

The Effect of Blended Learning Model and Higher Order Thinking Skills on Students' Learning Achievement

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Abstract. *The traditional learning model makes students only spectators and listeners, so the learning process becomes passive. Limited time is also causing a lack of students' absorption of the material presented. The purpose of this study was to compare student learning outcomes that use a blended learning model and the traditional learning model. This study used a quasi-experimental approach with a nonequivalent factorial pretest-posttest control group design. The instruments to collect data included tests of higher-order thinking skills and learning achievement tests. The results of the study show that the blended learning model has a significant influence on student achievement in Islamic Religious Education subject. There is a sizable difference in student achievement between the experimental group and the control group. This research perhaps helps lecturers understand how to apply blended learning.*

Keywords: *Blended Learning Model, High Order Thinking Skills, Islamic Religious Education, Students' Achievement*

INTRODUCTION

The process of teaching and learning is crucial in the application of learning models, as learning is an ever-evolving science that adapts to the changing needs of the times, including the development of technological knowledge (Millionshchikov, 1974). Technological advancements have led to improvements in learning activities in education, such as the growing variety of learning materials available, which can assist lecturers in creating and integrating relevant learning models to achieve students' educational outcomes (Kristiawan et al., 2021).

Success in education is closely linked to success in the learning process, which involves watching, seeing, and comprehending learning material (Agung, 2021). To ensure that students understand and comprehend the material well, lecturers must possess knowledge, abilities, and expertise in teaching, which can hone students' thinking skills and improve their achievements, as students are expected to have high intellectual abilities, potential, and achievement, as well as some higher-order thinking skills. Students are expected to be able to compete outside if they can think at a high level and influence their learning accomplishments (Zakaria & Iksan, 2020).

Research has shown the effect of blended learning models on learning achievement but has not examined higher-order thinking. Additionally, research has explored the impact of blended learning models on learning motivation, distinguishing motivation from learning achievement. Based on previous research, this study is innovative as it examines blended learning models, higher-order thinking, and learning achievement. It is also new to the Teaching Methodology of Islamic Religious Education course.

Higher-order thinking skills (HOTS), according to Nugroho (2018), are a higher level of thinking that goes beyond merely remembering information, presenting facts, or carrying out processes. HOTS requires the ability to perform something based on existing reality. Thinking skills are a combination of two terms with distinct meanings: thinking and skills. Knowing, remembering, planning, and preparing are all cognitive processes. Skills involve gathering, selecting information, drawing conclusions, analyzing, assessing an argument or concept, making judgments, and reflecting (Fanani, 2018). HOTS are essential for students because they allow them to think critically and solve problems. Emotional factors, in addition to high-level thinking, are critical in promoting students' learning success. One of the characteristics that students will require in the future is the quality of their learning success.

Higher-order thinking skills are closely related to how students handle challenges in the classroom. Following the Regulation of Ministry Education No. 18 of 2013 about Curriculum Implementation, students require the ability to communicate, be creative, and think critically for future competitiveness. Lecturers play a vital role in organizing and pushing their students to think critically. Some of the motivations used by local lecturers include starting and ending lessons with questions that lead to higher-order thinking skills, including brainstorming activities in the middle of the lesson to encourage students to find ideas and think critically, and assigning open-ended assignments as tasks to determine whether their creativity and understanding of the lessons learned follow the characteristics of higher-order thinking (Conklin, 2012).

High-level talents are divided into three categories: transfer of learning outcomes, critical thinking, and problem-solving (Brookhart, 2010). According to Conklin (2012), higher-order thinking skills involve both critical and creative thinking. These skills are a process of profound and extensive thinking that involves processing information critically and creatively to deal with and solve complex problems and involves students' analytical, evaluating, and thinking levels. Technology advances can be used to support learning practices that engage active students in the learning process and promote higher-order thinking abilities and learning accomplishment.

According to Dosinaeng et al. (2019), while students can handle issues related to numbers and algebra, they often struggle with geometry, data analysis, and probability. Bloom's taxonomy indicates that most students' abilities remain in the category of analyzing, with only a few reaching the level of producing when solving algebraic problems. To address this, the researcher suggests that secondary school teachers familiarize their students with non-routine questions to develop higher-order thinking skills (HOTS), that prospective teacher students become familiar with HOTS-oriented problems, and that prospective teacher lecturers help students develop HOTS during college to prepare them for their future teaching careers.

