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THE INFLUENCE OF THE AUDITORY INTELLECTUAL REPETITION (AIR) LEARNING MODEL ON SCIENCE LEARNING OUTCOMES IN ISLAMIC ELEMENTARY SCHOOL

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Abstract

This research was conducted at MI Baitul Huda Semarang. This research focuses on fifth-grade students for the 2022/2023 academic year. This study aims to determine the effect of the Auditory Intellectually Repetition (AIR) learning model on science learning outcomes in the theme material of the eight water cycles. This research is motivated by a lack of activity, enthusiasm, and low scores in science learning outcomes. This research approach is to use a quantitative approach. This study used a purposive sampling technique with a one-group pretest-posttest design model, namely an experiment conducted in one group only without any comparison group. The population used in this study was class V MI Baitul Huda, a total of 61 students, and focused on class VB as many as 30 students as a sample. The data collection method used is the test method with multiple choice objective tests. This study uses two sources of data, namely primary and secondary. The primary data source is student class V MI Baitul Huda Semarang which is the subject, and secondary data is documentation, teacher books, student books, and other supporting books. Data were analyzed using the t-test, which used the paired sample t-test. It was found that the results of the t-test were 0.000 <0.05, which means that the hypothesis is accepted, meaning that there are differences in science learning outcomes in class VB students before using the AIR model and after using the AIR model. Based on the test results of the coefficient of determination, the coefficient of determination (R Square) is 30.0%, which means that the AIR learning model influences science learning outcomes. Based on the results of the research that has been done, it is concluded that the AIR learning model influences science learning outcomes in class V MI Baitul Huda in the 2022/2023 academic year.

Keywords *AIR learning model, Learning outcomes MI Baitul Huda Semarang, Natural science*

INTRODUCTION

Education plays an important role in ensuring human development and survival (Sujana, 2019). Because education is one important factor in shaping the character and personality of a person. Education also plays a role in helping people keep up with the very rapid developments of the times and the development of science and technology. The development of complex information requires that the educational process must be prepared and implemented in a mature and optimal manner. One of the efforts to prepare oneself to face the development of information is to improve the quality of education in a better direction.

Improving the quality of education must be carried out holistically, including knowledge, skills, attitudes, and values. Improving the quality of these aspects is carried out to develop life skills through competence so that students can survive, adapt and prosper in the future so that they can make a significant contribution to the country's development.

Education is divided into three levels, namely elementary school, junior high school, and senior high school. In this case, elementary school is early childhood education that lasts during the child's school years. Basic education in elementary school offers subjects that must be mastered. The subject is natural science. IPA is a science that studies natural phenomena which involve living things and non-living things (inanimate objects) (Samatowa, 2016). Science is always taught in such a way that students gain knowledge and skills. In addition, IPA is also an empirical science and deals with facts and natural phenomena. These natural facts and phenomena make science learning not only verbal but also factual. According to (Sayekti, Ika Candra, Ika Fajar Rini, 2019), the nature of science as a process is realized through the implementation of learning that trains the process skills of finding scientific (science) products, so it is necessary to create conditions for learning science in elementary schools that can encourage students to be active and curious.

Science learning includes various aspects and expected goals. The purpose of learning science is for students to know, understand, practice, and complete learning science well (Rohima Sakila, Nenni Faridah Lubis, Saftina, Pearl, 2023). In order to achieve maximum results, in addition to the need for professional educators, good facilities, and infrastructure, it is equally important that learning methods are also needed, which encourage students to actively participate in the learning process in the classroom. The reality in practice that occurs in the field shows that science lessons taught by teachers are often still monotonous. The teacher only uses the lecture and

question and answer method to convey the material without any differences in variations of other methods. In addition, teachers also have not used any media in learning. As a result, students quickly feel bored and have difficulty understanding lessons.

