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Article

The Effectiveness of the Quantum Teaching Learning Model on Islamic Religious Education (PAI) Learning Outcomes at State Elementary School 1 Katobengke

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Abstract: This study aims to analyze the effectiveness of the Quantum Teaching learning model on the learning outcomes of Islamic Religious Education (PAI) at Elementary School 1Katobengke. This study uses a qualitative method with the object of research being 27 fifth grade students, consisting of 15 male students and 12 female students, and 1 PAI teacher. The instruments used in this study were observation, interviews, and documentation. The study was conducted in two cycles with two meetings in each cycle. The results of the study showed a significant increase in student learning outcomes between cycle I and cycle II. The average student score increased from 71.1 in cycle I to 77.59 in cycle II, with the percentage of student learning completion reaching 85.19% in cycle II. The application of the Quantum Teaching model succeeded in creating an active, enjoyable learning atmosphere, increasing student interest, and motivating them to be more involved in learning. Thus, the Quantum Teaching model has proven effective in improving Islamic Religious Education learning outcomes at Elementary School 1Katobengke and can be used as an alternative learning method that is more interesting and meaningful.

Keywords: Effectiveness; Learning Model; Quantum Teaching; Learning Outcomes; PAI

1. Introduction

Education is one of the most influential components in gaining knowledge(Fink, 2013). Through education, humans can provide positive changes that cannot become able, and those who do not know become knowing and understanding. So that education can produce intelligent and noble generations. Every education received by humans can be through teaching, training or educational research. Education as it occurs under the guidance of the person above, it can be seen that education plays an important role in producing strong humans for national development(Chabbott & Ramirez, 2000).

To deliver intelligent and noble humans, parents need to choose the right school for their children so that what is aspired to by parents and children can be achieved properly(Gerver, 2014). In accordance with the Constitution of the Republic of Indonesia No. 20 of 2003 concerning the National Education System, Chapter II Article 3, which states that National Education develops abilities and forms the character and civilization of a dignified nation in order to educate the life of the Nation, aims to develop the potential of students to become human beings who believe and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic citizens, and are responsible. Through the Constitution, schools are institutions that provide education to their students(Friedman & Solow, 2013). This educational institution provides formal pursuits that have systematic programs in implementing this education, which can be implemented through guidance, teaching, and training for students so that students can develop according to their potential. To develop the potential that exists in each student, schools have a very large role in directing and shaping students into people who develop optimally(Armstrong, 2006). In order to improve the quality of education, the Government has made improvements, one of which is to renew the

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curriculum which is expected to create new changes in the world of education so that students' interest in learning increases, namely with the existence of Independent Learning. The Independent Curriculum is a curriculum that applies in the current education system in Indonesia(Ilmi et al., 2020). This curriculum is the right curriculum by the government to replace the 2013 curriculum. The Independent Curriculum has 3 assessment domains, namely knowledge, skills and behavioral attitudes, but the emphasis is on the assessment criteria for the Pancasila lesson profile. The implementation of Islamic Religious Education is expected to improve student learning outcomes by using the Quantum Teaching learning model to prove that all education will position religious knowledge as a requirement to understand and apply the commands of Allah SWT. by studying Islamic religious education, students can distinguish between what is commanded by Allah SWT and what is prohibited.

The implementation of education is expected to be able to improve student learning outcomes, so that the learning process does not feel boring for students(Macklem, 2015). For that, an educational staff is expected to be able to create a pleasant learning atmosphere to attract students' interest in learning. Teachers as educators are expected to be able to process all efforts so that what is desired in educational goals can be achieved properly(Paris & Paris, 2003). Seeing the existing problems, one of the efforts made is to choose an appropriate learning model such as the Quantum Teaching model which can make learning more enjoyable. Applying the Quantum Teaching learning model in class, a teacher can create a pleasant learning atmosphere so that it can affect student learning outcomes and their activeness(Ratnasari et al., 2018). Active learning is a way of teaching and learning that optimizes student activity. Learning designs that reflect active learning activities need to be supported by the teacher's ability to facilitate student learning activities during the learning process(Niemi, 2002). So that there is a significant correlation between teacher teaching activities and student learning because activating students means demanding creativity and ability from teachers in designing learning activities(Horng et al., 2005).

