Original Article

The Influence of the Assurance, Relevance, Interest, Assessment, and Satisfaction (ARIAS) Learning Model with Jigsaw Type Cooperative Settings on the History Learning

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Abstract:

This research aims to determine the application of the ARIAS learning model with Jigsaw Type cooperative settings in class This research uses a quantitative approach with a pre-experimental design research type, in the form of a one group pretest-posttest design where there is only one group. The population in this study was all 2 class XI students. The sample in this research was class XI-1 students, totaling 20 students. The sampling technique in this research used a purposive sampling technique. The data collection techniques used are observation, tests and documentation. The data analysis technique uses the normality test, homogeneity test, and t-test for the difference between two means. The average score before using the ARIAS learning model was 64 which was categorized as sufficient and after being given treatment the average score of students was 83 which was categorized as good, this proves that there has been a significant change in student learning outcomes. Based on the results of the test value tcount > ttable or 13.262 > 2.101 at the significance level α = 5% (0.05), then HO is rejected and Ha is accepted or there is a real (significant) influence on student learning outcomes before and after using the ARIAS learning model with Jigsaw Type Cooperative Settings in the History subject. Thus, the use of the ARIAS learning model with Jigsaw Type Cooperative Settings influences the learning outcomes of class XI-1 students at SMA Negeri 1 Kuta Baro.

Keywords: Learning model, ARIAS Jigsaw cooperative setting, Learning outcomes

Introduction

Education is a conscious effort to create a cultural inheritance from one generation to another. Education makes this generation a role model for the teachings of previous generations. Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals and skills needed by themselves and society (BP Rahman et al: 2022: 2-3).

The development of science and technology has brought very significant changes to various dimensions of human life, both in economic, social, cultural and educational aspects. So that the scope of education is not left behind by science and technology and

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the student learning process can be made, adjustments need to be made, especially those related to teaching factors in schools. One of these adjustment factors is the learning model and media.

Based on the results of initial observations on August 2, 2024 conducted by researchers at SMA Negeri 1 Kuta Baro, it can be seen that when the learning process is taking place, there are still students who do not pay attention and there is a lack of student response when the teacher delivers the lesson material, so that student learning outcomes have not yet reached the target or have not reached the KKM (minimum completion criteria). Based on data from the 2024/2025 odd semester exam in class X1-1, it can be seen from the students' low scores where out of 20 students only 7 students or 35% completed and there were 13 students or 65% who did not complete because most of the students' scores did not meet the minimum completion criteria (KKM) . The KKM value determined at SMA Negeri 1 Kuta Baro is 75. In overcoming the problem of low student learning outcomes in history subjects, a teacher is required to be able to create a conducive learning atmosphere in order to create a pleasant learning atmosphere. With the existence of an appropriate and correct learning model, it is hoped that it can attract students' curiosity about the material provided so that students get good learning outcomes.

Based on these problems, the solution that can be used is to utilize or use an effective learning model. Innovative and creative learning can increase students' enthusiasm for learning so that student learning outcomes increase. Student learning outcomes are a goal or achievement in the learning process. If the learning achievement is successful, it can be said that the learning process that has been carried out is successful. Therefore, researchers plan a solution to improve learning outcomes by using the ARIAS learning model with a jigsaw cooperative setting. The ARIAS learning model contains components that are interrelated with each other which are factors that influence student success. therefore researchers are interested in conducting a study entitled "The Effect of the Assurance, Relevance, Interest, Assessment, and Satisfaction (ARIAS) Learning Model with a Jigsaw Cooperative Setting on the History Learning Outcomes of Class XI Students of SMA Negeri 1 Kuta Baro".

Method

The research method is the collection of data for research as an important step in obtaining information about research activities. The approach used by this researcher is quantitative. Quantitative research is research that involves numerical data and statistical analysis (deductive). In other words, quantitative research is a step to test various specific theories that are carried out by examining the relationship between variables usually measured by research instruments so that data consisting of numbers can be analyzed based on statistical procedures. So that it can be associated with quantitative methods, a significance of a group change will be obtained or it can also be said that the relationship between the variables studied (Rukmaningsih & Adnan, 2020: 16).

The type of research used in this study is pre-experimental, with the research design used in this study is "one group pretest-posttest design". The population of this study was all students of class XI of SMA Negeri 1 Kuta Baro consisting of 2 classes totaling 45 students. The sample taken was students of class XI-1 consisting of 20 students as one of the classes used, with a purposive sampling technique. Data collection

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techniques include observation and documentation, carried out to collect data from document sources and recordings (Priadana & Sunarsi, 2021:59). Then the data analysis technique used is observation sheet data analysis, normality test, homogeneity test, and t-test for differences in two means.

