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The Influence of the 7E Learning Cycle Model in Improving Student Learning Outcomes in Islamic Religious Education Learning

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Abstract

The low fiqh learning outcomes of students in schools in the 2022/2023 school year and the use of learning models that are still monotonous are the background to this research. This research aims to determine the effect of the 7E learning cycle learning model on efforts to improve fiqh learning outcomes for students at school. This research uses a quasi-experimental quantitative method with a static group comparison posttest only design. Research sampling was carried out using a purposive sampling technique because it used a smaller and homogeneous sample. The research results showed that the average posttest score on the experimental class fiqh learning outcomes was 84 out of 20 students, with the highest score for the experimental class being 100 and the lowest score being 72. Meanwhile the average posttest score on the control class fiqh learning outcomes was 72.2 out of 20 students, with the highest score in the control class being 92 and the lowest score being 60. The percentage of learning completeness for experimental class students was 85%, while the percentage of learning completeness for control class students was 40%. Based on hypothesis testing with SPSS 26, the significance of α in two directions or significance (2-tailed) was 0.000, so it can be concluded that (0.000 < 0.05). Therefore, it can be said that H0 which states that there is no influence of the 7E learning cycle model on increasing student learning outcomes in Islamic religious education learning is rejected and Ha is accepted, which means that there is a significant influence of the 7E learning cycle model on increasing student learning outcomes in school.

INTRODUCTION

A learning model is a pattern that is used as a guide in planning classroom learning (Hasanah, 2021). The learning model refers to the learning approach that will be used, including learning objectives, stages in learning activities, learning environment and classroom management, this agrees with Hasanah, (2021); Tibahary, (2018); Mayasari, (2016); Nasution, (2017); Azis, (2019). As Allah says in QS. al-Maidah verse 35:

يَٰٓأَيُّهَا ٱلَّذِينَ ءَامَنُواْ ٱتَّقُواْ ٱللَّهَ وَٱبۡتَغُوٓاْ إِلَيۡهِ ٱلۡوَسِيلَةَ وَجَٰهِدُواْ فِي سَبِيلِهِۦ لَعَلَّكُمۡ تُفۡلِحُونَ ٣٥

Meaning: *And look for methods/means that get closer to Him and strive in His way, so that you will get luck* (QS. Al-Maidah:35)

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The verse above is related to learning and learning which refers to the importance of using learning methods and models in the learning process itself, so that it can lead to the goals of Islamic education as desired. By implementing appropriate models, methods and facilities, education can take place according to plan and the goals that have been set can be achieved (Jannah et al, 2023). In this case, it is necessary to pay attention to how children interact with the use of models, methods or learning support facilities used, whether they are in accordance with the needs of students or not, and so on.

Therefore, for further clarity, the researcher conducted an interview with the fiqh teacher at the school to be able to see for sure how fiqh learning was implemented at the school. Based on the results of the interview, researchers can conclude that in providing learning to students, teachers are still found who only use conventional learning models and regarding this, after being asked why, it is because teachers are less capable in developing interactive learning models. This also reaped a negative response from students because the learning process carried out by the teacher seemed monotonous. Below, the researcher completes the data with daily test scores for fiqh subjects from class X students.

Table 1. Daily Test Assessment Data for Class X Students in Fiqh Subjects in 2022/2023

No.	Class	Average	KKM
1	X Science 1	79	75
2	X Social 1	75.5	75
3	X Social 2	70	75
4	X GPA 1	76	75

Based on daily test assessment data for students for the 2022/2023 school year, observations showed that there were still many students who got low scores or had not reached the Minimum Completeness Criteria 75 in the subject of jurisprudence. Only a few students get a complete score in the daily tests. This is because the form of learning model used by teachers is still monotonous and not adapted to the fiqh subject matter that will be taught, making students less active during the learning process, which ultimately affects the learning outcomes of students.

Problems in implementing fiqh learning in a school can be overcome by implementing a learning model that can make students active during the learning process, so that it can increase students' enthusiasm for learning and make students directly involved in the learning process. The activeness of students in this learning can be seen from the ability of students to express their opinions in the learning process so that students can obtain good and satisfying learning results. Therefore, researchers recommend the 7E learning cycle model as an effort to increase students' activeness in the fiqh learning process.

The learning cycle learning model is a series of stages (phases) that are organized in such a way that students can master the components that must be achieved in learning and play an active role in learning (Jannah et al., 2023; Matitaputty & Sopacua, 2023; Saputro & Pakpahan, 2021). The process of forming this learning cycle learning model has historically occurred in stages, not directly in type 7E, this is adjusted to the needs and effectiveness when implementing it (Saputro & Pakpahan, 2021). The learning cycle is a learning model with a constructivist approach which initially consists of three stages, namely: exploration, introduction to concepts, and application of concepts (Ben-Eliyahu, 2019; Khoiriyah & Husamah, 2018; Korhonen et al., 2019).

