



## THE INFLUENCE OF SCIENTIFIC APPROACH TO FIQH LEARNING ON STUDENT LEARNING OUTCOMES

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**Abstract:** The aims of this study were to find out whether there was an effect of the scientific approach on fiqh learning on students' cognitive, affective, and psychomotor learning outcomes at MA Al-Bairuny Sambong Dukuh. This study uses a quantitative research approach with the type of experimental research. The population in this study were all students of class XI MA Al-Bairuny Sambong Dukuh which consisted of two classes. The sampling technique in this study used saturated sampling used 2 classes, namely class XI IPS 1 as the control class and class XI IPS 2 as the experimental class. The data collection method in this study used the test, questionnaire, documentation, and observation methods, while the data analysis technique in this study used the T-test. The results showed, (1) There was an effect of the scientific approach on fiqh learning on cognitive learning outcomes as indicated by Sig level value.  $0.000 < 0.05$ , (2) There is an effect of the scientific approach on learning fiqh on affective learning outcomes indicated by the value of the Sig level.  $0.000 < 0.05$ , and (3) There is an effect of the scientific approach on learning fiqh on psychomotor learning outcomes as indicated by the value of the Sig level.  $0.000 < 0.05$ . This research will become a reference for measuring the effectiveness of the scientific approach presented by educational practitioners on various student abilities.

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## INTRODUCTION

Approach scientific is approach oriented learning or centered on student. Approach scientific be a designed learning process such such that participants educate in a manner active construct concept, law, or principle through stages observing (for identify or find problem), formulate problem , filed or formulate hypothesis, collect data with various engineering, analyzing data, interesting conclusion and communicate concept, law or found principles (Haenilah, Yanzi, & Drupadi, 2021).

One of the learning approaches in implementing the 2013 curriculum in schools is that teachers must use a scientific or scientific approach. The scientific approach is one of the recommended approaches to be applied in learning the 2013 curriculum (Khasanah, I., Supandi, S., & Kartinah, 2021). The scientific

learning approach is a process designed in such a way that students actively construct concepts in learning (Setiawan, 2019). The scientific approach to learning is put forward by the Ministry of Education and Culture as a scientific assumption that underlies the learning process. Based on the understanding of this approach, the Ministry of Education and Culture presents a scientific approach in visual learning, namely observing, asking, reasoning, trying, concluding and communicating (Lower-Hoppe, Elkins, Beggs, & Forrester, 2020). So to create an implementation of the 2013 curriculum that uses a scientific approach, teachers need to use methods and models in the stage of delivering subject matter to students so that it is hoped that there will be an understanding of the material being taught and can improve learning outcomes (Ulfah, 2022).

In implementing the 2013 curriculum, the guidelines must be understood by teachers, both teacher guidelines and student guidelines, all of which have been prepared by the government, both in relation to the national curriculum and the regional curriculum (Hasbullah et al., 2019). In addition to studying, understanding, and analyzing various guidelines as technical guidelines and curriculum implementation, teachers are also required to understand the characteristics of students (Mohali, 2019). This is important so that teachers can provide optimal service to students according to their interests, talents, abilities, and potential, so that they can develop optimally. On this occasion, teachers need to pay attention to students individually, because they have very basic differences (Lubna, 2017; Marpaung, Yolida, & Putri, 2021).

The application of a scientific approach is a challenge for teachers through developing student activities, namely observing, asking, reasoning, trying, concluding and communicating (Ahyat, 2017; Hadromi et al., 2021). Learning critical thinking skills refers to specific learning approaches that can be implemented and can be used by students in a controlled and conscious way to make them learn more effectively (Rahardjo, 2019). Learning activities in the scientific approach are activities in developing thinking skills to develop students' curiosity, so it is hoped that with this approach students will be motivated to observe the phenomena around them so that they are able to draw conclusions (Banyumas & Ulfah, 2022).

