Maritime history monopoly board model as effective methods for social science learning

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Abstract:
Encouraging school-level students to be active and motivated in learning activities requires the right approach. This article aims to show that the student's motivation for learning can be improved if we use an experimental learning approach. A deep understanding of learning materials can be done by designing game media which are generally known as "monopoly" by various groups, to become "Mariology," containing the primary material studied in learning. The material reviewed in this media is included in the sub-discussion of Social Sciences at Grade 8 Curriculum 2013. The class used as a research sample at this school is four classes. This experimental study shows that students' motivation to participate in activities has a positive effect. This is evident from the student learning outcomes in cognitively understanding the theories and terms of the maritime field. Besides that, practically, this is evident from their exams on marine material with an excellent average score.

Keywords: Experimental, Media, Monopoly, Maritime, Cognitive

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1 INTRODUCTION

One of the elements of human culture is education. An effective education system should be dynamic, developing, and open to the possibility of innovation (new ideas), especially in the era of computer science and technology development that has led to leaps in various fields (Supriyono, dkk. 2016). This stimulates innovation to be continuously developed by teachers in the field of education to build creative and intelligent students following the education system's goal declared in Law No. 20 concerning the National Education System Chapter II Article 3 (Muchyidin, Arif, dan Kusniya 2013). Therefore, education must align with changes in the culture of life to keep pace with the advance of civilization.

Schools are obliged to implement the educational curriculum (Ari, Regina, dkk. 2018). They have a curriculum designed to involve students and teachers in their surroundings to understand concepts in life through learning materials. As educators, teachers are obliged to play a role in improving themselves and their creativity (Rajkovic, Aleksandra Llic, Mirjana Senic Ruzic. 2020). This is to make a maximum contribution to improving the education quality and the progress of student learning and maximizing the educational curriculum's delivery.

Based on the general perception of all of the subjects taught in school, the study of history or the field of culture is a field that young people are less interested in. This is concerning, considering that historical or cultural material has a significant role in expressing an individual's emotions toward the area he inhabits. Not surprisingly, many young people are now more in love with cultures outside their country than their history and culture.

Social Science is a learned subject that demands students to comprehend general knowledge about social life, the environment, and the world in various ways. Unfortunately, until now, social science material is still considered unimportant for school students. This is following Kompasianan News media (June 26th. 2015) which states that social studies are not considered a subject of interest because 1) generally, teachers in schools are not ready to touch material, 2) there are no supporting facilities for social studies learning, 3) social studies learning outcomes is known to be low. This broad knowledge of social science is obtained from the number of reading activities and information they get from the environment (Rajkovic, 2020). The absorption of this information often depends on students' interests and attention, which tend to change over time. The student's interest and attention can create excellent learning progress (Asra dan Sumiati. 2007). Lack of student interest in learning materials makes it challenging to absorb available information. There will be a decline in interest in reading material when the students' interest decreases. The overwhelming number of learning materials can cause a lack of student interest and attention to mastering the academic terminology being studied and the many concepts students must understand. This is burdening for students to understand the learning material (Sulfemi, Wahyu Bagja. 2019).

The student's boredom caused by too many concepts and the overload of social science learning materials can be turned into appealing lessons by providing learning methods that make students active in using several of their five senses and are interactive in learning a lesson material (Supriyono 2016, Wibisono, Wahyu. (2010). state that learning media actively involves the five senses as an educational game media (Wibisono, Wahyu. 2010). One of the educative playing media is a monopoly board game, known as monopoly board games in general terms. This educational game media can help strengthen student memory and increase active participation (Vitianingsih, Anik Vega. 2016). This game media also functions as a learning tool used to support students in understanding concepts and terms in learning activities (Arsyat. 1996).

This study applies an educative game using topics of maritime that were a part of the learning modules in one of Class 8 Semester II Social Science by referring to the 2013 Curriculum. Conceptually, the term maritime refers to marine activity. Maritime lessons include understanding archipelagic countries, aquatic activities, marine tourism spots, and other aspects. This lesson uses a lot of complex terms and concepts, which are too overwhelming for the students. That is why this
topic was appointed as the central theme of the research. This research significantly impacts students, from those who were previously less interested in studying social sciences. Using the board game experiment method, they indirectly learn the material well. The students do not think that Social Science material is boring memorization but an exciting part of the story in the Mariology board game.