Learning outcomes are an illustration of the extent to which students understand the material taught by the teacher. According to (Hamalik, 2012), which is used as a benchmark to improve the quality and also the quality of education, which can be seen from one of them, namely learning outcomes. The teaching and learning process can be said to be successful if the desired basic competencies are achieved. Learning outcomes are important for students because learning outcomes show how far students are able to understand the material. Thus, the teacher has an important role in creating quality learning. Science lessons are one of the lessons that teachers often pay attention to because learning science has an even relationship with human life and also plays a very important role in the educational process and the development of science and technology.

Based on the results of previous research that is relevant, namely from research conducted by (Zulherman, Rahman Arifudin, 2020), the results of the study proved that there was a significant influence on students' science learning outcomes with the AIR learning model, thus helping students receive lessons better. In the research conducted by Ni Ketut Ayu Kartina Dewi and Ni Wayan Rati (Ketut et al., 2020), The results of this study indicate that there is an influence of the Tri Pramana Oriented Auditory Intellectually Repetition (AIR) learning model on student learning motivation (significance value 0.00 <0.05), there is an influence of the Tri Pramana Oriented Auditory Intellectually Repetition (AIR) learning model on students' science learning outcomes (0.000<0.05), and simultaneously there is the influence of the Tri Pramana Oriented Auditory Intellectually Repetition (AIR) learning model on student motivation and student science learning outcomes (F=0.00<0.05). Based on the results of the study, it can be concluded that the Tri Prama oriented Auditory, Intellectual, Repetition (AIR) learning model influences learning motivation and learning outcomes in Natural Sciences. Research conducted by (Ngazah, 2021), in this study it was shown that there was a significant difference between the results of the pretest and the results of the posttest that had been carried out, namely that it was known that the average pretest result was 50 and the average posttest was 75. Based on the analysis of hypothesis testing, it was proven that the paired sample t-test obtained a significance value (2-tailed) 0.000 <0.05 means rejected and accepted. While the value > is -11.973 > 2.145, this means that it is rejected and

accepted. It can be concluded that the media-assisted AIR model can have an effect on science learning outcomes. On research$H_o H_a t_{hitung}\ t_{tabel} H_o\ H_a$(Badawi et al., 2022), From the results of the SPSS analysis, the paired sample t-test obtained a significant value of 0.000 > 0.05, which means that there was an increase in experimental class learning outcomes from the pre-test and post-test. And on research (Rara Dewi & Kristiantari, 2020). The results of data analysis obtained tcount = 4.103 at a significance level of 5%, and dk = 64 obtained value = 2.000 so that = 4.103 > = 2.000, then rejected and accepted. This means that there is a significant difference in the competence of science knowledge between groups of students who are taught using the Multimedia-assisted Auditory Intellectually Repetition learning model and groups of students who are taught using conventional learning. The difference between the previous research above and this research is in the use of instructional media, where this research uses image media, while the four studies above do not use media, while one study uses Dapa Circle media. While the similarities in the previous research above are both use quantitative research and the Auditory learning model.

Based on the nature of science, science learning outcomes are very important because Natural Science is a process, a product, and also a scientific attitude. In terms of process, later, students will have the ability to develop knowledge, ideas and apply the concepts obtained to solve problems encountered in everyday life. In terms of products, students are able to understand the concept of science and its relation to everyday life. From a scientific point of view, students can increase their interest in studying the objects around them, be critical, curious, diligent, and independent, as well as able to work together, as well as recognize and develop a sense of love for the natural surroundings. The success of students in achieving learning outcomes in Natural Sciences must always be considered. If the ability to learn science is low, students cannot apply it in everyday life. However, the facts on the ground show that student learning outcomes in science still tend to be low.

This condition also occurs in the implementation of science learning in class V MI Baitul Huda Klampisan. Based on the results of the initial observations that the authors conducted through interviews with the teacher, information was obtained that there were still a number of problems that occurred in the science learning process. There are still students who are less active and enthusiastic in following the lessons. In addition, teachers also do not use more innovative learning models, and not all learning processes use learning media due to the limitations of learning media in MI.