Based on the description above, it turns out that there are still many things to be found at the implementation level of Islamic Religious Education learning which are still centered on textbooks that are often found in Madrasas, in fact this has become a culture for some teachers. Teachers who teach are oriented and gain experience in PAI learning practices from textbooks. This textbook-centered PAI learning culture must be changed, because an understanding of PAI products cannot be developed solely from textbooks. Including the Fiqh learning process that took place at MA Al-Bairuny, Fiqh subjects have been taught in a way that requires students to memorize, so this is no longer contextual in its era. This pattern also creates the impression that the teacher positions students as learning objects that must always be filled. Therefore, learning Fiqh with a scientific approach is expected to have a positive impact on students, especially in Fiqh subjects. When viewed from the reality of

the life of Muslims at this time, when asked about issues related to Islamic teachings, many do not know. This is because the level of knowledge is very minimal. In addition, the lack of awareness of Muslims to study Islamic teachings in this way.

Madrasah Aliyah Al-Bairuny is one of the private madrasahs among the Al-Mimbar Sambong Dukuh Jombang Islamic boarding school which implements *full day school*. As far as the researcher's initial observations, the implementation of a scientific approach to learning Fiqh at MA Al-Bairuny, there are several problems, especially in the aspects of planning, implementation, and learning support. By still using conventional methods, namely lectures, questions and answers, and giving assignments, the scientific approach is not yet clear. In terms of the carrying capacity of infrastructure, especially supporting books, computers and projectors are not yet available in each class, and internet connections are still very limited.

This fact is a problem in the world of education today. Weak teaching and learning process, especially in Islamic education subjects. Students tend to be less directed to think harder in the teaching and learning process (Supena, Darmuki, & Hariyadi, 2021). Even worse if students tend to be weak in motivation and interest in critical thinking. Weak motivation and student interest can be seen from low creativity, relatively boring, passive thinking, to the point of ignoring the learning process (Rozi, 2019). Because this can also come from strategies, methods, or learning models that are relatively dominant, accustomed to active teacher learning models, while students are passive and not supported by learning media that increase student motivation and interest (Zunidar, 2019). Such a learning method or model will result in the condition of the activities and student learning outcomes not being able to reach the subject achievement target (Wahid, Iq Bali, 2021).

Overcoming this problem, a teacher should try to make improvements to the learning model for the development of students' learning abilities and values (Emma, 2017). A learning model that can be applied is the scientific approach. The 2013 curriculum emphasizes the priority of using this scientific approach with the intention of presenting learning concepts with more recognition and a more scientific understanding. To realize the activities of observing, collecting information and reasoning a student well and effectively, media is needed to support student understanding (Alawiyah, 2021).

Like research conducted by Dadan Suryana (2017) which explains that a scientific approach can reach students in the ability to observe, ask, try, reason, and communicate through the development of themes that have been implemented so far. Experienced learning process by student as effort *discovery learning*. Development process ability think this be a discovery process learning as meaningful learning. Furthermore, this opinion is also supported by research conducted by Rahardjo (2019) approach scientific have necessary steps passed optimally, so step next could held optimally too. Difficult expect child could have Step good reason if child no have enough data to get from Step observation and ask. Likewise development, Skills child in Step communicate also difficult

optimized if child no have enough observational data and results reasoning as ingredient communication. If the teacher wants children he taught have good science process skills, then the teacher should capable optimizing Step beginning approach scientific : stage data collection .

From the facts found in some of the results of these studies, it seems to be a finding that will be different from the results of this study. This research is said to be different because the subject/object of the research will be applied to adolescent students, namely class XI students who incidentally are already familiar with thinking, reasoning, and expressing opinions. Students at this age will be able to absorb understanding from observations and experiences more easily than young children who need to use simpler communication to make it easier for them to understand.

So if you look at the position of this research, it will be a real novelty to see that there is great hope that can be contemplated in the evaluation of learning methods. This research will make it easier for education movers, especially teachers, to examine the effectiveness of scientific learning methods to develop activities and student learning outcomes. Seeing the facts above, the researcher became interested in seeing how the scientific approach was implemented in Jurisprudence learning, so the researcher specifically raised the title "The Effect of a Scientific Approach on Jurisprudence Learning on Student Learning Outcomes at MA Al-Bairuny Jombang". This research is useful to find out how much influence this approach has on student learning outcomes. As for the research object, it took place at MA Al-Bairuny Jombang.

