

The Development of Ludo Media to Improve Social Studies Learning Outcomes of Fifth Grade Elementary School Students

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Abstract— The purpose of this research was to determine the steps of the development, also to determine the feasibility of Ludo learning media for 5th-grade Social Studies learning the material. This research was Research and Development. The subjects of the testing were the 5th grade students as many as 28 students in Abean 3 Elementary School, and the objects were Social Studies learning outcomes and Ludo media. Techniques of the data collection were by questionnaire, documentation, and tests. The data analysis technique was descriptive analysis according to the development procedures carried out. The results showed that Ludo media is feasible to be implemented. Quantitative data analysis was in the form of assessment by media expert which obtained the score of 95 with “very good” category, by learning material expert obtained score of 78 with the “good” category, by learning expert got the score of 95 with “very good” category. The analysis of teacher and student responses to the product testing was obtained the average score of 87.41, which is in the “very good” category. The analysis of teacher and students’ responses to the product implementation was obtained the average score of 91,95 fall in the category of “very good”.

Keywords—*Ludo Media, Social Studies Learning Outcomes.*

I. INTRODUCTION

According to Somantri in the book Social Education, social studies education is a selection of the disciplines of social sciences and humanities [1], as well as basic human activities that are organized and presented scientifically and psychologically for educational purposes, as in [2] revealing that the basic thing that humanizes humans is the concept of value. Democratic values can be obtained individually by someone through studying social science [3]. Social studies learning aim to develop social relations among fellow humans because the curriculum contains patterns of human relations [4].

Students are able to find some useful insights that they can use to understand information by studying social studies [5]. Whereas [6] Social Studies (*Ilmu Pengetahuan Sosial/IPS*) subject is social sciences that are selected and adjusted to the educational programs in schools or for other equal study groups. Social Studies (IPS) subject is are simplified social sciences for education and teaching purposes in elementary and secondary schools.

Diverse qualifications and skills in interaction are important things that must be possessed by someone that acquired through social learning [7]. Social Studies also provide understanding and awareness to students about the life around them as well as about citizenship that aims to be able to develop students' skills in critical thinking, problems solving and empathizing [8] [9]. Likewise, [10] social learning contains socialization, social responsibility, and social skills which are the important aspects that influence the development and education of children.

Social studies subject is designed to develop the students’ ability to become a citizen that has the knowledge, understanding, and analytical skills to social conditions, when referring to the 4 basic objectives of social studies learning. According to Ryan in understanding skills, values and attitudes and thinking processes, this means that there are 3 competencies that must be obtained by students after participating in Social Studies learning which are increasing knowledge [11], increasing good attitude and skills in solving problems that arise in themselves and environment, although it will be very difficult to realize it when the teacher does not well prepared in the social studies learning plan in the class.

In the implementation of the Social Studies learning in elementary schools, there were found low students’ learning outcomes, especially in the learning material about kingdoms in Indonesia. The learning outcomes obtained by students in daily tests or evaluations are often far from expected because Social Studies learning taken by students does not meet the target. As a result, skills and application mastery of the material is also less. In Social Studies subject, one of the goals is students able to learn the history of the kingdoms in Indonesia. The actual material is easy and often encountered, but sometimes it is quite difficult in learning and learning outcomes to school. The implementation of media and technology able to facilitate teachers in delivering material on Social Studies, thus it is expected that the media implementation can improve students’ learning outcomes [12].

Overcoming the problems that have been described, the teacher is expected to be able to implement appropriate media, and the teacher needs to use the media in delivering learning material to students. Media comes from Latin and is

the plural form of the word medium [13]. Literally, media can be understood as a middle, intermediary, or introduction, so the media is an intermediary to convey messages. In simple terms, media can be understood as all forms or channels used to convey messages/information to other parties.

In a learning process, the teachers need media in teaching Social Studies to subject to students because students yet cannot understand the subject effectively and efficiently. Therefore, with Ludo media that researchers develop for Social Studies subject, it is expected to help teachers in carrying out learning in class and facilitating students in understanding or capturing what is taught by the teacher, thus learning will be more fun and interesting and not monotonous. Before this media implemented, hoped that the teachers would be able to master the Ludo media beforehand so that during the learning process using this media, the teacher able to explain how the Ludo media works, thus students understand when using the media.

Based on the problems described, the teachers are expected to be able to use the appropriate media. Teachers need to use media that can improve students' learning outcomes so that the information conveyed by the teacher will be well absorbed by students. Interesting learning media that in accordance with the students' characteristics and involving students in the learning process will make learning goals achievable. Therefore, in the learning process, there is reciprocal interaction between students and teachers.

Social Studies is an education that is very concerned about the dimensions of skills in addition to understanding the dimension of knowledge [1]. The skills to process and apply information are very important in order to prepare students to become citizens who are able to participate intelligently in society. Communication skills are very important because people can be said as an adult when he/she is able to communicate well. Therefore, learning communication skills is an important aspect of the Social Studies learning approach, especially in social inquiry.