Monopoly board games were selected as a medium in experimental research because they are known to be one of the most popular games among children, teenagers, and even adults (Mulyono, Abdurrahman 1999). Games can be a training tool that provides a better learning platform (Yusof, dkk, 2016). The concept of a city or state in monopoly can be analogized to an island in a monopoly game with the maritime as the Game's theme. Playing in the maritime monopoly game media is adopted from monopoly games in general by modifying the rules and changing the type of questions to be answered by students in learning activities. Monopoly Board Games can be one media that can encourage the learner to participate in a competitive activity. It is because gamification is seen as an instructional method with predetermined rules in the context of education. We believe that games create experiences for people, and experiences change people. So, games can potentially increase motivation, enjoyment, and task engagement (Essop, dkk. 2018).

Uzer states that the effectiveness of teaching material in learning activities can be seen using cognitive and affective aspects (Muhamad and Setyawati, Lilis. 1994). These two aspects help educational observers investigate students' involvement in learning activities. Therefore, cognitive and affective aspects will be an approach to determine the effectiveness of teaching and learning activities using monopoly games based on essential social science competencies.

Therefore, this media application is expected to help develop student learning processes in schools and increase student interest in learning (Arikunto, Suharsimi, dkk. 2006). Also, the application of this media is expected to increase the students' accomplishments in the subjects of Social Science.

2 RESEARCH METHODS

The research on using board games as learning media was designed based on the research and development (r & d) method. Designing teaching materials using a game board was conducted by making observations through interviews with the teacher of Social Science subject at Islamic Junior High School Plus Daarul Jannah. Then, the selected topics for teaching were used in the monopoly game board media as a part of the experiment in this case. Furthermore, the design and the form of the monopoly game board media were carried out by referring to the results of the interview with the teacher of Social Science at SMPiP, Daarul Jannah. In this stage, the syllabus and lesson plan was used as the primary reference for achieving student competence in learning. In the next step, the designed board game media was submitted to the school to be validated by conducting tryouts to be validated by the school and were declared suitable for use in 8th-grade students of SMPiP Daarul Jannah.

![Circularly model of research methods](image-url)
Purpose and Procedure

This Game aims to help the students understand the importance of social maritime topics through competition. Besides, students must play the games with practical teamwork skills to achieve the project requirements. So, this study uses a pilot test and post-test design.

Pilot Test

This study was conducted at SMPIP Daarul Jannah in Cibinong Regency, Bogor, West Java, by grade 8 students in 2019. One hundred twenty students are the sample in this study. They are in four different classes. Each child is divided into three groups to participate in this maripoli Game in each category. Each group is asked to play the Game according to the instructions on the maripoli game board. The group that wins in the Game is the group that manages to get the highest score. The score of each playing group is obtained from the Game. There is also a reduction in value for game participants who cannot answer the question or instructions requested in the Game.

Post Test

A week after they play the Game, students are given a maritime-themed test, and questions consist of 30 questions with objective choice answers. The test results become the standard measurement of the student's cognitive knowledge achievement.

This study aims to measure the feasibility of providing material to students using modified monopoly game board media on Social Knowledge Science subjects. To get a result for a media that can develop students' interest in studying Social Science material. Based on tryout results on students, the monopoly board game media (maripoli) significantly improved learning attainment in affective and cognitive aspects.

3 Results and Conclusions

OBJECT DESCRIPTION: Social Science, Maritime Theme, and Monopoly

The Concept OF Social Science

Humans exist as individual beings and as social creatures. As social beings, humans cannot live alone and always need help from other humans. Humans also need the fulfillment of their needs from humans and their environment. The interaction between humans and other humans and with their environment can be studied from various social knowledge science disciplines. The different social knowledge science disciplines are geography, economics, history, sociology, politics, law, and anthropology. These sciences are simplified into Social Sciences (IPS).