Based on the problems above, researchers are looking for solutions to solve these problems so that students become active and enthusiastic in participating in science learning in class so that they can improve student learning outcomes. The way to make learning more interesting for students is to use a learning model (Mirdad, 2020) one of them is the Auditory, Intellectually, Repetition (AIR) learning model. The Auditory, Intellectual, Repetition (AIR) learning model is a learning model that combines speaking, listening, thinking, and repetition skills (Ketut et al., 2020). Learning in class is also more fun when using media images. Pictures are visual learning aids that are used to give a concrete picture to students about the concept of material being taught by the teacher because learning science class V MI Baitul Huda has never used the Auditory, Intellectual, Repetition (AIR) learning model with the help of media images, learning with The model and media assistance should be a solution to the problems described above. Departing from this, the researcher plans to use image media to explore the Auditory, Intellectually, Repetition (AIR) learning model in understanding the learning material delivered by the teacher about the theme material of the eight water cycles.

The use of the Auditory, Intellectually, Repetition (AIR) learning model needs to be tested to determine whether it has an effect on science learning outcomes. Based on the reasons above, a research entitled "The Influence of the Auditory, Intellectually, Repetition (AIR) Learning Model on Science Learning Outcomes in Theme Material 8 Water Cycles in Class V MI Baitul Huda Semarang.

METHOD

This type of research is to use a quantitative approach with descriptive statistical analysis. Because what is used is data or information that is generated in the form of numbers, which uses systematic analysis (Siregar, 2013). This study used the one group pretest posttest design model, namely an experiment conducted in one group only without a comparison group. It can be explained that all students are given an initial test (Pretest), then given a treatment (treatment), namely science learning using the Auditory Intellectually Repetition (AIR) learning model, then a final test (Postets) is held to see changes in learning outcomes that occur after being given treatment.

According to (Sugiyono, 2014), data collection can be done in various settings, from various sources, and various ways in an effort to collect data. So that data collection is a systematic

standard procedure to obtain the necessary data. The data collection technique used in this study is a test. The test is a measuring tool for making measurements, which are used to collect information on the characteristics of an object (Yusup et al., 2018). This test technique is used to measure science learning outcomes at the beginning and end by using the image-assisted AIR learning model in the form of multiple choice questions. In the measurement, two stages were carried out, namely the initial measurement, namely the initial activity to measure the research subject before being given treatment (treat). And the final measurement is the activity of measuring research subjects after being given treatment (treatment). After the Pretest and Posttest were carried out, the results of the two were compared to whether there were changes/differences before and after being given treatment.

This research was conducted at MI Baitul Huda Semarang. Data collection techniques using tests and interviews. The tests used were pretest and posttest which were given to fifth grade students of MI Baitul Huda Semarang. While the interviews used were directional interviews because the researcher made a series of questions before conducting the interviews so that the interviews were conducted based on the questions that had been prepared. Interviews were conducted with science subject teachers for class V MI Baitul Huda Semarang to obtain data related to the constraints felt by the supporting teachers when the science learning process took place in class. This study uses two sources of data, namely primary and secondary. Primary data sources are data sources that directly provide data to data collectors, while secondary data are sources that do not directly provide data. The primary data source is student class V MI Baitul Huda Semarang, who is the subject, and secondary data is documentation, teacher books, student books, and other supporting books. The first step in this research is to determine the population. According to (Setyosari, 2015), "Population is the whole of objects, people, events, or the like that are of concern and study in research". The population in this study were students of class V MI Baitul Huda Semarang, totaling 61 students. Then after knowing the population, then determine the sample. "Sample is part of the population taken, which is considered to represent the entire population and taken using certain techniques"(August, 2014). The sampling technique in this study was purposive sampling with the one group pretest posttest design model, namely experiments conducted in only one group without a comparison group. The sample in this study was class VB, which consisted of 30 students.