Results

Implementation of the ARIAS Learning Model with Jigsaw Type Cooperative Setting in History Subjects in Class XI of SMA Negeri 1 Kuta Baro

The process of learning history using the ARIAS Learning Model with a jigsaw type cooperative setting for class XI of SMA Negeri 1 Kuta Baro. The implementation of this research process is arranged in several activities, namely planning activities, implementation activities, and closing and evaluation activities. Namely, in more detail, as follows:

1. Planning Activities

In the planning stage, the researcher made all the preparations needed during the research process by preparing everything needed during the research. The preparation that the researcher did was to compile the materials used as data collection tools during the research. The researcher first prepared a teaching module, Student Worksheets (LKPD), ARIAS Learning Model with Jigsaw Type Cooperative Setting with the material used, namely "Indonesian National Movement" with the sub-material "The emergence of national embryos and Nationalism". In addition, the researcher created a posttest question consisting of 20 multiple choice questions which would later be given after students took part in learning using the ARIAS Learning Model with Jigsaw Type cooperative settings.

2. Implementation of Learning

The first implementation of preliminary activities begins with the teacher entering the classroom by saying greetings, then the students prepare and respond to the teacher's greetings, and continue with reading prayers together and preparing things that will be needed when learning takes place. Next, the teacher checks student attendance to see student attendance and readiness and condition of the class to be used. After that, the teacher opens the lesson and conveys the learning objectives, and the teacher provides information about the learning material that will be discussed, the teacher repeats and links the material that will be discussed with the previous learning mater

The teacher instills a sense of confidence and trust in students, attracts students' attention in understanding the material, the teacher helps students realize their strengths and weaknesses and instills in students a positive image of themselves. Then the teacher asks students to form groups, the teacher prepares direct questions accompanied by a lottery, questions that get the same lottery gather together, and so on. Then after finishing the discussion, students return to their original groups.

Then the teacher directs students to return to their original groups by bringing the results of the discussion and directing them to explain the results of the discussion by directing them to explain the results of the discussion to their original group friends as well as to other friends and then in the presentation activity students use concept maps in explaining the results of the discussion then the teacher provides an opportunity

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to evaluate themselves and other groups then the teacher conducts an evaluation when students present the results of their discussions then the teacher informs the results of the students' discussions

In the closing activity, the teacher gives awards to the most correct and interesting groups. The teacher provides reinforcement and awards both verbally and non-verbally to those who successfully display their success. The teacher asks for a conclusion of the material that has been taught to students. It is expected that students can understand important points regarding the various upheavals that occur in the learning that has been followed. Then, next in the evaluation stage, the teacher gives a posttest in the form of 20 multiple choice questions. The test questions are done independently and collected before the learning process ends. After the posttest is complete, the teacher conveys to the students the material that will be studied in the next meeting. Then after all is finished, the teacher and students close the learning by reading a prayer together.

3. Learning Evaluation

Learning evaluation aims to see to what extent students have achieved the learning objectives that have been set. The learning evaluation used in this study is by using observations used to see student learning outcomes during student learning activities from the beginning to the end of learning. The value of student activity on the observation sheet in this study was obtained at 81% according to Jasmalinda's theory (2021:2201). Based on the percentage criteria of 81-100%, it is included in the very good category.

Student Learning Outcome Values Before Using the ARIAS Learning Model

Table 1. Student Learning Outcomes Before and After Using the ARIAS Learning Model

No	Name	Pretest	Posttest
1.	AL	45	70
2.	CQF	55	75
3.	FA	45	80
4.	FR	60	85
5.	FAK	80	90
6.	HM	80	95
7.	IAN	60	70
8.	LIS	65	85
No	Name	Pretest	Posttest
9	MA	85	100
10.	MF	65	80
11.	MFZ	60	85
12	MZR	55	80
13.	RM	80	95
14.	SN	75	85
15	SH	65	85
16.	SHU	65	80

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17.	SK	65	90
18.	WT	60	80
19.	ZU	55	70
20.	ZA	60	80
	Total	1280	1660
	Average	64	83

Source: Excel Data Processing

From table 1 above, before conducting a paired sample test, the results of the pretest and posttest above were first tested for normality using the SPSS 22 For Windows application. The results of the normality test can be seen in table 2.