Learning cycle initially, it consists of the phases of exploration, concept introduction, and concept application. In the exploration stage, students are given the opportunity to make maximum use of their five senses in interacting with the environment through activities such as practice, analyzing articles/journals, discussing social phenomena that occur in society and so on (Arqiya & Ramadani, 2023). According to Hanny & Fajar, (2022) stages of the learning cycle learning modeltype 7E can be explained as follows: i)

elicit, the teacher tries to generate or bring in students' initial knowledge. ii) engagement, used to focus students' attention, stimulate students' thinking abilities and arouse students' interest and motivation towards the concepts being taught, this phase can be carried out with demonstrations, discussions, reading, or other activities used to open students knowledge and develop students' curiosity. iii) exploration, students gain knowledge through direct experience related to the concept to be studied. iv) explanation, students are introduced to new concepts, laws and theories. v) elaboration, aims to bring students to apply definition symbols, concepts and skills to problems related to examples from the lessons learned. vi) evaluation, consisting of formative evaluation and summative evaluation. Formative evaluation should not be limited to certain cycles, teachers should always assess student activities. vii) extend, aims to think, find and explain examples of the application of the concepts that have been studied.

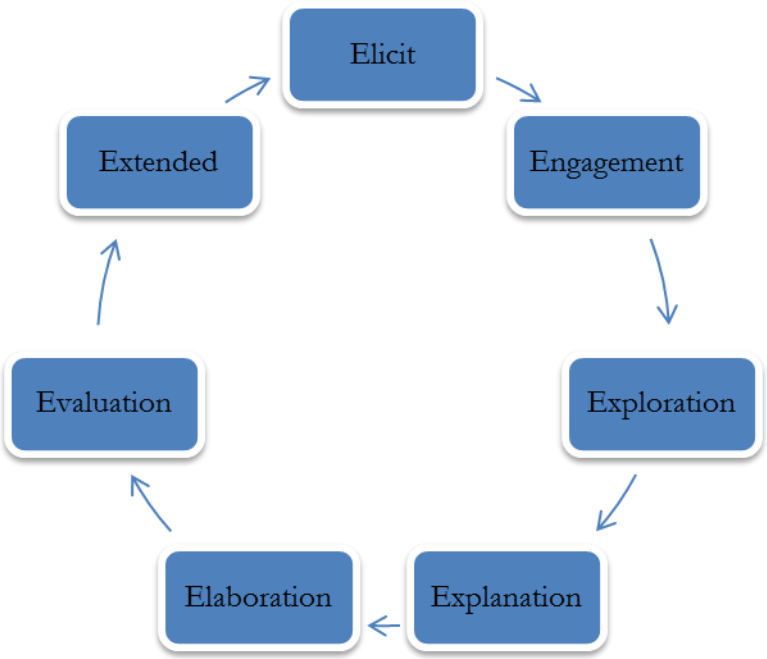


Fig 1. Flow of the 7E Learning Cycle Stages

Research related to the 7E learning cycle learning model has been discussed by previous researchers, such as Matitaputty & Sopacua, (2023); Ramamurthy & Roy, (2018); Sumadi, (2017); Zhang et al., (2018). However, the researchers above only focused generally on the issue of the influence of the 7E learning cycle model on Islamic education learning and student learning outcomes. Meanwhile, research that specifically discusses the influence of the 7E learning cycle learning model on student learning outcomes in fiqh learning at Islamic senior high school level has not been found.

The fundamental difference between this research issue and previous research is that previous researchers discussed the relationship between the 7E learning cycle learning model and student motivation and learning outcomes as measured through cycles in Islamic education learning in general, but this research issue discusses the influence of implementing the 7E learning cycle model. Towards increasing student learning outcomes in Islamic jurisprudence learning at Islamic Senior High School level through the implementation of posttests.

METHODS

The type of research that the researcher will carry out is quantitative research. This research uses quantitative data in the form of data that shows numbers or amounts such as post-test results after a fiqh learning process related to a material (Aini et al., 2019; Novebri & Dewi, 2020). From the results of the daily tests, researchers can see the effect of implementing the 7E learning cycle learning model on student learning outcomes. In this

research the researcher used a quasi-experimental research method, where this research actually follows a scientific research design which includes hypotheses, variables that can be manipulated by the researcher and variables that can be measured, calculated and compared (Armstrong & Kepler, 2018). This research was conducted to determine the effect of the learning model treatment applied on student learning outcomes. The way to find out is by comparing the learning outcomes between the experimental group and the control group (Adnot et al., 2017; Lin et al., 2012; Neuendorf, 2019; Thamrin et al., 2022). In the experimental group, jurisprudence learning uses the 7E learning cycle model, while in the control group, jurisprudence learning uses the conventional model, where the implementation of learning focuses a lot on the teacher, and the teacher uses the lecture method in conveying jurisprudence learning materials.