Blended learning, which combines online and face-to-face learning, is an effective and efficient approach to boosting student learning achievement (Dwiyogo, 2014). Students are required to actively monitor changes in their group, which promotes engagement in learning activities. Blended learning also allows students to utilize current materials and develop their thinking skills. According to Garrison (2014), this model is particularly effective in improving students' higher-order thinking skills as it enables them to discuss and analyze information obtained from various sources. In the case of Teaching Methodology of Islamic Religious Education courses, researchers have identified several flaws with the current learning process, including limited student engagement, restricted access to new sources, and insufficient development of critical thinking skills.

To address these challenges, the purpose of this study is to examine the effect of blended learning and high-order thinking learning models on student achievement in Teaching Methodology of Islamic Religious Education. Specifically, the study aims to describe the differences in learning achievement between students who use blended learning and those who use traditional learning models, as well as differences in learning achievement between high-level and low-level thinkers. The study also intends to explore the effect of the interaction between learning models and students' thinking on Teaching Methodology of Islamic Religious Education learning achievement.

This article contributes to the existing literature by providing educators with a practical guide for applying blended learning to improve student achievement. Additionally, it focuses on the development of higher-order thinking skills in the context of Islamic teaching, an area that has received less attention in previous studies. The study is also supported by prior research that has shown the positive effects of blended learning on students' higher-order thinking skills (Yulianti & Lestari, 2018; Rahmi et al., 2019) and problem-solving skills (Nadhiroh & Latifah, 2020). However, it is important to note that spot assessment is needed to evaluate the effectiveness of this approach, as demonstrated by Saefullah et al.'s (2020) study of blended learning in Thermodynamic material.

METHOD

This study utilized a quasi-experimental research design, which means that the selection of study subjects was not random, and the research was conducted using pre-defined classifications (Back & Hwang, 2005). The variables in this study consisted of independent factors, moderator variables, and dependent variables. The independent variable in this study was the learning model, which encompassed both traditional learning models and blended learning models. The moderator variable was high-level thinking, which was divided into two categories: high-level thinking and low-level thinking.

The dependent variable in this study was the learning achievement of the Islamic Religious Education teaching approach. The study employed a two-way factorial design known as the nonequivalent pretest post-test control group design. This design was chosen because previous studies by Hastjarjo (2019), Ratchna et al. (2019), and Wulandari et al. (2021) have indicated that when a study is conducted on a sample group with similar characteristics, one group is treated while the other serves as the control group.

Table 1. Two-Way Factorial Research Design

Learning Model	Conventional (A₁)	Blended Learning (A₂)
High-Level Thinking (B ₁)	A ₁ B ₁	A ₂ B ₁
Low-Level Thinking (B ₂)	A ₁ B ₂	A ₂ B ₂
\sum Total	\sum A	\sum B

Notes: A₁B₁ for students with high-level thinking in conventional learning, A₁B₂ for students with low-level thinking in conventional learning, A₂B₁ for students with high-level thinking in a blended learning, and A₂B₂ for students with low-level thinking in a blended learning.

In this study, 210 students were dispersed over groups A, B, C, D, E, F, and G. The sample approach utilized in this study was purposive sampling (Marsha & Ghazali, 2017). Group A, C, and G were decided based on the average value of computer science B, graduated from high school in 2019, and began studies at IAIN Curup in the 2019/2020 academic year. Furthermore, one experimental group, one control group, and one group were chosen from the three courses to assess the validity of the questions. The group is determined by drawing lots. The first group was designated as the experimental group, the second as the control group, and the third as the group for verifying the validity of the questions. The group C is the experimental group, the group A is the control group, and the group G is the test validity group, according to the draw findings. The following table describes the sample group.

Table 2. Number of Research Samples

No	Groups	Sample	Amount
1	C	Experimental Group	30
2	A	Control Group	30
Total			60

After selecting two groups as study samples, a test of hot questions and learning accomplishment of the Teaching Methodology of Islamic Religious Education was conducted. The hot test was used to assess who thinks at a high-level vs. who thinks at a low level. According to the hot test analysis findings, 13 students in group C believed high level and 17 students thought low level, whereas 12 students in group A thought high level and 18 students thought low level. The data is shown in the table below:

Table 3. HOTS in Test Results

HOTS Level	Experimental Group	Control Group	Amount
High	13	12	25
Low	17	18	35
Total	30	30	60

Furthermore, because this study employs factorial analysis, the sample group must be determined based on the similarity of the number of hot categories in each cell to ensure that each group of students in each group receives the same number of samples, the number of samples determines the number of samples with the same value in each cell, namely 12 students. The sample group is chosen based on the hot value category, with a maximum value of 100 and a minimum value of 0. The high-value hot category has a value 51 to 100, whereas the low-value hot category has a value between 0-50. Furthermore, 24 students with high hot are drawn from students whose scores are in the high upper range, and 24 students with low hot are drawn from students whose scores are in the low limit. The hot scores for 12 kids who were not assigned to a cell group were in the high and low ranges. Figure 1 depicts the distribution of the sample groups used.