Table 2. Normality Test

Tests of Normality

	Learning outcomes	Kolmogorov-Smirnova			Shapiro Wilk		
		Statistics	df	Sig.	Statistics	df	Sig.
Learning outcomes	pretest	.214	20	.017	.927	20	.138
	posts	.214	20	.017	.937	20	.260

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Source: IBM SPSS Ver22 data processing (2024)

Based on table 2, the normality test on the results of the pretest and posttest scores in class XI is seen in the Shapiro-Wilk column, a sig value of 0.138 is obtained on the previous value which means it is greater than 0.05, and on the posttest it is obtained 0.260. which is greater than 0.05. So, it can be concluded that the data used in this study is normally distributed.

Table 3. Homogeneity Test

Test of Homogeneity of Variance

		Levene Statistics	df1	df2	Sig.
Mark	Based on Mean	1.078	1	38	.306
	Based on Median	1.041	1	38	.314
	Based on Median and with adjusted df	1.041	1	34,011	.315
	Based on trimmed mean	1.077	1	38	.306

Source: IBM SPSS Ver22 data processing (2024)

Based on table 3, the homogeneity test on the results of the pre- and post-test scores in class XI obtained a sig value of 0.306 which is also greater than 0.05. So it can be concluded that the data used in this study is homogeneous.

Table 4. Correlation Test

Paired Samples Correlations

	N	Correlation	Sig.

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Pair 1	Learning Outcomes & Posttest	20	.824	.000

Source: IBM SPSS Ver22 data processing (2024)

Based on the output above, the Sig value of the before (pretest) and after (posttest) values are both 0.000, where Sig 0.000 < 0.05, so there is a relationship between the pretest and posttest

Table 5. Paired Sample Test Statistical Results

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	T	df	Sig. (2-tailed)
Pair 1	Hasil belajar - POSTTEST	-19.000	6,407	1,433	-21,999	-16.001	-13,262	19	.000

Source: IBM SPSS Ver22 data processing (2024)

Based on the output of the "Paired Sample Test", it can be concluded that the Sig. (2-tailed) value is 0.000. This means that the Sig. value is 0.000 < 0.05 so that there is a significant difference between the results of students' history learning in the pretest and posttest at SMA Negeri 1 Kuta Baro.

Analysis of the Application of the ARIAS Learning Model in History Subjects for Class XI-1 at SMA Negeri 1 Kuta Baro.

The research process was conducted face-to-face with one meeting with a duration of 2 X 45 minutes. All 20 students in grade XI-1 were given treatment with the ARIAS Learning Model with the material "The emergence of national embryos and Nationalism". In the implementation process, the teacher explained the steps of the ARIAS learning model and divided students into several groups consisting of 4 groups with 5 students in each group. Then all groups were given Student Worksheets (LKPD) which were worked on by dividing group assignments. However, previously students first studied the explanation of the material from the teacher and also studied from poster media and also sought information from other groups. Then the teacher directed students back to their original groups by bringing the results of the discussion and directing them to explain the results of the discussion by directing them to explain the results of the discussion to their original group friends as well as to other friends and then in the presentation activity students used concept maps in explaining the results of the discussion then the teacher gave the opportunity to evaluate themselves and other groups then the teacher conducted an evaluation when students presented the results of their discussions then the teacher informed the results of the student discussion. Then, the closing activity was the teacher gave a posttest evaluation question in the form of 20 multiple choice questions that were answered independently.

After the posttest is completed, the teacher and students together conclude the learning and at the end of the learning the teacher conveys to the students the material to be studied for the next meeting. Then after all is finished the teacher and students close

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the learning by praying together, and saying hello. Based on observations during the learning activities were carried out to find out how the implementation of the learning process using the ARIAS learning model with the Jigsaw Cooperative Setting type during the learning process. The observer of the implementation of the ARIAS learning model is the history subject teacher, Mrs. Dewi Mentari S.Pd. Observation of the implementation of the ARIAS learning model was carried out from the beginning of the learning activity to the end of the learning. Based on the evaluation of the observation results that have been filled in by the observer, the observation result score was 81% so it is said to be included in the very good category.

Analysis of the Influence of the ARIAS Learning Model with a Jigsaw Cooperative Setting on Student Learning Outcomes in History Subjects in Class XI-1 of SMA Negeri 1 Kuta Baro

The learning outcomes obtained by students before the implementation of the ARIAS learning model with a jigsaw cooperative setting in the classroom, the average value in the class was 64. This shows that classically and individually students are included in the sufficient category. After the implementation of the ARIAS Learning model with a Jigsaw Cooperative Setting, the average value in the class was 83. This shows that classically and individually it is included in the good category, so it can be concluded that student learning outcomes have increased.