The quasi-experimental research design used by researchers is a static group comparison design (Giner et al., 2023; Lin et al., 2017; Suratno et al., 2019). Basically, this design uses two groups, namely the experimental group and the control group, but the selection of the two groups is not done randomly. Apart from that, the treatment is only given to one group, this design also only applies a posttest, but because this design uses a control group, several factors that influence internal validity can be controlled.

The population in this study was all seventy two students. To determine several samples to be taken, researchers used a purposive sampling technique, which is done using a smaller sample and a homogeneous population. Independent variables are variables that influence or cause changes to the dependent variable (Zhang et al., 2018). The independent variable in this research is the 7E learning cycle learning model. The dependent variable is a variable that is influenced by the independent variable (Eom & Ashill, 2018). The dependent variable in this research is learning outcomes. Meanwhile, the control variable is a variable that is controlled so that the influence of the independent variable on the dependent variable is not influenced by external factors that are not studied. In this study, the control variables include the same number of students, the same class conditions, the same class level and the same learning materials used. In this research, researchers used data collection techniques through initial interviews and posttests. Meanwhile, for test instrument requirements, researchers used validity tests, reliability tests, item discrimination tests and item difficulty tests. The data analysis techniques that researchers use are normality tests, homogeneity tests and hypothesis tests (Audina et al., 2018; Munir, 2017).

RESULT AND DISCUSSION

Based on research that has been carried out in control and experimental classes. Data on students' fiqh learning outcomes were obtained after being given a final test. Based on the test scores obtained, then look for the highest score, lowest score, average score and standard deviation. The conclusion of the calculation results can be seen as follows:

Table 2. Posttest Result Data for Research Sample Class

Class	N	Min	Max	Sum	Mean
Experiment	20	72	100	1680	84
Control	20	60	92	1444	72.2

The learning results of students after carrying out an experimental posttest using the 7E learning cycle model in class The number of students who had very high posttest results was 3 people with a percentage level of 15%, the high category was 10 people with a percentage level of 50%, the low category was 4 people with a percentage level of 20%, while for the very low category there were 3 people with a level percentage 15%. If this is done by adding up the values, an average (mean) value of 84 is obtained. If the results of the average (mean) value are classified into the frequency distribution table of the experimental class posttest learning results above, it can be said that the picture of the posttest results in class fiqh subjects social has a high average, which ranges from 83-92. So it can be concluded that the average posttest picture of experimental results using the 7E learning cycle model is in the high category.

The learning results of students after carrying out a control class posttest using the conventional model (lecture and question and answer), obtained of very high, high, low and very low categories. The number of students who had very high posttest results was 1 person with a percentage level of 5%, in the high category there were 2 people with a percentage level of 10%, in the low category there were 12 people with a percentage level of 60%, while for the very low category there were 5 people with a level of percentage 25%. If this is done by adding up the values, an average value (mean) of 72.2 is obtained. If the results of the average scores (mean) are classified into the frequency distribution table of post-test learning results for the control class above, it can be said that the picture of the post-test results in the social sciences class 2 fiqh subject is low on average, namely in the interval 68-77. So it can be concluded that the average posttest picture of control class learning outcomes using the conventional model in Islamic Religious Education (fiqh) learning is in the low category. The results of the normality test using SPSS 26 obtained the following results.

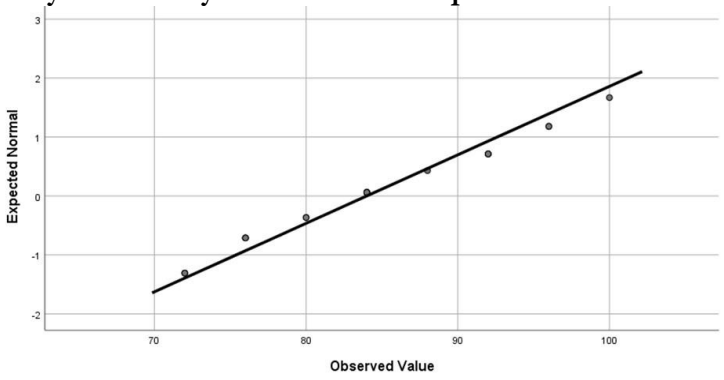
Table 3. Results of Normality Test Analysis for Experimental Class and Control Class

		Kolmogorov-Smirnova			Shapiro-Wilk		
	Class	Statistics	df	Sig.	Statistics	df	Sig.
Results	Post_Ext	,168	20	,139	,930	20	,155
	Post_Cont	,150	20	,200*	,940	20	,238