The optimal learning process for students requires learning media that can be used by teachers to deliver learning material. Teacher's understanding of media that broader than merely think it as a tool is very important [16]. Learning media is one medium that shows the best results used by teachers in teaching [17]. Furthermore, learning media is one of the tools used to stimulate the mind in conveying information to attract students' attention and interest in the teaching and learning process [18]. In addition, learning media also provide motivation, maintain students attention, and invite students to learn independently [19]. Adequate learning facilities enable teachers to improve the quality of teaching [20].

Students who have difficulty in understanding the subjects being studied are expected to be helped by the implementation of learning media [21]. Based on the results of previous studies [22], students can improve their media ability to communicate and convey their ideas. The implementation of learning media must be pursued as optimal as possible. This is based on the understanding that the teachers' ability to deliver learning material has certain

limitations, especially those related to understanding learning material delivered in the form of variables. Teacher's understanding of media that broader than merely think it as a tool is very important [16]. Therefore, in accordance with the results of the studies [18] explained, the development of innovative and creative learning media is very important.

This Ludo learning media is inspired by the Ludo game that is already known by the public. This Ludo game is modified into a pictorial Ludo game and added new rules so that learning becomes more interesting and not boring. These media are a learning resource that is visually designed and can be used by students individually or in groups.

The implementation of Ludo media as one of the choices in the learning process is expected to be able to realize an increase in learning outcomes of Social Studies subject. This is because according to cognitive learning theory, learning is seen as an attempt to understand something. This attempt is carried out actively by the students.

Based on the results of the study [23] revealed that the modified Ludo game activities could improve the understanding of children aged 5-6 years old in recognizing the initial Social Studies concept. The implementation of Ludo media is thought to be able to realize an increase in Social Studies learning because the media can be used in learning activities to facilitate students in understanding a learning material. Therefore, in further learning, students will be more comprehensive and easier to understand. Also, it provides opportunities for children to be more active in understanding learning through Ludo media.

II. RESEARCH METHOD

Type of research

This was Research and Development, research method to produce a certain product, and tested the effectiveness of the product [24].

Place and time of research

This research was conducted at 3 Abean Elementary School in Mirit Subdistrict, Kebumen Regency in August 2018.

Research subject

The research subjects were media expert, material expert, learning expert, 5th grade teacher and 28 students of 3 Abean Elementary School. Product testing participants were as many as 8 fifth grade students and teacher. The subjects of the implementation testing were 20 students in the 5th grade of Abean 3 Elementary School.

Data collection techniques and instruments

Data collection techniques were by questionnaires, documentation, and tests. The data collection instruments were experts' validation sheets, teacher and students' questionnaires, data collection instruments for the quality of Ludo media that validated by expert Validates.

Data analysis technique

This research was descriptive analysis according to the development procedures carried out. The steps of data analysis carried out are as follows:

- a. Changing the assessment in qualitative form to quantitative with the following conditions:

TABLE I. SCORE ASSESSMENT GUIDELINE

Qualitative Data	Score
VG (Very Good)	5
G (Good)	4
S (Sufficient)	3
L (Less)	2
VL (Very Less)	1

- b. Calculating the average score using a formula of $\bar{X} = \frac{\sum x}{N}$
- Information \bar{X} = average score
 $\sum x$ = total score
 N = number of assessments

In the evaluation of the development of Ludo Media to improve learning outcomes of Social Studies subject of the history of Hindu-Buddhist and Islamic kingdoms in 3 Abean Elementary School was determined by a minimum score of B, which is a "good" category. Therefore, when the average score of assessment by media expert and material expert, as well as the results of the media implementation tests by students and teachers showed the final results of B, then the development of Ludo Learning Media to Improve Social Studies learning outcomes of 3 Abean Elementary School in this research is categorized as feasible to be implemented in the learning process of 3 Abean Elementary School.

III. RESULTS AND DISCUSSION

1. Quantitative Data Analysis Results

The results of quantitative data were obtained from the assessment of questionnaires by media experts, material experts, learning experts, teacher questionnaire, and student questionnaire:

TABLE II. QUANTITATIVE DATA OF LUDO MEDIA QUALITY

No	Assessment	Score	Category
1	Media Expert	95	Very Good
2	Material Expert	78,57	Good
3	Learning Expert	95,45	Very Good
Total		269,0	
Average		89,67	Very Good

Based on table II the results of quantitative data analysis of Ludo media quality according to the assessment of media expert, material expert, and learning expert are obtained on average score, so the average score can be searched by this formula:

$$\bar{x} = \frac{\sum x}{N} = \frac{269,0}{3} = 89,67$$

TABLE III. QUANTITATIVE DATA OF LUDO MEDIA FEASIBILITY

No	Assessment	Score	Category
1	Product Testing	87,41	Very Good
2	Implementation Testing	91,95	Very Good
Total		179,36	
Average		89,68	Very Good