Temporary assumptions based on the description of the background of this research, the hypothesis can be formulated as follows: There is no significant effect on the use of learning models H_oAuditory Intellectually Repetition (AIR) on science learning outcomes at MI Baitul Huda Semarang; There is a significant effect of using the Auditory Intellectually Repetition (AIR) learning model on science learning outcomes at MI Baitul Huda Semarang. Data analysis technique is a way or method to process a result or information that is valid and can be easily understood by people. Descriptive statistical analysis is an analysis used to analyze data by describing the data that has been collected as it is, without intending to make general conclusions (Sugiyono, 2016). This study used quantitative data analysis techniques with descriptive statistical analysis methods, namely the t-test with paired sample t-test. If the value of Sig. (2-tailed) <0.05, so there is a significant difference between learning outcomes in the pretest and posttest data. If the value of Sig. (2-tailed) > 0.05, so there is no significant difference between learning outcomes in the pretest and posttest data (Mutmainnah et al., 2021).

FINDINGS AND DISCUSSION

Findings

Test the Validity of the Questions

Validity is a test that functions to see whether an instrument is valid (valid) or invalid. This validity test was carried out to find out how far the instrument in the study was able to reflect the contents in accordance with the things and characteristics being measured (Nilda Miftahul Janna, n.d.).

When the instrument is completed, the next step is to test the validity and reliability of the questions. In the test, this question was conducted on 30 students of class VI MI Baitul Huda Semarang. From the results of the validity of the 30 items tested, there were 18 questions that were considered valid and 12 items that were counted as invalid. In testing the validity of this item, it will be used to measure science learning outcomes so that the interpretation of validity is in a good category.

Table 1. Question Validity

No. Question	Pearson Correlation	sig. value	Conclusion
Problem 1	0.316	0.089	Invalid
Problem 2	0.490	0.006	Valid
Problem 3	0.080	0.672	Invalid

Problem 4	0.730	0.000	Valid
Problem 5	0.432	0.017	Valid
Problem 6	0.473	0.008	Valid
Problem 7	0.473	0.008	Valid
Problem 8	0.549	0.002	Valid
Problem 9	-0.085	0.657	Invalid
Problem 10	-0.116	0.542	Invalid
Problem 11	0.327	0.078	Invalid
Problem 12	0.526	0.003	Valid
Problem 13	0.619	0.000	Valid
Problem 14	0.493	0.006	Valid
Problem 15	0.473	0.008	Valid
Problem 16	0.526	0.003	Valid
Problem 17	0.456	0.011	Valid
Problem 18	0.238	0.206	Invalid
Problem 19	0.300	0.108	Invalid
Problem 20	0.435	0.016	Valid
Problem 21	0.473	0.008	Valid
Problem 22	0.161	0.396	Invalid
Problem 23	0.513	0.004	Valid
Problem 24	0.183	0.334	Invalid
Problem 25	-0.123	0.516	Invalid
Problem 26	0.539	0.002	Valid
Problem 27	-0.006	0.977	Invalid
Problem 28	0.525	0.003	Valid
Problem 29	0.078	0.682	Invalid
Problem 30	0.410	0.038	Valid

Based on the validity data test above, there are 12 invalid questions and 18 valid questions. The question can be said to be valid if it has a sig value. <0.05, when viewed from the interpretation of the validity value based on the Pearson Correlation value that:

0.800 – 1.00 = Very High

0.600 – 0.799 = High

0.400 – 0.599 = Enough

0.200 – 0.399 = Low

0.000 – 0.199 = Very Low (Sari & Ermawati, 2021).

Questions that are valid and that can be used in research are questions that have a sufficient minimum validity value interpretation. So based on the data above, the 12 invalid questions have a low validity value interpretation and are very low. While 18 valid questions have a sufficient and high validity value interpretation. So that from 30 questions made, only 18 questions that can be used in research.

Reliability Test

Reliability is an index that shows the extent to which a measuring device can be relied upon or trusted. So that this test of reliability can be used to find out whether the consistency of the measuring instrument is good or not if the measurement is carried out repeatedly (Nilda Miftahul Janna, n.d.).