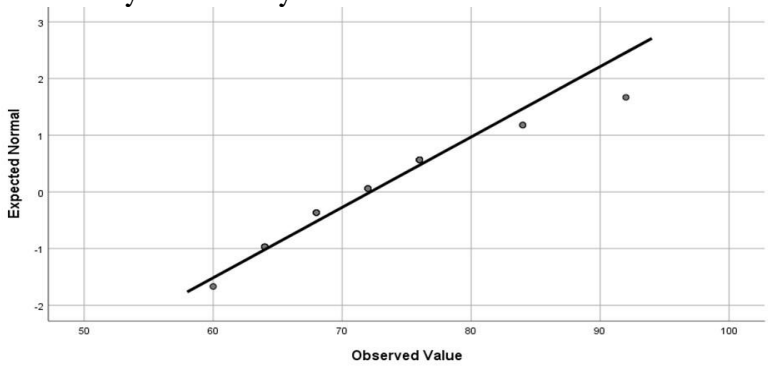
*. This is a lower bound of the true significance.

From the data above, it is found that the sample class is normally distributed because α is greater (>) than 0.05, namely 0.155 for Shapiro Wilk and 0.139 for Kolmogorov Smirnov, meaning that on both sides the data is normally distributed. To be clearer about the normality test of this research data using histograms, the following is an overview.

Graph 1. Normality Test Analysis Results for Experimental Class Normal QQ Plot



Graph 2. Normality Test Analysis Results for Normal Control Class QQ Plot



Homogeneity test results from research results that have been carried out using SPSS 26, namely

Table 4. Posttest Homogeneity Test Analysis Results for Experimental Class and Control Class

		Levene Statistics	df1	df2	Sig.
Results	Based on Mean	.127	1	38	,723
	Based on Median	,145	1	38	,706
	Based on Median and with adjusted df	,145	1	37,983	,706
	Based on trimmed mean	,158	1	38	,693

Based on the table above, it is found that the sig value based on mean is 0.723 > 0.05, so it can be concluded that the variance of the experimental class and control class data is the same or homogeneous. Based on the results above, it can be concluded that the post test data for the experimental class and control class have normal data and homogeneous variance, so that hypotheses can be tested. After carrying out the t test analysis using the SPSS version 26 program, the following results were obtained.

Table 5. Results of Hypothesis Test Analysis for Experimental Class and Control Class

	Test Value = 1					
	t	f	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference Lower	Upper
Results	47,960	39	,000	77,100	73.85	80.35
Class	6,245	39	,000	,500	.34	.66

Based on test analysis with SPSS version 26, the sig α in two directions or sig (2-tailed) is = 0.000, so it can be concluded that (0.000 < 0.05). This means that Ho, which states that there is no difference in student learning outcomes using the 7E learning cycle learning model, is rejected and Ha is accepted. This means that there are differences in student learning outcomes in fiqh subjects, there is an influence of the 7E learning cycle model and those that do not apply the 7E learning cycle learning model, so it can be concluded that the learning outcomes of students who use the 7E learning cycle learning model are better than the learning outcomes of students who do not apply the 7E learning cycle learning model.

Based on the research results that have been obtained, it proves that the research is in line with relevant research. This can be seen from Wingki Priado's research entitled Application of Learning Cycle 7E in Islamic education Subjects for Class VII Students at Adabiyah Middle School. Where the results of the research show that H0 is rejected and Ha is accepted, with an average of 78 for the experimental class and 68 for the control class. The results of the research showed an increase in cycle I from an average of 61.31 to 71.97. In cycle II it increased from 71.97 to 78.04.

From this presentation it was concluded that learning using the 7E learning cycle model can have an influence on student learning outcomes in Islamic Religious Education (fiqh) learning. This is reinforced by relevant research in which one of the research variables, namely variable X, both uses the 7E learning cycle model. Meanwhile, for the Y variable, some of them use measurements of learning outcomes, but some are different because they use measurements of the results of learning skills.

CONCLUSION

The results of the research show that there is an influence of the 7E learning cycle learning model on student learning outcomes in class it can be concluded that 0.000 < 0.05.

This means that Ho, which states that there is no influence of the 7E learning cycle learning model on student learning outcomes in Islamic Religious Education (fiqh) learning, is rejected and Ha is accepted. This means that there is an influence on learning outcomes by applying the 7E learning cycle model, so it can be concluded that the learning outcomes of students who use the 7E learning cycle model are better than the learning outcomes of students who do not apply the 7E learning cycle model. For future researchers, we hope that this research can become a reference and material for developing the use of the 7E learning cycle model in learning.

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