The results obtained will then be processed to determine the t-test of the difference between the two averages. The results of the normality test before using the ARIAS learning model and the pre-test in the class obtained a sig. 0.138 or greater than 0.05 and in the post-test obtained a sig. 0.260 which is greater than 0.05. So it can be concluded that the data used in this study are normally distributed. In the homogeneity test, the results obtained before using the ARIAS model and the post-test in the class obtained a sig. 0.306 which is greater than 0.05, so it can be concluded that the data used in this study are categorized as homogeneous.

Furthermore, in the statistical correlation test obtained in this data processing, the sig. value before using the ARIAS learning model and post-test are both 0.000 where 0.000 <0.05, there is a relationship between the values before (prestest) and after the post-test. Furthermore, based on the data obtained from the results of the paired sample test, the sig. value is 0.000 <0.05 so that there is a significant difference between the results of students' history learning in the data before using the ARIAS learning model and the post-test in class XI-1 Kuta Baro. Furthermore, in analyzing the data to test the hypothesis or t-test conducted in this study, the results of the t-test criteria were obtained > t-table or 13.262 > 2.101. at a significance level of $\alpha = 5\%$ (0.05), then HO is rejected and Ha is accepted or there is a real (significant) influence on student learning outcomes before and after using the ARIAS learning model at SMA Negeri 1 Kuta Baro.

Based on this explanation, this is in line with research conducted by Yuyun, et al. (2020:60) The ARIAS learning model with Jigsaw Cooperative Setting is superior in improving student learning outcomes compared to conventional learning models, this is evidenced by the average posttest score in the experimental class of 76 while in the control class it was 72.14 so that a difference of 3.86 was obtained. So it can be concluded that there is an influence of the ARIAS learning model with a jigsaw type cooperative setting on improving student learning outcomes.

Furthermore, in line with the research of Arianto et al. (2021: 1-7) the jigsaw type cooperative setting learning model in ARIAS has a positive influence. This is statistically

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proven by using the "t" test, it is concluded that the learning outcomes of students taught using the jigsaw type cooperative setting learning model in ARIAS on the ability to convert complex procedure texts into an article by class X students of SMA Persiapan Stabat, this is evidenced by the results of the hypothesis test of the t table count > t, namely the level α 0.05, it turns out that the t table count > t is 24.05> 1.669, so Ha is accepted. Based on the results of this study, the recommendation that researchers can give to Indonesian language teachers is to use the jigsaw type cooperative setting learning model in ARIAS as an alternative in choosing a model to improve student learning outcomes. Based on the discussion, it can be concluded that the ARIAS learning model with the jigsaw type cooperative setting has an effect on improving student learning outcomes in history subjects at SMA Negeri 1 Kuta Baro.

Conclusion

Based on the results of the research and discussion that the researcher has described about the influence of the ARIAS Learning Model with a jigsaw cooperative setting on learning outcomes in the History subject of class XI at SMA Negeri 1 Kuta Baro. The conclusions and suggestions presented are based on the results of this study as follows: First, the implementation of the ARIAS learning model with the Jigsaw Type Cooperative Setting on the history of class XI students at SMA Negeri 1 Kuta Baro has been implemented very well in accordance with the steps of the ARIAS learning model. This can be seen from the results of the analysis of the application of the model and media using observation with a percentage of 81% which is included in the very good category.Second, the learning outcomes of students in history subjects through the ARIAS learning model in class XI-1 at SMA 1 Kuta Baro can be seen based on the results of the hypothesis test obtained tcount> ttable where tcount is 13.262> ttable of 2.101. at a significant α = 5% (0.05), it can be concluded that HO is rejected and Ha is accepted or there is a real (significant) influence so that there is a positive and significant influence of the ARIAS learning model on learning outcomes in History subjects in class XI at SMA Negeri Kuta Baro.

Suggestion

Based on the research results and discussions that the researcher has outlined previously, the suggestions for this research are as follows:

1. chools are expected to be able to provide all facilities that support the learning process in schools such as supporting books on history subjects. This aims to make it easier for students to find information related to their learning materials.
2. Teachers are expected to try to implement or apply the ARIAS model in teaching and learning activities in an effort to improve the quality of history learning in schools.
3. For students, it is expected to foster a greater curiosity in the learning process so that this can increase the rate of understanding of the material delivered by teachers at school. With the increasing level of student understanding, of course, learning outcomes will also experience a progressive spike.
4. Researchers are expected to be able to conduct research using other learning models with more diverse data analysis methods so that the results obtained are truly optimal and represent the conditions during the learning process.

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