## **RESEARCH METHOD**

This study uses an experimental research design. The population of this study were all students of class XI IPS at MA Al-Bairuny Jombang, totaling 54 students. The sampling technique used was saturated sampling and a sample of 54 students of class XI IPS MA Al- Bairuny Jombang was obtained. In this case, the researcher used a scientific approach which was applied to class XI IPS 2 with a total of 26 students or called the experimental class, and class XI IPS 1 with a total of 28 students as the control class or were not given treatment using a scientific approach. Then after that the two classes are given a post test, the results of which will be used as calculation data in SPSS 26, whether there is an influence of the scientific approach or not. To analyze the hypothesis, a T-test was used to distinguish between the two means derived from the study sample.

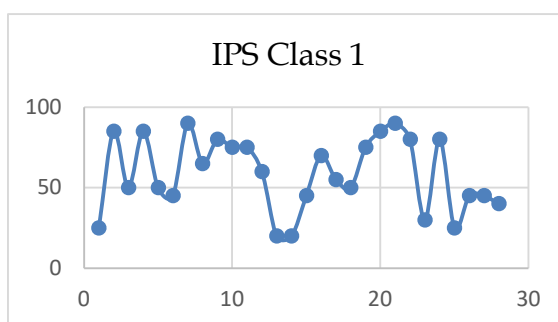
## **RESULT AND DISCUSSION**

The scientific approach becomes an objective method for the teaching and learning process with a scientific approach in which the learning materials are factual and concrete, teacher delivery and student responses are reciprocal without any doubts and presumptions, as well as the concept of encouraging students to think critically, analytically and rationally (Suryana, 2017; Syafar, Rofiqoh, & Maghfirah, 2022). The realm of scientific learning models is divided into 3 aspects, namely knowledge, attitudes and skills (Setiyadi et al., 2017).

MA Al-Bairuny Jombang is one of the Islamic educational institutions that applies a scientific approach, including in the subjects of Islamic religion. However, to prove and find out the effectiveness of applying the scientific approach to student learning outcomes an analysis test will be carried out. In the following, a description of the analysis will be presented.

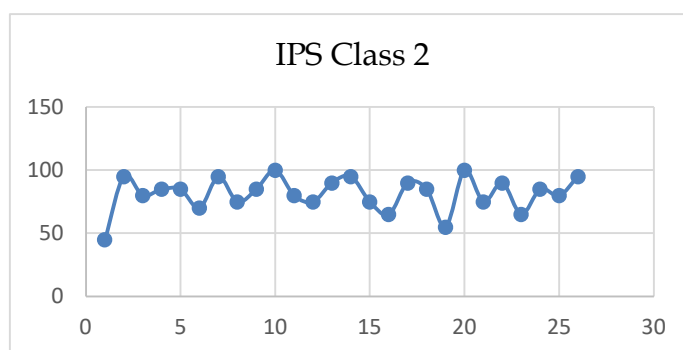
### Normality test

Analysis of the implementation of learning material on marriage by using the post test value normality test. This test is a test carried out with the aim of assessing the distribution of data in a group of data or variables, whether the data distribution is normally distributed or not. In this case the researcher used the Kolmogorov Smirnov test via SPSS 26 For Windows. The results of the normality test for post-test scores and questionnaires for the control class and the experimental class are presented in the following table. The conventional learning model in class XI IPS 1 (control class) with a total of 28 students was treated for 2 lessons so that the recapitulation data for the post-test scores of students was obtained in the following graph 1.



Picture 1 . Diagram of IPS Class Post Test Score Results 1

From the results of the graphic description above, it shows a row of post-test scores obtained from 28 students in class XI IPS 1 as the control class of 25, 85, 50, 85, 50, 45, 90, 65, 80, 75, 75, 60, 20, 20, 45, 70, 55, 50, 75, 85, 90, 80, 30, 80, 25, 45, 45, 40. Then analyze the implementation of learning material on marriage using the Scientific Approach learning model in class XI IPS 2 (experimental class ) was also treated for 2 lessons so that data on the recapitulation of the results of the students' post-test results was obtained in the following graph 2.



