Al-Islam Learning Outcomes Analysis Judging from the Use of Jigsaw Puzzle Media in Muhammadiyah Elementary School

by Supiyadi Supriyadi

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Abstract. Learning al-Islam as a distinctive feature in the grand design of Muhammadiyah education and being the educational foundation of Muhammadiyah in improving the quality of graduates who excel in personality, religion, science, skills, work in art and culture and high competitiveness, both locally, nationally and globally. On the other hand, the learning outcomes of al-Islam, including material on understanding faith in angels and their duties on third grade students in Muhammadiyah Elementary School Bangil, are still much below the minimum completeness criteria. Based on this, this study used an experimental research method with a pre-experimental post-test test design in one group. The population in this study were class III students as many as 32 students using saturated sampling techniques. The research data used the pre-test value and the postal tests were analyzed using paired samples t-test through SPSS 20 for Windows. The results showed a pre-test average value of 69.53 lower than the average post-test score of 84.922. That is, there is an increase in the results of learning al-Islam after receiving treatment using media jigsaw puzzle games. Based on the results of the Paired Samples Test test, it shows that the use of media jigsaw puzzle games can improve and improve the learning outcomes of al-Islam.
Keywords: Learning Media, Puzzles, Jigsaw, Learning Outcomes Al-Islam.

A. INTRODUCTION

Muhammadiyah education entering the 21st century faces global and national challenges, including: 1) the development of science and technology which has implications for changes in the methodology of education and learning; 2) various government policies in the field of education; 3) eradication of morality in al-karimah, and 4) community expectations of quality Muhammadiyah schools [1]. The challenges are internal, including: 1) ideological commitment and loyalty of Muhammadiyah school implementers; 2) the quality, relevance and competitiveness of Muhammadiyah schools, and 3) resources that are professional and committed to the development of a progressive quality of Muhammadiyah education [2], [3].

In general, Muhammadiyah education functions, namely: 1) as a means of education and intelligence; 2) community service; 3) preaching amar ma'ruf nahi munkar, and 4) regeneration land [2]. This shows that, Muhammadiyah educational mission is education, service, preaching, and cadre. The mission, became a solution and response to the dryness of the religious spirit in education, Muhammadiyah has the characteristics of education al-Islam and Kemuhammadiyahan [4], [1].

Al-Islam and Kemuhammadiyah learning are expected to be the center of improving the quality of graduates who excel in personality, religion, science, skills, work in arts and culture and are highly competitive, both locally, nationally and globally [5]. Seeing the challenges above, al-Islam learning as a characteristic of Muhammadiyah education required the vitalization of its role and function [2], [4].

Based on observations, including: 1) learning outcomes of al-Islam class III students at Muhammadiyah Bangil Elementary School about material knowing and believing the names of the Angels of God and their duties there are students who have not reached the minimum completeness criteria; 2) some teachers have not optimized the use of media in al-Islam

learning, and 3) Teachers al-Islam in compiling the al-Islam Learning Program Plan does not use jigsaw puzzle media.

The fact above, that grade III elementary school students in accordance with the characteristics in general, like interesting games, and fun in al-Islamic learning, including media puzzle games. Media puzzle games are two-dimensional visual media to convey information in the form of knowledge by connecting parts to one another, thus forming an image. The jigsaw puzzle game media in this study collaborated with cooperative learning jigsaw models.

The study discourse on puzzle game media, shows that there is a relationship between the use of media puzzles and learning interests, motivation to learn, creative thinking, and student learning outcomes. Nurhayati assessed the effectiveness of chemical learning using drill and practice methods assisted by crossword puzzle media by comparing the application of the 5E learning cycle method assisted by the media crossword puzzle. The results of his research, the application of drill and practice methods assisted by word puzzle media is more effective than the 5E learning cycle method assisted by crassword puzzle [6].

Mastery of content using media puzzle games is also influential in increasing social interaction and visual-spatial intelligence [7], [8]. The application of the accelerated learning approach assisted by media puzzles also influences the activities and student learning outcomes [9]. The application of cooperative learning models type two stay two stray, horay course review, number head together assisted by media puzzles can improve student learning outcomes [10,11,12,13,14,15]. There is an increase in students' cognitive learning abilities after applying the cooperative learning model type make a match, picture and picture, games tournament teams, and playing methods assisted by puzzle media [16,17,18,19]. Another study, there was an increase in the development of language for children of kindergarten after the application of assignment methods assisted with media media puzzle games [20]. The development of puzzle card learning media with research and development approaches can improve creative thinking skills in elementary school students [21].

