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# Application of AIR Learning Model to Understanding the History of the Establishment of the Abbasiyah Dynasty

Wahyu Hidayat<sup>1\*</sup>, Sri Mulianah<sup>2</sup> dan Asriani<sup>3</sup> Institut Agama Islam Negeri (IAIN) Parepare\*<sup>1, 2, 3</sup> \*Iemail: wahyuhidayat@iainpare.ac.id,

#### **Abstract**

This study purpose to determine the effect of the Auditory, Intellectually, Repitition (AIR) learning model on the historical understanding of the students' abbasid dynasty. This study uses a quantitative approach, in which data collection uses a test description instrument. The analysis technique in this research is descriptive analysis (mean and standard deviation) and t-test analysis to test differences in understanding of the material. The results of this study indicate that in the implementation of the AIR and students 'understanding is categorized as high 0.97 or 97%, it is said to be high because the implementation of the Auditory, Intellectually, Repitition (AIR) learning model can improve students' understanding. on learning Islamic Cultural History. There is an effect of the Auditory, Intellectually, Repitition (AIR) learning model on students' understanding of the learning of the history of the establishment of the Abbasid Dynasty class XI MIA.3 MAN 2 Barru.

**Keywords** : AIR model, Dynasty of Abasiyah

#### Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran Auditory, Intellectually, Repitition (AIR) terhadap pemahaman sejarah dinasti abbasiyah mahasiswa. Penelitian ini menggunakan pendekatan kuantitatif, dimana pengumpulan data menggunakan instrumen tes deskripsi. Teknik analisis dalam penelitian ini adalah analisis deskriptif (mean dan standar deviasi) dan analisis uji-t untuk menguji perbedaan pemahaman materi. Hasil penelitian ini menunjukkan bahwa dalam penerapan AIR dan pemahaman siswa dikategorikan tinggi 0,97 atau 97% dikatakan tinggi karena penerapan model pembelajaran Auditory. Intellectually. Repitition (AIR) dapat meningkatkan siswa ' memahami. pada pembelajaran Sejarah Kebudayaan Islam. pengaruh model Ada pembelajaran Auditory, Intellectually, Repitition (AIR)

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terhadap pemahaman siswa pada pembelajaran sejarah berdirinya Dinasti Abbasiyah kelas XI MIA.3 MAN 2 Barru.

Kata Kunci : Model AIR, Dinasti Abasiyah

#### A. Introduction

One of the external factors that affect student learning outcomes, among others, is the teaching and learning process that occurs in schools. In general, the learning process still uses a learning model that is dominated by educators. This kind of learning model causes students to tend to be less active and easily bored when learning takes place so that the absorption of the material delivered is less than optimal. One of the things that need to be considered by a teacher is how appropriate the use of a learning model is, adjusting the situation and conditions of learning so that the learning model can be applied properly.

The learning model can be used as a pattern of choice, meaning that teachers may choose an appropriate and efficient learning model to achieve their educational goals. The author assumes that the Auditory, Intellectually, Repititon (AIR) learning model strongly supports teaching and learning activities

that are not only teacher-centered because the Auditory, Intellectually, Repititon (AIR) learning model is very helpful for students to be more active in teaching and learning activities as well as Students are more free to understand and solve problems in their own way. So that a teacher must present a problem that is easily understood by students so that students can easily respond to the problems raised by the teacher. Considering that there are so many subject matter taught in achieving the learning objectives themselves, while students do not take the learning process seriously because the learning model used by the teacher is less attractive and most students do not pay attention to the teacher when explaining the learning Students material. do not really understand the lesson said Aulia Fatima, one of the class XI students. MIA.3. Therefore, the Auditory, Intellectually,

The subject matter that will be taught by a teacher here is material about the History of the Founding of the

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Abbasid Dynasty. The importance of the history of the establishment of the Abbasid dynasty is to be studied because during the reign of the Abbasid State, especially during the caliphate of Harun ar-Rashid and his son Al Makmun, it was the golden age of science and culture in the Islamic world and at this time Muslims also gave freedom to the war of reason and mind. for human progress at that time. During this caliphate, it was also the result of human thought and scientists from various nations in the world, which at that time developed complementary and added to the progress of science in the Islamic world. So that Muslims from Arabs and Persians from non-Arabs who involved in the world of education produce Islamic scientists' works and works in foreign languages, especially Greek. In addition, Muslim scientists explored 3 continents to study, namely the continents of Asia, Europe, and Africa which are considered continents that have progressed very rapidly from all sciences. After returning from the place of wandering Muslim scholars read and translated the books. From these books, the Muslim community at that time learned and

continued to develop their knowledge in various mosques which were then used as centers of educational activities. So the Islamic community at that time pointed to the extraordinary development of science.