Table 2. Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.851	18

From the results of calculating the reliability test of 18 valid questions, the result is = 0.851. Then the value is compared, if the value is greater than 0.05, then it is reliable. If it is below, then it is not reliable. So it can be concluded that the 18 questions can be used to calculate science learning outcomes in this study because the data test values above are reliable.$r_{11}r_{11}$

Test of Distinguishing Power and Difficulty Level

Discriminating power examines the questions in terms of the ability of the test to distinguish students who fall into the low or weak category and the high or strong category of presentation. The discriminating power of the items is used to find out how far the items can distinguish students' abilities, namely, students who have understood and have not understood the material being taught (Magdalena et al., 2021).

Table 3. Discriminating Power Test

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Problem_2	13.50	13,224	.417	.845
Problem_4	13.43	12,944	.558	.838
Problem_5	13.43	13,082	.510	.840
Problem_6	13.40	13,352	.450	.843
Problem_7	13.40	13,766	.306	.850
Problem_8	13.33	13,747	.386	.846
Problem_12	13.33	13,678	.413	.845
Problem_13	13.33	13.195	.613	.837
Problem_14	13.40	13,283	.474	.842
Problem_15	13.40	13,214	.499	.841
Problem_16	13.33	13,609	.442	.844
Problem_17	13.33	13,747	.386	.846
Problem_20	13.60	13,421	.325	.851

Problem_21	13.40	13,352	.450	.843
Problem_23	13.70	12,493	.585	.836
Problem_26	13.30	13,666	.486	.843
Problem_28	13.37	13.206	.547	.839
Problem_30	13.40	13,628	.354	.848

From the data above, it can be concluded that the discriminating power test must be adjusted to the interpretation of discriminating power where:

0.70 – 1.00 = Very Good

0.40 – 0.69 = Good

0.20 – 0.39 = Enough

0.00 – 0.19 = Bad (Nani, 2021).

So from the data above, the interpretation of discriminating power is sufficient and good, which can be seen from the valueCorrected Item-Total Correlation. With a note that if it is at a sufficient level then the questions may be used and improved, whereas if they are at a good and very good level, the questions may be used without improvement, if they are at a poor level, then the questions may not be used.

In discriminating power, there is a relationship with the difficulty level test. The difficulty test is that the test questions will be tested in terms of difficulty so that questions can be obtained which are easy, medium, and difficult (Magdalena et al., 2021). A question is said to be good if it has a level that is not too easy and not too difficult (Laela Umi Fatimah, 2019). Based on the magnitude of the difficulty index between 0.00 and 1.00, an index of 0.00 indicates the item is difficult, and an index of 1.00 indicates the item is too easy. In calculating the difficulty level, it was found that 18 items were considered valid.

Table 4. Test the Difficulty Level of Questions

No Question	Index	Conclusion
Problem_2	0.70	CURRENTLY
Problem_4	0.77	EASY
Problem_5	0.77	EASY
Problem_6	0.80	EASY
Problem_7	0.80	EASY
Problem_8	0.87	EASY
Problem_12	0.87	EASY
Problem_13	0.87	EASY
Problem_14	0.80	EASY
Problem_15	0.80	EASY
Problem_16	0.87	EASY

Problem_17	0.87	EASY
Problem_20	0.60	CURRENTLY
Problem_21	0.80	EASY
Problem_23	0.50	CURRENTLY
Problem_26	0.90	EASY
Problem_28	0.83	EASY
Problem_30	0.80	EASY

From the data above, it is found that out of 30 valid questions, there are 18 have an easy difficulty level of 15 questions, while three questions and the remaining 12 questions are difficult.

Homogeneity Test

A homogeneity test is used to determine whether the sample has a homogeneous variance or not. The two variants are said to be homogeneous if at a significant level a= 0.05 with the following test criteria:

IfSig value < 0.05, then it is not homogeneous

IfSig value > 0.05, then homogeneous (Usmadi, 2020).