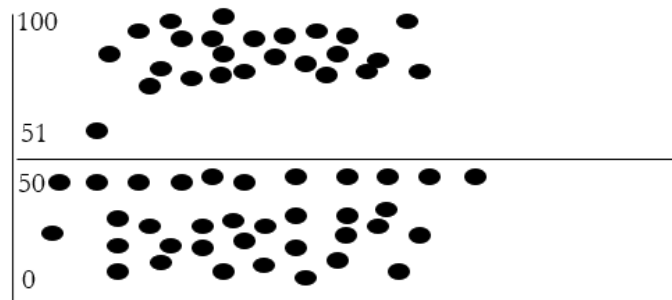


Figure 1. Distribution of Sample Group

The following table also shows the number of students divided into high-level and low-level thinking groups.

Table 4. Grouping the Number of Students Based on the Hots Questions Test Results

HOTS	Sample of Experimental Class PAI GroupC	Sample of Control Class PAI GroupA	Amount
High	12	12	24
Low	12	12	24
Total	24	24	48

FINDINGS

Data from high-level thinking and low-level thinking studies were derived from the outcomes of student assessments in which they responded to hot questions ranging from comprehending (C4) to evaluating (C5) and producing (C6) (C6). The research data on students' critical thinking skills were gathered using the HOTS instrument, which consisted of 10 questions, each with four assertions. The HOTS instrument is from the Islamic Religious Education Learning and Materials for Junior High School course. According to the HOTS score data, 13 students in the experimental group have high hots, 17 students have low hots, 12 students in the control group have high hots, and 18 have low hots. Furthermore, groups are formed by taking the same number of students, namely 12 students in each group in one class. In the experimental class, 12 students with high hots and 12 with low hots were treated with a blended learning model; in the control class, 12 students with high hots and 12 with low hots were treated with a conventional learning model.

The pretest findings in the Experiment and Control groups provided the initial data on the learning achievement of the Islamic Religious Education teaching approach. This initial data determines the sample class's normality and homogeneity. The data is confirmed to be regularly distributed based on the test findings, as seen by the sig value of the normality test, which is 0.100 with a sig value of $0.123 > 0.05$, implying that the data is normally distributed.

Furthermore, to evaluate the homogeneity of the data, a Fisher test was performed by looking at the findings of F-count, with the assumption that if F-count, the sample is homogenous. The computation yielded F-count = 0.117 at the level of sig = 0.05 or 5%, with df of the numerator ($v1$) = $60-1=59$ and df of the denominator ($v2$) = $60-1=59$, and F-table = F (0 0.05) (3.15). The sample is judged homogenous because $0.117 < 3.15$.

The findings of this study are divided into several categories: a) a description of the learning achievement data of the Islamic Religious Education Teaching Methodology of students who study using the conventional learning model (lecture) A1; b) a description of the learning achievement data of the Islamic Religious Education teaching methodology of students who study using the blended learning (A2) learning model; and c) a description of the learning achievement data of the Islamic Religious Education teaching methodology of students who study using the blended learning (A2) learning model, c) Data description of learning achievement data of Islamic Religious Education teaching methodology who learns with higher order thinking (B1); d) Data description of learning achievement data of Islamic Religious Education teaching methodology who learns with low-level thinking (B1) (B2), then e) A description of learning achievement data on Islamic Religious Education teaching methodology using conventional learning models (lectures) and high-level thinking (A1, B1); f) A description of learning achievement data on Islamic Religious Education teaching methodology using blended learning and high-level thinking learning models (A2, B1); g) A description of learning achievement data on Islamic Religious Education teaching methodology using conventional learning models (lectures) and low-level thinking (A1, B2), h) Learning accomplishment statistics on Islamic Religious Education teaching approach using blended learning and low-level thinking learning models (A2, B2);

The number of samples, the highest value, the lowest value, the mean, the median, the range of empirical values, the standard deviation, the group interval, many groups, and the median in the form of a classed frequency distribution are the results of the computation of the data provided. The data recapitulation of the outcomes of the Islamic Religious Education Teaching Methodology's computation of the learning accomplishment score is shown in the table below.