Based on the initial observations on Islamic Cultural History learning at MAN 2 Barru, a problem was found. Problems related to teachers who usually still use learning models that make students inactive in the learning process and are not in accordance with Islamic Cultural History learning itself, meaning that the teacher only instructs students to record/copy the subject matter as well as the teacher explains the material being taught at that time to students without giving individual or group assignments related to the material that is able to grow the mental and self-confidence of students while also making students understand the material being taught faster using the Auditory, Intellectually, Repititon learning model. Because the Auditory, Intellectually, Repititon (AIR) learning model is in the final stage of Repitition, the learning process, namely the repetition of learning materials that have been taught by the teacher, will be carried out by students so that they are

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faster and easier to understand. In addition, the second problem is the low interest of students in learning Islamic Cultural History which has an impact on student learning outcomes. To overcome these problems, an appropriate learning model is needed so that students can easily understand the material presented by the teacher. In addition, the second problem is the low interest of students in learning Islamic Cultural History which has an impact on student learning outcomes. To overcome these problems, an appropriate learning model is needed so that students can easily understand the material presented by the teacher. In addition, the second problem is the low interest of students in learning Islamic Cultural History which has an impact on student learning outcomes. To overcome these problems, an appropriate learning model is needed so that students can easily understand the material presented by the teacher.

Researchers chose to use the AIR learning model because through this learning model, students' understanding of the material being taught can increase and be able to obtain satisfactory learning outcomes. This is supported by research by Ainia, Kurniasih & Sapti

(2014), research by Linuwih Sukwati (2014) stated that the Auditory, Intellectually, Repititon (AIR) learning model was able to improve speaking skills in the learning process. So that all students can be involved to be active in the learning process. As a result, the activity of students in participating in the learning process has increased from before. The AIR learning model is also a learning model that involves students more actively through 3 aspects, namely Auditory, Intellectually, and Repitition. So it can be concluded that the learning model that is sufficient to make students active so as to increase their learning is motivation the Auditory, Intellectually, Repititon (AIR) learning model. Based on these problems, the researchers are interested in conducting research.

#### **B.** Research Methods

Research on the influence of the Auditory, Intellectually, Repitition (AIR) learning model on understanding the history of the establishment of the is Abbasid dynasty experimental research or in other words, the type of research used in study this is experimental using research

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quantitative approach, with the form of One-Group Pretest-Posttest research design. The experimental research is a study that tries to find a causal relationship between the independent variable and the dependent variable, where the independent variable is deliberately controlled and manipulated.

The population in this study was all students of class XI at MAN 2 Barru School. The sampling technique in this study is the simple random sampling method, which is a sampling technique that provides equal opportunities to every member in a population to be sampled.

The instrument in this study is a test of the ability to explain the history of the establishment of the Abbasid dynasty in particular which is used to measure the ability to understand and clarify it, as well as aspects of the assessment, namely through readiness to explain the history of the establishment of the Abbasid dynasty and clarify the chronology of the establishment of the Abbasid dynasty. The data analysis technique used is descriptive quantitative analysis technique, namely the mean deviation. (mean) and standard Meanwhile, to analyze the differences in the pre-test and post-test learning outcomes, the analysis was carried out using a t-test. To determine the size of the influence of the Auditory, Intellectually, Repititon (AIR) learning model on understanding the history of the founding of the Abbasid dynasty, the eta squared formula was used.

#### C. Results and Discussion

# 1. Understanding the History of Students by Gender

Understanding the history of the establishment of the Abbasid dynasty of students according to gender above, can be explained as follows.

**Table 1. Understanding the History** 

Gender	Pre-Test		Post-Test		
	Mean	SD	Mean	SD	
Male	51.00	6.00	86.67	4.33	
Woman	49.50	5.80	87.50	4.08	

Data Source: IBM SPSS Data Analysis

It can be seen on Table 1, that the results of the pretest (before treatment) of male students obtained mean of 51.00, meaning that they were incomplete because the mean was <75, after the posttest (after treatment) an average of 86.67, means complete because the mean > 75. While female students get an average of 49.50, which means it is not complete and after the posttest (after treatment) the mean obtained is 87.50

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which means it has reached completeness. So it can be seen that there is an increase in understanding of the history of the establishment of the Abbasid dynasty which is marked by an increase in means, as well as students who have achieved completeness values after being given treatment.