Based on table III, the average score of 89,68 shows that the Ludo media is feasible to be implemented in 5th grade elementary school in order to help students understanding, especially the history of Hindu-Buddhist and Islamic

kingdoms in Indonesia. Then the average score can be searched as follows:

$$\bar{x} = \frac{\sum x}{n} = \frac{179,36}{2} = 89,68$$

TABLE IV. QUANTITATIVE DATA OF LUDO MEDIA FEASIBILITY

No	Assessment	Score	Category
1	Pretest	1,55	55
2	Posttest	2,450	87
Total		2,605	

Based on the table IV, the average score can be searched as follows:

$$Pretest Mx = \frac{1,550}{28} = 55,35$$

$$Posttest Mx = \frac{2,450}{28} = 87$$

2. Quantitative Data Analysis Results

2.1 Analysis by Media Expert

An assessment carried out by media expert was an assessment of the developed media quality specifically and deeply. The results score from a media expert is 95. Based on the score, Ludo media gets the category of "very good". From the content and purpose of the Ludo media, it is in accordance with the children's development, and practical, the Ludo media uses clear usage instructions, as well as providing assistance and learning opportunities.

2.2 Analysis by Material Expert

An assessment carried out by the material expert was an assessment of the developed media quality specifically and deeply. The results score from a material expert is 78.5. Based on the score, Ludo media gets the category of "good".

2.3 Analysis by Learning Expert

An assessment carried out by Learning expert was an assessment of the developed media quality specifically and deeply. The results score from learning expert is 95. Based on the score, Ludo media gets the category of "good".

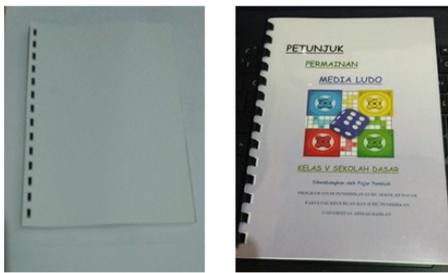
2.4 Product Test Data Analysis

The product testing was conducted on 20 August 2018 with 8 students in 5th grade of Abean N 3 Elementary School which heterogeneously selected with low, medium, and high levels of ability.

3. Product Revision

3.1 Improvements After Product Evaluation

- a. Color changes in the guidebook



(a) (b)

Figure 1. Guidebook

- (a) Picture of a guidebook before revision
- (b) Picture of a guidebook after revision

b. Fixing the size on star cards and fixing the questions



(a) (b)

Figure 2. Question Cards

- (a) Question cards before revision.
- (b) Question cards after revision.

c. Repairing the board and picture quality of Ludo media



(a) (b)

Figure 3. Board of the Ludo Media

- (a) Picture of the Ludo media board before revision.
- (b) Picture of the Ludo media board after revision.

4. Discussion

Research on Ludo media development to improve Social Studies learning outcomes of the 5th grade elementary school has relevance to previous studies. The previous research [11] explained that image media can improve students' learning outcomes. In addition, a previous study [25] revealed that in explaining a learning concept, the implementation of good visual aids will be more effective and more impact than verbal communication words. In addition, in reference [26] explained that teachers consider educational media important because it can provide motivation and ability to attract students' attention. This shows that the word game Ludo media has the ability to improve students' learning outcomes because of the implementation of media images and visualization concepts about the existing learning materials.

In addition, the previous study [27] explained that the word game Ludo media is very effective in improving students' English learning outcomes.

Based on the results of the analysis that have been discussed, it is stated that Ludo media assessment by media expert obtained the average score of 95, which is in the category of "very good". Furthermore, for the assessment of material expert obtained an average score of 78,5 which is in the "good" category. The assessment of learning expert obtained an average score of 95,45 which is in the "good" category. Therefore, the Ludo media can be concluded as a qualified media based on experts' judgment.

The product testing and the implementation testing of Ludo media that was done by students and teachers got an average score of 89,68 which is in the "very good" category. Therefore, it can be stated that the Ludo media is feasible for 5th grade students in the subject of the history of Hindu-Buddhist and Islamic kingdoms in Indonesia. The average scores of pretest and posttest are 55 and 87. This proves that there are indications of success in improving students' understanding, especially in the material of the history of Hindu-Buddhist and Islamic kingdoms in Indonesia.

IV. CONCLUSION

Based on the research it can be concluded that the development of Ludo media consists of 10 steps. Based on the results of the validation of the three experts, the average score is 89,67 which is in the "good" category. On the results of product testing and implementation, testing obtained an average score of 89.68 which is in the "very good" category and the average score of pretest is 55,35 and posttest is 87. This was used to determine the feasibility of Ludo learning media to be implemented in the Social Sciences learning material specifically the history of Hindu-Buddhist and Islamic kingdoms in Indonesia of the fifth-grade elementary school. On the conclusion of the research and development, there are several suggestions as follows: 1) Ludo media can be used by the teacher to assist the teaching and learning process in the class on Social Studies subject of the history of Hindu-Buddhist and Islamic kingdoms in Indonesia; and 2) with various limitations in the Ludo media, then it would be better if the Ludo media is used in depth related to the material and is always used with the guidance and direction of the teacher.

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