Table 5. Recapitulation of Calculation Results of Islamic Education Teaching Methodology Learning Achievement Scores

Learning Model	Mean	Median	Deviation	Variance	Min-Score	Max-Score	Range	N
Conventional (A1)	68.58	72.00	18.458	340.688	44	100	56	24
Blended Learning (A2)	82.25	84.00	13.848	191.761	62	100	38	24
High-Level Thinking (B1)	90.00	91,00	8.086	63.391	74	100	26	24
Low-Level Thinking (B2)	60,92	63,00	11,127	123,819	44	80	36	24
Conventional High-Level Thinking (A1, B1)	85,17	85,00	7,930	62,879	74	100	26	12
Conventional Low-Level Thinking (A1, B2)	52,17	50,00	7,697	59,242	44	70	26	12
Blended Learning High-Level Thinking (A2, B1)	94,83	95,00	4,783	22,879	88	100	12	12
Blended Learning Low-Level Thinking (A2, B2)	69,67	68,00	5,710	32,606	62	80	18	12

Hypothesis Testing

The following table shows the calculations and data analysis findings about the effect of learning models and higher-order thinking on learning accomplishment Islamic Religious Education teaching approach.

Table 6. Two-Way ANOVA Hypothesis Test Results

No	Variance	Number of Squares	df	MK	F-Count	Score Sig	Conclusion
1	Among A	2214.083	1	2214.083	49.865	0,000	There is Difference
2	Among B	10150.083	1	10150.083	228.598	0,000	There is Difference
3	Among AB	184.083	1	184.083	4.146	0,048	There is Interaction

Table 7. Univariate of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	12548.250 ^a	3	4182.750	94.203	.000
Intercept	273310.083	1	273310.083	6155.422	.000
Learning Model	2214.083	1	2214.083	49.865	.000
High-Level Thinking	10150.083	1	10150.083	228.598	.000
Learning Model * High-Level Thinking	184.083	1	184.083	4.146	.048
Error	1953.667	44	44.402		
Total	287812.000	48			
Corrected Total	14501.917	47			

a. R Squared = .865 (Adjusted R Squared = .856)

The following table shows the results of the pretest hypothesis testing of students' critical thinking skills in the experimental and control groups.

Table 8 Hypothesis Testing Pre-Test Learning Achievement Experimental Group and Control Class

Code	N	Mean	Std. Deviation	Std. Error Mean
Experimental	4	46.04	17.640	3.601
Control	4	48.13	18.525	3.781

Table 9. Hypothesis Validation Achievement in Pre-Test Learning Experiment and Control Groups

		F	ig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Pretest Student Achievement of Experiment and Control Class	Equal variances assumed	120	730	.399	46	.692	-2.083	5.221	-12.594	8.427	
	Equal variances not assumed			-.399	45.890	.692	-2.083	5.221	-12.594	8.428	

The results of the pretest hypothesis testing on student accomplishment in the experimental and control groups produced a t-count of -0.399, as shown in the table. While the value of t-table for $\alpha = 0.05$ with $df = 46$, t-count t-table (-0.399 > 2.012), H_0 is approved, and H_a is denied. As a result, there is no significant difference in the experimental and control groups' pretest scores of students' learning achievement. As a result, student accomplishment is similar between the experimental group before utilizing the mixed learning model and the control group before using the conventional learning model.

The following table shows the results of the post-test hypothesis testing of students' critical thinking skills in the experimental and control groups:

Table 10 Hypothesis Testing Post-Test Learning Achievement Experimental Group and Control Class

Code	N	Mean	Std. Deviation	Std. Error Mean
Experimental	24	82.25	13.848	2.827
Control	24	68.17	18.253	3.726

Table 11. Hypothesis Validation Achievement in Post-Test Learning Experiment and Control Groups

		F	ig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Pretest Student Achievement of Experiment and Control Class	Equal variances assumed	.496	.068	.011	46	.004	14.083	4.677	4,669	3,497	
	Equal variances not assumed			3.011	42.887	.004	14.083	4.677	4,651	3,516	

The findings of post-test hypothesis testing on student success in the experimental and control groups received a t-count of 3.011 in the table. When t-table for $\alpha = 0.05$ and $df = 46$ indicates that t-count > t-table (3,011 > 2,012). Thus, H_0 is rejected, and H_a is approved. As a result, there is a substantial difference between the experimental and control groups' post-test scores of students' learning achievement. As a result, there is a substantial difference in student accomplishment between the experimental group taught using the blended learning model, and the control group taught using the traditional learning model.