Based on Table 1 above also shows that male students obtained a standard deviation value is 6.00 from the pretest results (before treatment), also the posttest results (after treatment) obtained a standard deviation value is 4.33. Meanwhile, female students in the pretest (before treatment) obtained a standard deviation value is 5.80 after the posttest (after treatment) the standard deviation was 4.08.

# 2. Understanding the Founding of the Abbasid Dynasty of Students as a whole

The understanding of the establishment of the Abbasid dynasty of students is explained in the picture below.



Figure 1. Diagram of Understanding the History

Based on the diagram above which shows that there is an increase in the average value between the pretest value (before treatment) which is mean of 49.96 with the posttest value (after treatment) with mean of 87.24 and the standard deviation value is 5.80 at pretest (before treatment) and posttest (after treatment) with a standard deviation of 4.1. So by looking at the average value that has increased, it is known that the understanding of the history of the establishment of the Abbasiyah dynasty students increases with the gain value (the difference in the average posttest average value of the pretest) which is 37.27 and the results of the pretest (before treatment) student has not reached the minimum completeness score because the score is still < 70.

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# 3. Testing Data Analysis Requirements

The validity test in this study is the expert judgment test, by consulting the performance assessment instrument with expert lecturers whether the instrument is ready to be used or not. The results of the validation that have been carried out are then revised, namely by adding, subtracting, or correcting the statement items in accordance with the suggestions given by expert lecturers.

The author conducts intensive consultation with the thesis supervisor appointed by the campus to validate and the teacher in the field. Broadly speaking, the results obtained from this expert validation are that the rubric of the performance assessment instrument that has been made is suitable for use as a practicum assessment. The feasibility is seen from the writing (spelling), the clarity of the instrument, the systematics, and the suitability of the content. Empirical testing was not carried out because the instrument used by the author was in the form of a performance assessment rubric in presenting his learning results about the history of the establishment of the Abbasid Dynasty properly and correctly, not in the form of giving multiple choice or oral tests.

#### a. Normality test

**Table 2. Normality Test** 

Test	Kolmogorov-Smirnova		Shapiro-Wilk			
	Statistics	df	Sig.	Statistics	df	Sig.
Pretest (Before treatment)	0.153	29	0.082	0.951	29	0.194
Posttest (after treatment)	0.156	29	0.070	0.935	29	0.073
*. This is a lower bound of the true significance.						

a. Lilliefors Significance Correction

Data Source: IBM SPSS Data Analysis

If sig > 0.05 then the data is normally distributed, based on the table above, the Kolmogorov-Smirnov value for the pretest (before treatment) is 0.153 with a significance of 0.082 and df is 29, because the value of sig (0.082) > 0.05as well as the posttest value The Kolmogorov-Smirnov value is 0.156 with a significance of 0.070 because the value of sig (0.070) > 0.05 so that the pretest data (before treatment) and posttest data (after treatment) are all normally distributed. As for the Shapiro-Wilk value, the provisions are the same, namely if sig > 0.05 then the data is normally distributed while if sig < 0.05then the data is not normally distributed, the pretest (before treatment) is 0.951 with a significance of 0.194 with a df of 29 as well as Shapiro-Wilk value for posttest (after treatment) is 0.935.

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## **b.** Outliers Test (Outliers)

Checking outliers or outlier data is explained using a box-plot as follows:

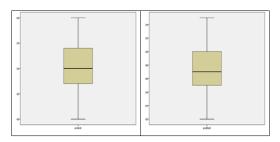


Figure 2. Box-plot

By using IBM SPSS Version 21 on the data from the pretest (before treatment) and posttest (after treatment) the box plot image above shows that there are no outliers or outliers (extreme values) both pretest (before treatment) and posttest (after treatment). Means that there is no data that deviates from another set of data. In other words, there is no data that is much different from the overall data that can affect/disrupt the data analysis process, for example the results on the average value.