Picture 2 . Diagram of IPS Class 2 Post Test Score Results

Figure 2 shows a series of post-test scores of 26 students in class XI IPS 2 as the experimental class, namely 45, 95, 80, 85, 85, 70, 95, 75, 85, 100, 80, 75, 90, 95, 75, 65, 90, 85, 55, 100, 75, 90, 65, 85, 80, and 95. Based on the results of the post test scores in graphs 1 and 2, then a normality test was carried out with SPSS 26. The normality test was carried out to find out whether the data research comes from a normal population or not. If the research data comes from a normal distribution then proceed to hypothesis testing. The following table shows the normality test results for the control class and the experimental class.

**Table 1 . Student Questionnaire Data Normality Test Results**

<b>One-Sample Kolmogorov-Smirnov Test</b>		Control	Experiment
N		28	26
Normal Parameters <sup>b</sup>	Mean	20,71	34,69
	Std. Deviation	9,443	2,710
Most Extreme Differences	Absolute	,120	,168
	Positive	,120	,120
	Negative	-,099	-,168
Test Statistic		,120	,168
Asymp. Sig. (2-tailed)		,200 <sup>c,d</sup>	,056 <sup>c</sup>
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			
d. This is a lower bound of the true significance.			

Based on the table above, it can be concluded that the data is normally distributed because it has a Sig > 0.05. The experimental class has a sig of 0.056 and the control class has a sig of 0.200 which is greater than 0.05. So, both control class and experimental class data are normal data.

### Test Independent Samples Test

Furthermore, researchers used the Independent Samples Test or t-test to determine whether or not there was an effect of a scientific approach on learning Fiqh on students' learning outcomes at MA Al-Bairuny Sambong Dukuh. Analysis output results using SPSS 26, the Influence of a Scientific Approach to Learning Fiqh on Student Learning Outcomes.

**Table 2. SPSS Output Results 26 The Effect of a Scientific Approach On Fiqh Learning Against Student Learning Outcomes**

		Independent Samples Test									
		Levene's Test for Equality of Variances			t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Nilai	Equal variances assumed	12,501	,001	-4,449	52	,000	-22,775	5,119	-33,047	-12,503	
	Equal variances not assumed			-4,529	44,678	,000	-22,775	5,029	-32,905	-12,644	

The output results of hypothesis testing in the Independent Samples Test table show that the effect of a scientific approach on learning jurisprudence on students' cognitive learning outcomes has a significance level of 0.000 where Sig.  $0.000 < 0.05$ . This shows that there are differences in cognitive aspects of learning outcomes in fiqh learning that uses a scientific approach model with learning that uses conventional models. So from this score, it is also concluded that there is a significant influence from the scientific approach to learning jurisprudence on learning outcomes in the cognitive aspects of students.

Approach scientific This certainly has goals so that it reaches real targets and learning directions (Persada, Djatmika, & Degeng, 2020). Among them (1) to improve cognitive abilities, such as students' thinking, (2) to build students' abilities and skills to solve problems systematically, (3) to create an atmosphere of awareness of student learning which is their need, (4) to obtain learning outcomes in accordance with learning targets, (5) to guide students to practice communicating about various ideas such as writing scientific papers, and (6) to construct student characteristics (Septina et al., 2018). So from the influence of the scientific approach to learning outcomes, students will be able to achieve learning that is in accordance with the objectives of the scientific approach.

## CONCLUSION

Based on the data analysis and discussion above, it is known that using a scientific approach to learning jurisprudence has a positive influence on student learning outcomes on marriage material in class XI MA Al-Bairuny Jombang. The output results of hypothesis testing in the Independent Samples Test table show that there is an influence of a scientific approach to learning jurisprudence on student learning outcomes has a significance level of 0.000 where Sig.  $0.000 < 0.05$ . This means that it can be concluded that there is an influence of the scientific approach on learning jurisprudence on student (cognitive) learning outcomes at MA Al-Bairuny Sambong Dukuh. The scientific approach to fiqh subjects fulfills the criteria for the effectiveness of cognitive activity in learning

and student learning outcomes. This research will become a reference for measuring the effectiveness of the scientific approach presented by educational practitioners on various student abilities. It is expected that education practitioners can make students as subjects in learning.

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