DISCUSSION

Based on the findings of the previously disclosed data analysis and hypothesis testing, it is possible to conclude that the learning model and thinking skills influence the learning accomplishment of the Islamic Religious Education Teaching Methodology.

Several findings need to be addressed to be used as a reference to enhance Islamic Religious Education Teaching Methodology learning. These findings will be utilized as a starting point for further research on 1) the superiority of the mixed learning model over traditional learning models, 2) The dominance of higher-order thinking skills over lower-order thinking skills, 3) In the Islamic Religious Education Teaching Methodology, there is an effect between the learning model and thinking skills on student accomplishment, 4) The benefits of the Blended Learning model for students with higher-order thinking skills above traditional learning models

for students with high-level thinking skills, 5) The benefits of Blended Learning models for students with low-level thinking skills above traditional learning models for children with low-level thinking skills (Sumarmi et al., 2021; Yunus & Syafi'i, 2020).

The first finding indicates disparities in learning accomplishment between students who use the mixed learning model and those who use the traditional learning model. According to statistical analyses, the mixed-learning model outperforms the traditional learning paradigm. It is demonstrated by the fact that the learning accomplishment of the group of students who use the mixed learning model is more significant than the learning achievement of the students who use the conventional learning model.

The ongoing blended learning strategy can motivate students to increase their learning achievement and mastery (V. K. Sari & Wibowo, 2021). A blended learning strategy can improve students' attention and performance in the Islamic Religious Education Teaching Methodology topic. Blended learning is a new technique that can assist students because it is also a type of ICT support for new learning. Even blended learning is regarded as one of the top 10 presenting methods growing in the information delivery sector (I. K. Sari, 2021).

According to the description, studying Blended Learning may boost attractiveness and encourage students to continue learning and following the learning process. This learning model can also assist instructors in developing lessons based on students' learning patterns and prepare pupils for future problems. Blended learning can aid in developing superior learning processes based on learning styles and preferences (Widayanti & Suarnajaya, 2021). On the other hand, learning with traditional methods encourages pupils to be more passive because they only hear the lecturer discuss the content and examples in the book. When the instructor concentrates on instances from the book, the learning becomes tedious, and students lose interest in paying attention and acquiring the content. It keeps pupils inactive, and their recall of what the lecturer says only lasts for a short time, affecting student learning performance.

Blended learning focuses on overcoming difficulties experienced by students connected to feelings, experiences, and understanding in learning without a lecturer, or in other words, the lecturer gives answers to student problems that the student in question chooses. A favorable relationship between professors and students, such as offering attention and excitement, is thought to make it simpler for students to embrace the lecturer's learning and, as a result, can boost student learning accomplishment (Adri et al., 2021; Dwiyogo, 2014; Garrison, 2014).

According to the description, blended learning may captivate students' attention, causing them to become eager and active learners, and the knowledge and material received will be more incorporated into students' minds. It can boost students' willingness to learn, improving student learning success. On the other hand, learning with traditional methods causes pupils to be more passive and listen to the lecturer add content and examples in the book or write on the chalkboard. When lecturers use examples from books or blackboards, which might be repetitive, students' excitement or interest in acquiring content suffers. It keeps pupils inactive, and their recall of what the lecturer says only stays short, affecting student learning performance (Awaluddin, 2018; Istiningsih & Hasbullah, 2015; Wardani et al., 2018).

Furthermore, with students playing a passive part in the learning process, the influence on student mastery of learning information is limited. Students must study actively and be able to improve their memory in order to reach the objective (Utama, 2020). Maximum learning achievement indicates effective learning; if students are inactive, the reverse will occur.

About students' active participation in classroom learning, it can be demonstrated that students actively correlate each new subject matter with a range of prior knowledge and experiences that exist in everyday life or experiences discovered in real life. As a result, pupils find it easier to translate the meaning of the information, which improves learning accomplishment.

The second finding in this study is that there are disparities in learning accomplishment between Islamic Religious Education Teaching Methodology students with higher-order thinking abilities and Islamic Religious Education Teaching Methodology students with lower levels of thinking, based on the analysis findings. Islamic Religious Education Teaching Methodology's learning accomplishment with higher-order thinking skills is more significant than Islamic Religious Education Teaching Methodology's learning achievement with low-order thinking abilities. A person with high-order thinking abilities will enhance his/her self-achievement and well-being through various tactics, such that pupils with higher learning levels tend to attain greater levels (Wibawa & Agustina, 2019).