The use of media puzzles can also improve student competence [22]. Developing puzzle game media with a 4-D development model, including: define, design, develop, and disseminate can give birth to active and challenging student learning activities [23]. Media puzzle games can improve essay writing skills in elementary school students in the learning process by applying the model concept sentence, quantum teaching [24,25,26].

Some of the above studies have not yet looked specifically at examining media jigsaw puzzle games in al-Islam learning in elementary schools. Therefore, this study analyzes the direct influence of the use of media jigsaw puzzle games on the learning outcomes of al-Islam.

B. RESEARCH METHODS

The research approach uses quantitative research, type of experimental research, with pre-experimental design. The researcher, in this case observes one main group and there is no control group to compare with the experimental group [27]. Media jigsaw puzzle game as an independent variable that affects the learning outcomes of al-Islam as a dependent variable. The pre-experimental design used post-test pre-tests in one group [27], [28]. Researchers in this case provide 10 questions for students to explain during pre-tests and tests. Then compare the values of pre-tests and tests.

The population of this study were all third grade students in Muhammadiyah Bangil Elementary School in the even semester of the 2017-2018 school year as many as 32 students and as a research sample. The sampling technique uses total sampling [29].

The technique of collecting data through tests as a tool to measure students' cognitive learning outcomes, namely pre-tests and tests. Furthermore, validity and reliability tests are

used using construct validity by asking for opinions from experts, which are then tested on the instrument in the field. The results of the instrument trials were then analyzed using Pearson Bivariate correlation. While the reliability test uses the Cronbach's Alpha method. Before conducting a hypothesis test, the researcher conducted a prerequisite test by conducting a normality test of the data using quadrad chi (^{2}) and PP (Probability Plot) chart with the help of SPSS 20 for Windows to test the normality of pre-test data and post-test [30], [31].

C. RESULTS AND DISCUSSION

The results of data analysis to determine the effect of using media jigsaw puzzle games on learning outcomes of al-Islam can see the following table:

Tabel 1. *Paired Samples Statistics*

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	69,531	32	12,7860	2,2603
	Posttest	84,922	32	7,3639	1,3018

The table above shows that the average pre-test score is lower than the average value of the tests, meaning that there is an increase in learning outcomes of al-Islam after being treated with media jigsaw puzzle games.

Tabel 2. *Paired Samples Test*

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pretest - Posttest	-15,3906	7,0170	1,2404	-17,9205	-12,8607	-12,407	31	,000

The above calculation results obtained value (-12.407) and values (2.040) with 2-sided test and degrees of freedom (df) n - 1 or 32 - 1 = 3. This shows that there is a difference between the average pre-test value and checkpoints. That is, the use of media jigsaw puzzle games can improve and improve the learning outcomes of al-Islam. The results of this study also prove that there is an influence of the use of jigsaw puzzle game media on the learning outcomes of al-Islam in third grade students at Muhammadiyah Bangil Elementary School.

The results of this study provide evidence of reinforcement of previous studies, [19], [11], [10] that the use of instructional media especially media jigsaw puzzle games can improve student learning outcomes [11]. The use of media jigsaw puzzle games, also fosters a learning atmosphere that is fun, challenging and enhances students' learning creativity, so that they are motivated to learn during learning activities [32].

This is in accordance with the opinion of Kemp & Dayton (1985) which states that the functions and benefits of using learning media in learning can present information or subject matter to be more interesting and fun, so as to foster students' motivation and interest in participating in learning activities and improving processes and student learning outcomes [33]. This shows that the use of jigsaw puzzle media is effectively used in al-Islam learning.

The results of this study can also contribute to the learning process of al-Islam and Kemuhammadiyah which are expected to be a center for improving the quality of graduates who excel in personality, religion, science, skills, work in arts and culture and high competitiveness, both locally, nationally and global [5].

Learning al-Islam in Muhammadiyah Bangil Elementary School through the optimization of learning media will also provide reinforcement on integrated characteristics in the Muhammadiyah grand design education which will be an alternative solution in filling the spiritual spirit of drought in Muhammadiyah education in general. As the role and mission of

Muhammadiyah education can run as aspired, namely education, service, preaching, and regeneration [4].

D. CONCLUSION

Based on the data analysis and discussion, the conclusion in this study is that there is the influence of the use of jigsaw puzzle game media on the learning outcomes of al-Islam class III students at the Muhammadiyah Bangil Elementary School. The results of this study are expected to provide suggestions for teachers, especially the teachers who will teach in the subjects of al-Islam and Kemuhammadiyahan. The teacher should always create a pleasant learning atmosphere for students by using learning media such as media jigsaw puzzle game.

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