Table 5. Homogeneity Test

		Levane Statistics	df1	df2	Sig.
Student UAS Score	Based on Means	8,020	1	46	,007
	Based on Median	6,887	1	46	,012
	Based on the Median and with adjusted, do	6,887	1	32,613	,013
	Based on trimmed mean	7,336	1	46	,009

The results of the data obtained above, show that the significance value is 0.007. From the output obtained, if the significance value or sig <0.05 it is said that the variation of the two or more groups of the data population is not the same (non-homogeneous). It is concluded that the above data is not homogeneous.

Normality Test

The normality test is used to determine whether the final ability of class V is normally distributed or not, with a significance level of 5% or 0.05. Technical analysis is done by comparing the results *pretest* before using the AIR learning model with *posttest* after using the AIR learning model.

Table 6. Normality Test

Tests of Normality						
	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistics	Do	Sig.	Statistics	do	Sig.
Pertest before using the model	.133	30	.183	.951	30	.182
Post-test after using the model	.215	30	001	.940	30	092
a. Lilliefors Significance Correction						

The normality test shows that the significance value of the pretest and posttest is greater than 0.05. If the value of Sig. > than 0.05, the data is said to be normal. In the data above where the pretest significance value is 0.182 > 0.05 and the posttest significance value is 0.092 > 0.05. So that the results of this data analysis show that both the pre-test data on learning outcomes and the post-test learning outcomes are both normally distributed.

Hypothesis Test (t-test)

After being tested for normality, the next step is to test the difference in the average experimental class. This test was conducted to test the hypothesis whether there is a significant difference or not between protest and post-test. This test uses the paired sample t-test, where the test is conducted to compare the difference between the two means of the two paired samples assuming the data is normally distributed (Abdul Wahab, Junaedi, 2021). With the keyword paired, samples come from the same subject (Pretest-Treatment-Posttest).

Table 7. Hypothesis Test (t-test)

Paired Samples Test									
		Paired Differences					t	do	Sig. (2-tailed)
		Means	std. Deviation	std. Error Means	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pertest before using the model - Post-test after using the model	-15,833	7.202	1.315	-18,523	-13,144	-12,042	29	.000

If viewed from the decision making that:

1. If the value of Sig. (2-tailed) <0.05, so there is a significant difference between learning outcomes in the pretest and posttest data.
2. If the value of Sig. (2-tailed) > 0.05, so there is no significant difference between learning outcomes in the pretest and posttest data (Montolalu & Langi, 2018).

So that from the results of the data obtained above it show that the significance value (2-tailed) is 0.000 <0.05, which shows the hypothesis is accepted and rejected, so it can be stated that there is a significant difference between pre-test and post-test. This shows that there is an influence in the use of the AIR learning model on student learning outcomes.

Determination Coefficient Test

The last data analysis is the coefficient of determination. The coefficient of determination is a data test to find out how much the X variable affects the Y variable.

Table 8. Test Coefficient of Determination

Summary models				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.548a	.300	.275	5,487

a. Predictors: (Constant), Pretest before using the model

The table above explains that, based on the magnitude of the correlation value or relationship R, which is 0.548. Based on the output, the coefficient of determination (R Square) is 0.300, which means that the influence of the AIR learning model on student learning outcomes is 30.0%.

If calculated using the formula of determination, then:

KD = × 100%r^2

KD = 0.548 × 100%

KD = 0.3003 × 100%

KD = 30.0%

The results above explain that after the learning process uses the AIR learning model with students given a posttest to measure learning outcomes, it is found that there is an influence when the AIR learning model is applied, which is equal to 30.0% which can be seen from the results of calculating the coefficient of determination above. So it can be concluded that the modelAuditory, Intellectual, Repetition (AIR) learning has an influence on the science learning outcomes of MI

Baitul Huda Semarang students.