Experts define Social Knowledge Science in various ways. One social expert named Taranto (2010: 171) states that Social Science integrates different branches of social knowledge sciences, such as sociology, history, geography, economics, politics, law, and culture. Social Science is important to recognize humans and their surroundings.

Social Knowledge Science Education in schools is a simplification of the disciplines of the various branches of social science (history, geography, economics, politics, culture, anthropology, psychology, philosophy, and others) organized and scientifically presented for students' learning. Students are directed, guided, and assisted with social knowledge subjects to become good human beings interacting with their environment. Students must know that the world and its environment constantly change (Trianto, 2010: 17).

Many terms and concepts in Social Science, ranging from complex to easy, must be learned by the students at school (Kartikaningtyas, Dyah, dkk. 2014). The words and images need to be simplified to make them accessible for learners to understand. The simplification can be done in various ways; among these are reading literature related to the terms and concepts, understanding terms with the help of other persons, and understanding terms through a one-way method.
Maritime Concept in Social Science Learning

Maritime is a term included in one of the lesson materials in Social Science. It is part of the study of the field of study. Maritime is a term relating to the sea. This term is used in many learning subjects that also apply conceptual terms. The word "maritime" is derived from English, which means the sea. In general, maritime means life activities related to the sea, naval industry, marine fishing activities, exploitation of natural resources at sea, marketing of aquatic products, and inter-island trade.

Maritime activities play an important role in Indonesia. Maritime has been known since Hindu and Buddhist times. This is evidenced by the presence of relief images of ships and boats on the walls of Borobudur and several other temples in Indonesia. Maritime activities accomplished by their ancestors today show that the Indonesian people could use marine natural resources best in their daily activities. The archipelago was a maritime axis for world shipping and trade in the past. This is due to the geographically strategic location of Indonesia, which is between two continents and two oceans. Indonesia’s position in this way is highly supportive of any maritime activities.

The Concept of The Monopoly Game

Monopoly is a game incorporating economic concepts into it. This Game is classified as a type of board game. The Game's objective is to introduce the idea of history by trying to control the plots or boxes on the board through buying, renting, and exchanging property in a simplified economic system. The Game was widely produced by Parker in England on November 5th, 1935.

In this Game, the dice are thrown in turns to move the pieces owned by the player. If one of the players lands on a plot not owned by other players, they can buy that tile at a price stated. If others own the plot, that player must pay the rent for the amount specified in the rules Jalil, Muhammad, dkk. (2016).

Before the Game of monopoly was introduced, there were other similar games, including the landlord’s Game which Elizabeth Magie created in 1904. This Game aims to make the people aware of how landlords enriched themselves and impoverished tenants during the industrial revolution in Europe at that time. This Game has developed rapidly and is played in almost all countries (Sulistyowati, Kabut. 2010).

Monopoly Game Media in Class VIII SMP IP Darul Jannah

Monopoly, generally known as a board-based game, has great value in being used as a learning medium (Ibrahim, Muslimin, dkk. 2000). This media helps teach and makes learning activities more exciting and enjoyable. This Game increases the involvement of students in teaching and learning activities to improve their learning outcomes. Students will cooperatively try to follow the Game well and remember the complex concepts and terms in the learning material.

The Implementation of Maritime Activity Lessons in Monopoly Games (Maripoli)

In the social science learning (IPS) themed monopoly game, the game board is filled with activities learned in social science (in maritime activities). Therefore, to make it easy to remember, this Game is called Maripoly (Maritime Monopoly) or Maripoli. Game boards are created from the primary material of banners or fabric, so they are not easily damaged and can be stored easily (Kustijono, Rudy 2003). Other equipment is placed in a box made to support Maripoli’s play. Other features are the players’ pawns (paper boats), dice, cups, island symbols, answer keys to questions, gift cards, and sanctions cards that are distinguished by color (blue for prizes and grey for punishment).

The Maripoli game board has several squares with numbers on them. Each box contains commands that the players must follow. By the orders in each box, the players may get prizes, charges, or penalties through the cards they take. Each card has scoring points. If the player gets a penalty card and can carry out orders and answer questions well, then the player will earn points.