## 4. Statistical Hypothesis Test

Testing the hypothesis of this study using the t test. This test is conducted to determine whether the results of this study are in accordance with the proposed hypothesis or not. The statistical hypotheses in this study are as follows:

$$H_0: \mu_1 \neq \mu_2$$

$$H_a: \mu_1 = \mu_2$$

With the test criteria if the value of sig <0.05 then  $H_0$  is rejected, which means there is an effect. And if the value of sig >0.05 then  $H_0$  failed to be rejected, which means there is no effect. Statistical hypothesis testing can also use the criteria  $t_{cal} > t_{table}$  then there is an effect, or  $H_0$  is rejected and if  $t_{cal} < t_{table}$  then there is no effect, or  $H_a$  fails to be rejected. For more details, the following t-test table based on this research is as follows:

Table 3. T-test

Test	Average Gain	Standard Deviation	Standard Error Average	t <sub>cal</sub>	df	Sig
Post-Pre	37.27	6.38	1.18	31.46	28	0.000

Data Source: Output IBM SPSS Statistics

Based on the table above, the value of t count = 31.46 with a significance value of 0.000 because the value of sig <0.05 then  $H_0$  is rejected, meaning that there is a difference in test results or understanding of the history of the establishment of the Abbasid dynasty of students between the pretest (before treatment) and after being given the AIR learning model. Meanwhile, to find out how much influence or effect the use of the AIR learning model has, using the

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Eta Squared formula, the calculation is as follows:

$$Eta \ Squared = \frac{t^2}{t^2 + (N-1)}$$

$$= \frac{31,462^2}{31,462^2 + (29-1)}$$

$$= \frac{989,857}{989,857 + 28}$$

$$= \frac{989,857}{1017,857}$$

$$= 0.972$$

The eta squared value is 0.97 because 0.97 > 0.14 then the Auditory, Intellectually, Repitition (AIR) learning model has a very large influence on understanding the history of the establishment of the Abbasid dynasty of students or also called the large effect.

#### **D.** Discussion

The author obtained data about the understanding of the history of the establishment of the Abbasid dynasty of students as a whole with mean pretest score of 49.96 and mean posttest score of 87.24, meaning that there was an increase in understanding of the history of the establishment of the Abbasid dynasty from the pretest to posttest and also obtained mean gain value of 37.27 and the value of the standard deviation of the pretest was 5.80 and the standard deviation of the posttest was 4.10. Thus,

overall, students experienced an increase in understanding the history of the establishment of the Abbasid dynasty by using the AIR learning model as evidenced by the increasing mean score and standard deviation.

Based on the results of research conducted by Ridha Muzayyana on "Effectiveness in learning which states that using the AIR learning model can increase students' active learning and material can be conveyed to students well".

Based on the theory AIR learning model is a learning model which of course also has shortcomings, for example in its application it requires careful preparation and planning and a lot of time. But besides that by applying this learning model, the learning process becomes clearer, concrete and avoids understanding only verbally (words or sentences) and also more importantly, students are more active in observing and able to adjust the theory being studied with reality in the daily life of students.

Apart from improving students' understanding, the AIR learning model can also improve students' cognitive learning outcomes based on the results

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of Winda Elinawati's research. In this study, it was proved by the data of the average pretest result = 37.96 and the average posttest result = 78.33 and  $t_{cal}$ (14.77) >(2.0066)t<sub>table</sub> with significance test of 5% or 0.05 so that with The average value of the pretest (before treatment) and posttest (after treatment) which increases means that the learning outcomes of students also increase, as well as the results of the ttest which means that the AIR learning model affects the results learning of students in Islamic Cultural History class XI Mia.3 MAN 2 Barru. Learning achievement can also be increased through the application of the AIR learning model based on the research results of Yurdiana Ika Purnamasari. This study proves the results of the data from Kolomogorov-Smirnov with a significance value of the experimental class = 0.060 and the significance value of the control class = 0.196 and tcount for the experimental class (0.776) > ttable 0.281 because tcount is greater than ttable then there is a significant effect on the use of the Auditory learning model., Intellectually, Repitition (AIR) on student achievement in class XI Mia.3 MAN 2 Barru. Thus, apart from

increasing students' understanding, the Auditory, Intellectually, Repitition (AIR) learning model can also improve student achievement and interest in learning.

#### E. Conclusion

Based on the results of the analysis that has been described, it is obtained that there is an effect of the Auditory, Intellectually, Repitition (AIR) learning model on the understanding of the history of the establishment of the Abbasid dynasty for students of class XI Mia.3 MAN 2 Barru. The AIR learning model has a very big influence on understanding the history of establishment of the Abbasid dynasty for students of class XI Mia.3 MAN 2 Barru.

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