Discussion

From the results of the research that has been done above, it can be stated that the experimental class has differences in learning before the application of the AIR learning model and after the application of the AIR learning model. Where when the pretest was carried out using the conventional lecture learning model, it was found that the average pretest value was 70.00 and when the AIR learning model was applied, the posttest average value was 90.00. As said in the research (Rara Dewi & Kristiantari, 2020), if there is an increase in the average value, then there is a significant difference. So it can be said that before using the AIR model and after using the AIR model, there are different learning outcomes because there is an increase in the average value.

When learning takes place using the Auditory, Intellectual, Repetition (AIR) learning model with the help of media images that take place interactively, a conducive learning situation is created where there is interaction between students when they discuss either in groups or during the question and answer presentation process taking place between groups. In learning with the Auditory, Intellectually, Repetition (AIR) model, students are given many opportunities to be able to develop and explore themselves according to the stages of learning. Where students play an active role in gaining knowledge in learning while the teacher is only a facilitator in learning, the use of media images in this learning model is intended so that students can more easily understand ongoing learning (Rara Dewi & Kristiantari, 2020) that learning media has a good role in the activeness and enthusiasm of students. At the Auditory stage, students learn to understand through speaking, listening, making presentations, and also when expressing opinions. Intellectually, students are given the opportunity to be able to develop and explore themselves with various activities such as training to be able to solve a problem, practice reasoning, create, construct, and apply the results obtained. Whereas in Repetition, students are trained to be able to do assignments, both questions, and quizzes. During the learning activities, students are more active and enthusiastic because the Auditory, Intellectual, Repetition (AIR) learning model assisted by image media can make it easier for students to understand the learning material being studied.

The application of the Auditory, Intellectual, Repetition (AIR) learning model with the help of media images in learning activities can assist teachers in delivering material and also assist students in understanding the material being studied so that students can further hone their thinking skills, reasoning and exploring themselves in order to make students insightful. Wide.

The use of media images in the Auditory, Intellectual, Repetition (AIR) learning model in the science content on the theme of 8 water cycles adds to the enthusiasm of students in participating in learning, where students can immediately see and reason about how the process of the water cycle occurs on earth. In contrast to learning that only uses conventional learning with the lecture model, during which students are seen to be less active and a little enthusiastic in following the lesson. Where the learning process is still centered on the teacher who provides a lot of material delivery without actively involving students in the learning process so that the results of students' science knowledge competence are less than optimal. As explained in the research (Rara Dewi & Kristiantari, 2020) which states that when learning with the lecture method, students are less active in participating in learning.

The results in this study are in line with research conducted by (Rara Dewi & Kristiantari, 2020,)where there is a significant difference in the competence of science knowledge between groups of students who are taught using the Multimedia-assisted Auditory Intellectually Repetition learning model and groups of students who are taught using conventional learning. Evidenced by the obtained tcount = 4.103 at a significance level of 5% and dk = 64 obtained value = 2.000, so that = 4.103 > = 2.000, then rejected and accepted. And it is also reinforced by research conducted by Isti Ngazah (2021), where the AIR model assisted by Circle can affect science learning outcomes. Evidenced by the existence of a significant difference between the results of the pretest and the results of the posttest that has been carried out, it is known that the average pretest result is 50, and the average posttest is 75. Based on the analysis of proven hypothesis testing in the paired sample t-test, a significance value (2-tailed) of 0.000 <0.05 is obtained, meaning that it is rejected and accepted. While the value > is -11.973 > 2.145, this means that it is rejected and accepted.

CONCLUSION

Based on the results of the research that has been done, it can be concluded that the results of this study have a significant difference in influence on science learning outcomes before the AIR learning model is applied and after the AIR learning model is applied. It was found that the results of the 2-tailed t-test were 0.000, namely <0.05, which means that the hypothesis is accepted, which means that there are differences in science learning outcomes in VB class students before using the AIR model and after using the AIR model. With a coefficient of determination (R Square) of 0.300,

it means that the influence of the AIR learning model on student learning outcomes is 30.0%. So it can be concluded that the Auditory, Intellectual, Repetition (AIR) learning model has an influence on the science learning outcomes of MI Baitul Huda Semarang students.

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