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On the other hand, points will be deducted if the player cannot answer questions or does not carry out orders well. In this Game, the duration is set up to 60 minutes. Victory is obtained by the player reaching the highest points (Susanto, Arif, Raharjo dan Muji Sri Prastiwi. 2011). Players can have complete control over a box that represents an island. Suppose a player not controlling the island crosses an island owned by others. In that case, they must pay taxes by reducing the previously collected points.

**Maripoli Practice in Grade 8 SMPIP Daarul Jannah**

This Game is applied in four classes that study with a maritime lesson: classes 8D, 8J, 8I, and 8P SMPIP Daarul Jannah. Based on the implementation results, the monopoly game method is effective in learning activities with the increased motivation for students learning social science material. The results of the school exams show that the pass rate for grade 8 students in the topics covered in the Game reaches 75%.

In playing the Game, one class is divided into five groups. Each group is randomly selected to take its turn. Each group has the right to choose a pawn, a paper boat as a symbol of maritime adventure, or sailing across the archipelago’s seas. Each student from each group will have a turn to play.

The Game is started by shuffling the dice. The dice coming out of the container will be the basis for the number of moves each player takes. Each square in the Game has a command that the player must follow. There will be questions in some boxes that the players must answer. These questions are related to the topics of the maritime history lesson. The players appreciate several other packages. In addition, some of the squares in this Game have scoring points for players who successfully answer questions and deducted scores for players failing to answer questions and execute orders. In addition to queries and orders in the box, there is also a request to take a blue card which means a reward or gift, and a grey card which means punishment. The total card in the Game is 38 cards. The shape of the card can be seen at the end of this paper (attachment).

The Game is played for a one-hour duration. The player declared to win is the player with the best possible score in the form of collecting the most points. Of course, the victory is decided by the ability to answer as many questions as possible.

![Maripoli Board Game Model](image)

**Figure 3.2.1.** Maripoli Board Game Model (Maritime-based monopoly)

**Source:** Gaya Mentari Creation Board Games
The maripoli board model above consists of boxes incorporating commands (Nafis, Muhammad Wahyuni. 2015). If there is an order to take a card, then the card can be drawn from the deck of cards stacked in the middle of the board. In the card, there will be other commands that will help the player to increase his score. After the order is executed, the card can be returned to the bottom of the deck of cards.

Analysis of Standard Achievement Assessment of Student Competency

The preparation of teaching materials in the form of games is conducted to follow up on students’ learning difficulties regarding complicated terms in the learning materials. Based on the observation results, it was found that learning activities that actively involved students in learning would help them better comprehend the material and challenging terms. Board games with applied topics from social science are an effective way to increase student learning potential.

The maripoli board game board media is improved through several processes to ensure that it is accepted by the school and implemented by the students. The result of the school’s validation of board game media is presented in the following table.

Table 1. Expert Assessment Results

<table>
<thead>
<tr>
<th>No</th>
<th>Aspects of Assessment</th>
<th>Appropriateness %</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material</td>
<td>89,20 %</td>
<td>Very appropriate</td>
</tr>
<tr>
<td>2</td>
<td>Media</td>
<td>90,15 %</td>
<td>Very appropriate</td>
</tr>
</tbody>
</table>

Based on the table above, it can be seen that maripoli game board media has achieved very decent criteria results in terms of learning materials and learning media. The “very feasible” indicator is based on tryouts conducted by learning experts in schools. Based on the learning material, maripoli game board media has provided learning topic components written in the command cards (prizes and sanctions) with varying difficulty levels. The contents of the questions on the game board and command cards have depth and breadth in terms of material. Not only that, maripoli board game media and its equipment have stimulated students to be active in learning activities.

Implementing the maripoli game board for Islamic Junior High School students Plus Daarul Jannah at Class 8 D, J, I, and P, an assessment result of the cognitive and affective aspects of the student’s understanding of the material was obtained. The mental part is identified by the student’s ability to answer questions. The students’ affective aspect is obtained from the observation of the way how students work together in their groups.

Cognitive Aspect

The cognitive aspect is related to the student’s ability to answer the questions given in the Game. According to (Ibrahim, and Muslimin, dkk. 2000), mental is a learning activity consisting of the ability to answer questions and analyze data. In this aspect, each answer given by students is recorded to reveal how many correct answers they give.