The application of the Quantum Teaching model can make students more active because teachers can foster student interest by providing a problem solving in the form of experiments associated with students' daily lives(Bøe et al., 2018). This Quantum Teaching model is one of the recommended learning models as an alternative meaningful learning that leads to active, creative, effective and enjoyable learning so that it is expected that the learning outcomes obtained by students will also increase.

The Quantum Teaching method is very good when applied in the learning process because by using the Quantum teaching method it can emphasize the interaction between students and teachers, and create a pleasant and comfortable learning atmosphere(Chavez & Weisinger, 2008). And it can also provide opportunities for students to be able to develop with their potential so that students can be actively involved in the learning process and students can also think critically and creatively. This can certainly attract students' interest in learning in order to achieve the desired learning outcomes in the subjects given by the teacher.

2. Materials and Methods

This study uses qualitative research. Qualitative research is a research method used to collect data in the form of words, pictures, and observations(Polkinghorne, 2005). Qualitative research focuses on an in-depth understanding of social, cultural, or psychological phenomena, and does not focus on statistical measurements or calculations(Doucerain et al., 2016). The purpose of qualitative research is to understand social phenomena, identify patterns, themes, or concepts that emerge in the data, develop new theories or concepts based on research results, and improve understanding of the phenomena being studied(Sinkovics, 2018). The research was conducted at Elementary School 1Katobengke. The objects of this study were grade V students of Elementary School 1Katobengke with a total of 27 students, namely 15 male students and 12 female students and 1 teacher of Islamic Religious Education subject, a total of 28 people.

The types of instruments used in this study are: (1) Observation sheets, observing the behavior and activities of students and teachers in the classroom or in the school environment, after knowing the results of this observation, it is used to determine the next steps, namely (2) Interviews, collecting data through conversations with respondents, such as teachers and students at the school, then (3) Documentation, analyzing relevant documents, such as curriculum, syllabus, and student progress reports. The population in this study were PAI students and teachers, and the sample in this study was those in the population.

Table 1. Condition of Research Population

Population Description	Gender		Amount
	Male	Female	
Islamic Religious Education Teacher Class V	0	1	1
Class V Students	15	12	27
Amount	15	13	28

Data Source: State Elementary School 1 Katobengke

Based on the table above, it can be seen that this study is students of Elementary School 1Katobengke and teachers of Islamic Religious Education subjects. With the number of male student respondents as many as 15 people, female students as many as 12 people, and Islamic Religious Education subject teachers as many as 1 person(Benn, 2002). The total respondents in this study were 28 people.

Table 2. Researcher Sample Conditions

No	Sample Description	Population	Sample	Amount
1	Islamic Religious Education Teacher	1	1	100%
2	Grade V students	27	27	100%
Amount		28	28	100%

Data Source: Processed Table No. 1

Based on the table above, it can be seen that the number of samples in this study is the number of the research population itself(Levy & Lemeshow, 2013). Therefore, this type of research is called population and census research. Data collection techniques are methods used to collect data from various sources for research materials(Sutton & Austin, 2015). In choosing data collection techniques, of course there are several techniques that must be done so that the techniques used can be appropriate and systematically precise(Moser & Korstjens, 2018). Data collection techniques are divided into three methods, namely: Observation, interviews, and documentation. To determine the final value of learning outcomes obtained by each student:

$$\text{Final score} = \frac{\textit{Score Obtained}}{\textit{Maximum Score}} \times 100$$

To determine the average class value using the formula:

$$\text{Average value} = \frac{\textit{total student scores}}{\textit{Number of students}}$$

To determine the percentage of classical learning completion value using the formula:

Percentage of Completion = students complete (meet the KKM value) x 100%Number of all students

Data Analysis Techniques: Data analysis techniques in qualitative research are carried out during and after data collection(Sutton & Austin, 2015). Data analysis in the field, according to Milles, there are two important things in the analysis of the data; first, the analysis of data that appears in the form of words and not a series of numbers. These two analyzes consist of three streams of activities that occur simultaneously, namely; Data reduction, Data presentation.

3. Results and Discussion

3.1 Result

This research is an action research in Elementary School 1 Katobengke totaling 27 people consisting of 15 male students and 12 female students. In this study, the teachers who work together are fully involved in the planning phase, Action, observation, and reflection of the learning cycle(Rodgers, 2002).

