan Batik Painting Skills

1. Conformity to the theme

In this indicator, students who got score 4 were 39 students. It showed that the images made by students were very suitable with the theme of Semarang batik motifs. In the theme of motifs, the students were able to develop it into art works that had uniqueness and character.
2. Creativity and Color Composition

In this indicator, there were 3 students with score 4 whose paintings had harmonious color compositions and these students already got new ideas in the works they produced. A total of 34 students got score 3, most of the color compositions were harmonious. There were 2 students who got a score of 2. They produced paintings that had a small proportion of the color composition. The results of color composition can be seen in the following picture.

![Figure 5. Suitability of color composition](image)

3. The Skills of Painting Techniques

In this indicator, there were 2 students who got score 4. They were very skilled using pointillism technique which is a technique of painting using dots that can form objects such as a house, a tree, and barong animal. Accuracy in using shading techniques could be seen when they scratched pencils and crayons to make dark and light colors and also gradation. There were 33 students who got score 3 who were skilled at using tools (painting papers and coloring while painting). There were 4 students who got a score of 2. It showed that students were skilled enough to use tools (painting paper and coloring when painting).

4. Neatness and cleanliness

There were 2 students who got a score of 4 whose works were very neat and clean in the painting area. There were 36 students who got a score of 3 with neat and clean images in the painting area. There was only a student who got score 2 whose picture was neat, but not clean enough on the painting area. They were not able to paint neatly and cleanly.

![Figure 6. Painting neatly and cleanly](image)

### Table 1. Score of Student Skills

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students</td>
<td>39</td>
</tr>
<tr>
<td>Mean</td>
<td>80,10</td>
</tr>
<tr>
<td>Minimum Score</td>
<td>66</td>
</tr>
<tr>
<td>Maximum Score</td>
<td>92</td>
</tr>
</tbody>
</table>

In batik learning, from a total of 39 students, the mean score is 80.1, the lowest score is 66 and the highest score is 92.

In the first and second meetings, students tended to experience the same obstacles during learning, even though the second meeting had been slightly better. Most groups had difficulty in making mind mapping. Students paid less attention to the teacher’s explanation on how to make mind mapping. This was shown by many students who still asked questions about how to make the maps. To overcome the obstacles above, the teacher actively went around observing group discussion activities and tried to provide sufficient guidance and explanation to students in need so that they could make mind mapping well.

In the third and fourth meetings, students’ ability to make mind mapping was better than previous meetings. This was proved by decreasing number of questions from students on how to make mind mapping. Students were brave enough to present the results of mind mapping that they made while others gave response to the presentation results if there were differences in the discussion. Moreover, there were many enthusiastic students who were willing to present the results of the mind mapping they made in front of the class. [12].

Based on the description above, it can be seen that the applied mind mapping model can help students to be more active in learning to paint batik because there are various activities carried out by students. Those activities start from question and answer, discussion, and expressing opinions in front of the class. The teacher gives rewards to students who are active in learning activities.

Mind mapping is a way of recording creatively for each learner to produce ideas, record what is learned, or plan new assignments. [18]. In addition, learning by using mind mapping model provides an opportunity for students to convey mind mapping that has been made in groups in front of the class. From this theory, we can know that learning with the mind mapping model requires students to learn creatively and be active in learning. This is in accordance with cognitivism learning theory which encourages students to be active in learning and learn through social interaction. [11]

The mind mapping model is also in accordance with constructivism learning theory because it shows that learning activities are conducted interactively and based on student-centered. By learning using the mind mapping model, students are free to develop their creations so that they can increase creativity, make it easier for them to remember, absorb material they have
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The success of the mind mapping model is supported by a research that has been done before, namely the research conducted by Aykac (2015) with the title “An Application Regarding the Availability of Mind Maps in Visual Art Education based on Active Learning Method. Procedia Social and Behavioral Sciences”. This research shows that mind maps can help understanding concepts in a fun and creative way. Moreover, they can improve student learning outcomes in art learning.

The results of the study stating that a mind mapping model is effectively applied to Semarangan batik motifs learning can be used as a supporting theory in future studies about the effectiveness of the mind mapping learning model. The use of mind mapping has some purposes, namely: 1). Students obtain learning experiences using the mind mapping model so that they can improve the outcomes of learning Semarangan batik painting. 2). It contributes to schools in improving the learning process of painting batik so that it can improve the quality of education in schools. 3). Can instill in students to love local culture, to maintain, preserve and develop the superior potentials, aesthetics and characteristics in Semarang.[15].

Based on Sunarya Yan Yan research with the title: “Adaptation of Aesthetic Elements at Form of Sundanese Batik Ornaments”. This research shows that the study of cultural identity related to Sundanese batik, considering aesthetic elements as cultural artifacts, involves a comprehensive investigation of batik as designed object. Some of the issues are investigating the aesthetic development of traditional and modern Sundanese batik to discover the characteristics of Sundanese batik; and investigating the relationship between the form and application of aesthetic elements in Sundanese batik on the one hand and Sundanese cultural identity on the other by considering intra-aesthetic and extra-aesthetic factors. To investigate the aesthetics of Sundanese batik and to identify characteristic Sundanese batik elements, a visual adaptation strategy was used. [20]

V. CONCLUSION

The mind mapping model implemented can help students to be more active, skilled, and creative in learning to paint batik, because there are various kinds of activities that can be carried out by students. Those activities start from question and answer, discussion, and expressing opinions in front of the class. The teacher gives rewards to students who are active in learning activities.

The proportion of students who meet the Minimum Mastery Criteria (KKM) is more than 75% so that it can be said that the class successfully meets collective achievement.

REFERENCES

[20] Sunarya, Yan, Yan, 2018. Adaptation of Aesthetic Elements at Form of Sundanese Batik Ornaments. Published by ITB Journal Publisher, ISSN: 2337-