The questions in the Game are put on the game board tiles, gift cards, and penalty cards. Two questions are on the game board, and sixteen are on the card. Six cards represent statements of orders, and the other six represent punishment.
Diagram 3.3.1. The diagram of students’ cognitive abilities in grade 8D in answering the questions in the Game.

Source: Personal documentation

In the implementation of the maripoli Game in class 8D, there were 22 children able to answer questions related to the maritime lesson in the maripoli Game. In comparison, the other eight children have not been able to answer correctly yet. This Game increases students’ motivation to remember and look for the best possible answer. When they forget the answer, they are motivated to read the book as well as possible.

Diagram 3.3.2. Diagram of students’ cognitive abilities in grade 8J in answering the questions in the Game.

Source: Personal documentation

In the implementation of the maripoli Game in grade 8J, 60 % or 18 children can answer questions related to the maritime lesson in the maripoli Game. In comparison, 40 % of 12 other children could not answer the questions correctly.

Diagram 3.3.3. The diagram of the cognitive abilities of students in 8I grade in answering the questions in the Game.
Source: Personal documentation

In the implementation of maripoli in grade 8I, 75 % or 24 students can answer questions related to maritime material in the maripoli Game. 25 % of six other children have not been able to answer the questions in this material.

Diagram 3.3.4. The diagram of students’ cognitive abilities in grade 8P in answering the questions in the Game.
Source: Personal documentation

In the implementation of maripoli in class 8P, 67 % or 20 students can answer maritime material questions in the maripoli Game. 33 % of the ten other children have not been able to answer the questions in this material.

Affective Aspect
The practical aspect relates to students' ability to work with their group mates in the Game. That is to say; it demonstrates the cooperation between one student and other students in the same group. The group's success in the Game can also be observed in this aspect. The effectiveness of monopoly games can also be identified from the affective element. Good cooperation between them expresses the effectiveness of the learning method using maripoli as media.

Based on the observation, every student who is a group member must inevitably take part in showing their ability to play maripoli. Each member can select, carry out orders, answer questions, or execute commands prompted in the Game. Students must also be involved in several activities in the Game and work together to become the best group. In this aspect of affection, all students become active in knowing the learning material. This can be seen in the chart below:

Diagram 4.4.1. Diagram of the students' affective Skills in grades 8D, 8J, 8I, and 8P in their participation in learning activities.
Source: Personal documentation
Based on the diagram above, it can be seen that most students from grade 8 SMPIP Daarul Jannah are actively involved in this maripoli Game. In class 8D, there are 30 students involved in the Game. This means that all students in the class are active in this Game. The involvement of students in class 8J also shows a similar situation. In class 8I, 28 children participate in the activities of 30 children from class 8J. Two other children did not participate in teaching and learning activities due to their absence. In class 8P, 29 students actively participated in learning activities in the maripoli Game. One child was not involved due to illness. Based on data showing this affective aspect, it is known that learning activities using maripoli games are pretty compelling.

4 CONCLUSION

The monopoly game can be used as a medium for studying lessons in social science. This game method will most likely help students understand concepts and terms related to learning material. To apply monopoly board game media in learning activities, monopoly board games are used by integrating the essential competencies in social science with the basic concepts of monopoly games. Based on the cognitive and affective aspects of the idea of education, the lessons on maritime activity in the archipelago applied in the image of monopoly board game media are convenient for eighth-grade students at SMPIP Daarul Jannah.

Learning activities in the field of study, in this case, social science, demand teachers to have creativity and innovation. This needs support from the educational institution where they are teaching. This is for the sake of increasing the ideas of the teachers. Hopefully, this study can be an inspiration to make the learning process more enjoyable.

For the researcher, I hope this research inspires the development of other learning media that can activate students’ experiences. Developing several teaching media in further analysis can contribute to increasing the students learning quality. Moreover, the development of learning media such as board games makes students who previously did not like the learning material like the material because it is considered not tricky.

REFERENCE


**ELECTRONIC MEDIA REFERENCE:**