Students with higher-order thinking abilities pick more challenging assignments, are persistent in addressing new problems, and work more to attain their goals. It demonstrates that kids with higher-order thinking skills strive for success, are more optimistic, and continually look for answers to challenging problems. On the other hand, students with inadequate thinking skills lack confidence in their abilities, readily give up on finishing the tasks assigned, and prefer to avoid work with a high level of complexity because they lack confidence in completing more significant projects and only feel capable of doing easy tasks.

These findings are consistent with those of (Mahmudi & Suroso, 2014), who discovered a positive association between higher-order thinking skills scores and lower-order thinking skills scores in their study. However, these findings contradict other findings that thinking capacity had no substantial influence on student accomplishment.

The third finding in the third hypothesis demonstrates that traditional and blended learning and thinking abilities impact student accomplishment in Islamic Religious Education Teaching Methodology. The learning model is a conceptual framework that specifies how to organize learning events in order to attain learning goals. Both internal and external factors determine the effectiveness of applying the learning model. In this situation, the internal condition is the student's memory (Irman, 2019). Student memory is linked to both higher-order and lower-order thinking. Using the appropriate learning model can help pupils think more clearly (Leung & McGrath, 2010). Enhancing students' thinking skills will influence their learning achievement. The learning model and level of thinking have an impact on learning accomplishment.

The fourth finding in this study demonstrates disparities in learning accomplishment between Islamic Religious Education Teaching Methodology students with higher-order thinking skills and learning utilizing blended learning models against traditional learning models. Islamic Religious Education Teaching Methodology students with higher-order thinking skills who study with a mixed learning model outperform Islamic Religious Education Teaching Methodology students with higher-order thinking skills who learn with traditional learning models. Students with higher-order thinking abilities will boost their self-achievement and well-being in numerous techniques so that students with the capacity for higher order thinking tend to have high achievement as well.

Based on the analysis findings, the fifth conclusion in this study demonstrates that there are disparities in learning accomplishment of the Islamic Religious Education Teaching

Methodology for students with low-level thinking skills studying with the blended learning model (Qasrawi & Beniabdelrahman, 2020). Islamic Religious Education Teaching Methodology Pupils with low-level thinking abilities who study with the mixed learning model learn better than students with low-level thinking skills who learn with conventional learning models.

The main characteristic of low-level thinking skills is that they are doubtful about their abilities, so they quickly give up on doing the given task. Even though these students can do it, students with low-level thinking skills need more confidence in completing the task. Traditional learning tends to make students more passive since they merely listen to the lecturer's information. Therefore the conventional learning model is consistent with the characteristics of students who have low-level thinking skills (Qasrawi & Beniabdelrahman, 2020). Furthermore, Islamic Religious Education Teaching Methodology pupils with lower-order thinking skills obtain more fantastic learning achievements while studying using the blended learning model rather than the conventional approach.

CONCLUSION

The following conclusions can be formed based on the study findings and discussion of the research findings 1) the learning accomplishment of Islamic Religious Education teaching methodology students who study with Blended Learning is higher than the learning achievement of Islamic Religious Education teaching methodology students who study with traditional learning models; 2) Learning Islamic Religious Education teaching methodology achievement of students with high-level thinking skills is higher than learning Islamic Religious Education teaching methodology achievement of students with low-level abilities; 3) There is an interaction effect between learning model and thinking ability on learning achievement of Islamic Religious Education teaching methodology; 4) Islamic Religious Education teaching approaches with high-order thinking abilities learning with blended learning models to outperform those with traditional learning; 5) Studying achievement of the Islamic Religious Education teaching style is higher among students with lower-order thinking skills when learning with the blended learning model than when learning with conventional methods. Recommendations in this study are addressed, 1). Lecturers for other subjects apply the blended learning model because this model is proven to increase learning achievement, 2). Future researchers, to add intellectual intelligence variables or IQ variables.

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AUTHORS' CONTRIBUTION

Author	Contribution
Guntur Gunawan	As a conceptualization, providing ideas for research
Johanes Sapri	Develop and design a research methodology
Hadiwinarto	Develop and design a research methodology
Yuyun Yumiarty	Provide financial assistance for scientific publications.