Table 3. Results of Implementation of Cycles I and II

Student initials		Minimum Completion Criteria	Test Score cycle I	Test Score cycle II	Information	
					Completed	Not Completed
1	AD	70	80	85	✓	-
2	AN	70	65	70	✓	-
3	AG	70	70	75	✓	-
4	AA	70	70	80	✓	-
5	BD	70	60	65	-	✓
6	CC	70	80	85	✓	-
7	DN	70	60	70	✓	-
8	EG	70	70	80	✓	-
9	FD	70	80	85	✓	-
10	FM	70	75	85	✓	-
11	GI	70	60	70	✓	-
12	GU	70	60	65	-	✓
13	HA	70	80	85	✓	-
14	HB	70	65	70	✓	-
15	HP	70	70	75	✓	-
16	IS	70	75	80	✓	-
17	II	70	80	90	✓	-
18	IH	70	85	90	✓	-
19	JS	70	70	75	✓	-
20	JN	70	65	75	✓	-
21	JJ	70	70	80	✓	-
22	LA	70	80	85	✓	-
23	LV	70	80	85	✓	-
24	MC	70	60	65	-	✓
25	MH	70	75	80	✓	-
26	MA	70	60	65	-	✓
27	MD	70	75	80	✓	-
Amount			1920	2095	23	4

Average cycle I		71.1		
Average cycle II			77.59	
Learning Completion				85.19 14.82

Based on the actions given, the research data obtained from cycle II is in the form of data from observations and tests of reading aloud ability results(Gorsuch & Taguchi, 2010). This can be seen from the results of teacher and student observations that have been filled in by observations where the results have increased and from student learning outcomes(Kane & Staiger, 2012). The following is a table regarding the cycle II teacher observation sheet:

Table 4. Teacher Observation Sheet

No	Aspects observed	Information Yes	No
	Kegiatan Awal	✓	
1.	Teacher Checks Student Readiness	✓	
2.	Teachers take attendance and pray together	✓	
3.	The teacher confirms the topic to be discussed.	✓	
4.	The teacher delivers apperception		✓
5.	The teacher conveys learning objectives	✓	
	Core activities		
1.	Teacher shows media	✓	
2.	Teachers Give Students Opportunities	✓	
3.	Teachers guide students in writing	✓	
4.	The teacher conducts a question and answer session	✓	
5.	Teacher evaluates students		✓
	Closing Activities		
1.	The teacher together with the students concludes the material	✓	
2.	Students write the homework given by the teacher	✓	
3.	Pray together	✓	
4.	Students answer closing greetings	✓	
	Amount	10 2	

4. Discussion

This research was conducted in two cycles, and was conducted in two meetings in one cycle. Based on the performance indicators carried out, this research is said to be successful if the average value of student learning outcomes is at least 70 and the percentage of student learning completion is at least 70% of the number of students(Asif et al., 2017). Students who have achieved the KKM value. The following is an introduction to the results of this study(Sjöstrand et al., 2015). There are several development steps that need to be considered: first, teachers must be able to know the character of students in terms of behavior that indicates difficulties, second, teachers need to understand the principles of learning and their application, and third, teachers must be able to apply motivational action techniques that are in accordance with the existing class conditions.

5. Conclusions

Based on the results of the study conducted at Elementary School 1Katobengke, this study aims to analyze the effectiveness of the Quantum Teaching learning model on the learning outcomes of Islamic Religious Education (PAI) at Elementary School 1Kato-bengke. This study uses a qualitative method with the object of research being 27 fifth grade students, consisting of 15 male students and 12 female students, and 1 PAI teacher. The instruments used in this study were observation, interviews, and documentation. The study was conducted in two cycles with two meetings in each cycle. The results showed a significant increase in student learning outcomes between cycle I and cycle II. The average student score increased from 71.1 in cycle I to 77.59 in cycle II, with the percentage of student learning completion reaching 85.19% in cycle II. The application of the Quantum Teaching model succeeded in creating an active, enjoyable learning atmosphere and increasing student interest, as well as motivating them to be more involved in learning. Thus, the Quantum Teaching model has proven effective in improving Islamic Religious Education learning outcomes at Elementary School 1Katobengke and can be used as an alternative learning method that is more interesting and meaningful.

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