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THE EFFECTIVENESS OF THEMATIC LEARNING MODEL BASED ON THE ANEUK JAMEE TRIBE INTEGRATED HIGHER ORDER THINKING SKILLS (HOTS) IN BASIC SCHOOL STUDENTS

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Abstract- This study aims to test the thematic learning model's effectiveness based on the Aneuk Jamee ethnic group's culture with an integrated Higher Order Thinking Skills (MT-BAJEE) in South Aceh Regency. The research was conducted at SD Negeri Alue Bata, Nagan Raya Regency. This type of research uses Pre-Experimental Design in the form of One-Shoot Case Study. This study's subjects were 22 people in class IV / A SDN Kasik Putih and 22 people in class IV / B SDN Air Sialang. The data collection techniques used were tests and documentation. The data analysis technique used the t-test formula. The research results indicate that There are differences in student learning outcomes between applying the model MT BAJEE learning and *Student Teams Achievement Division* (STAD) on caring for the environment where I live in grade IV elementary school. This conclusion is based on students' average final results, where the average student with learning model MT BAJEE is 76.82 while the average student with the Student Teams Achievement Division model(STAD) is 68.64. It also shows that the usage model MT BAJEE better than the Student Teams Achievement Division model(STAD) This is evident from the statistical data analysis "t-test" obtained results t-table =1,720and from the calculation of the t-test t-count = 1.945, so compared between t-count and t-table, then t-count> t-table so that Ho is rejected and Ha is accepted.

Keywords: Thematic, Aneuk Jamee, HOTS, MT BAJEE

I. INTRODUCTION

Education is an effort to foster and develop the human personality both in the spiritual and physical parts. Through education, a person can be more mature because this education has a very positive impact; it can eradicate illiteracy and provide skills, mental abilities, etc.

The formation of human character should start early, especially in Elementary School as the most fundamental institution, which can be the initial milestone in students' character building. Early character-building aims so that the character values that want to be built are recorded well in the minds of students(Ariyani and Wangit, 2016)

Education and learning in various science fields in schools today seem dry (dry) from the beauty of life, filled with memorized theory and very minimal practice, too abstract, and do not touch the science's values and human dimensions. Education and learning should be an integral part of human culture and have humanistic characteristics (Sinaga, 2016).

Many of the Aceh Province lessons are still traditional, especially in schools located in remote areas such as some elementary schools in Singkil District, West Aceh, Seumelu and Nagan Raya. The facilities and infrastructure available are minimal. Also, learning activities have not used the surrounding culture and environment as hinted at in the 2013 Curriculum. Students who attend school mostly come from middle to lower-middle families, teachers are not yet proficient in implementing thematic learning, even though thematic learning in the 2013 curriculum has long been applied in elementary schools, which needs to be resolved.

Based on the preliminary analysis carried out, there were several fundamental problems in learning in Aceh provincial elementary schools, including: learning in Aceh province primary schools still looks traditional, teachers still use ordinary textbooks as teaching materials, learning is more dominant using the lecture method, so students do not motivate in learning.

The various literature that the researchers found shows that: So far, teachers use traditional learning more often than applying thematic learning models, the material taught is textual so that students memorize more material (Saputro, 2015).

The teacher is not proficient in using a variety of learning models. This is also because the teacher does not understand the variations in learning models developed a lot today. (Santyasa, 2007). Besides,

teachers find it challenging to apply thematic learning models, even though this thematic learning model has long been echoed by the government (Saputro, 2015).

The role of culture is huge in building a nation's civilization if traced many factors influence social problems, including education, cultural shifts, shifts in national values, the youth's indifference to customs and so on. (Nurdyansyah, 2015).

The application of learning models adopted from outside and adapted in schools requires students and teachers to change their teaching and learning behavior. Constructive interaction between students and their peers, students and teachers, student-teacher problems are very difficult to condition. This is due to conventional teaching, which conditions students to receive knowledge passively. So far, teachers provide concepts and principles of learning in the ready-to-eat form to students and do not get students used to solving problems and learning from their culture. (Mardhatillah, 2017, b). Teachers are more confident in successfully teaching students based on previous experiences. This is evident from student activities; students are reluctant to ask their teachers and friends (fragile students) even though they are given encouragement and motivation (Su'udiah, 2016). Smart students prefer to work alone, and if they have difficulty directly asking the teacher without passing the results of their group discussions(Anzar, 2017). Thematic learning integrates several subjects in a particular theme, thematic learning that is integrated with various other variables can create practical and meaningful learning.

In this study, the researcher wants to make innovation by developing a thematic learning model based on local wisdom integrated with Higher Level Thinking Skills (KBAT) or in English called Higher-Order Thinking Skills (HOTS).

Practical thematic learning is meant to be a thematic learning model that is easy to apply for teachers, following students' mental and cognitive development and the student's cultural environment. (Mardhatillah, 2019)

CultureThe Aneuk Jamee tribe has a social system such as genealogy, baduduak gadang (musyawarah) who enjoy having dialogues with others. The cultural system which includes the philosophy of togetherness, a value system in the form of right steps, shaking hands with the right hand, and the upbringing of ancestors and so on are considered necessary to be applied in learning activities(Manan, 2017). With the collaboration between the Aneuk Jamee ethnic culture with the integrated thematic learning model, KBAT will instil good cultural values in students that enrich students 'knowledge and increase students' ability to defend their identity in the face of globalization. Therefore, researchers consider it essential to develop a thematic learning model based on the culture of the Aneuk Jamee Tribe (MT-BAJEE) integrated KBAT in Elementary Schools in South Aceh Regency.

II. METHODS

This type of research uses the Pre-Experimental Design in the form of One-Shoot Case Study (one-shot case study) wherein this research design there is a group given treatment, and then it is observed that the results (treatment) are as independent variables and the results are as variables. Dependent).

The approach used in this research is quantitative. The quantitative approach according to Sugiyono (2011: 14) is research that uses a deductive-inductive approach, meaning an approach that departs from a theoretical device, the ideas of experts, as well as the understanding of researchers based on their experiences, then it is developed into problems and solutions proposed to obtain justification. (verification) in the form of support for empirical data in the field.

An appropriate research approach must be used so that researchers can get a clear picture of the steps that must be taken and taken and a description of the problem. Research approaches based on the nature of the data include the quantitative research approach in which the data collected is statistical figures.

The research will be carried out in 2020 in the second semester of the 2020-2021 school year. This research's location is SD Negeri Kasik Putih and SD Negeri Air Sialang, South Aceh Regency.

III. RESULTS AND DISCUSSION

1. Comparison of the Results of Preliminary Tests (Pretest) for Experiment Class A and Experiment Class B.

Data from the results of students' initial test scores in experimental class A (MT BAJEE Learning Model) and experimental class B (STAD Learning Model) can be presented in the table below:

Table 1: Comparison of Pretest Value Results

Classification	**Experiment Class A. (MT BAJEE Learning Model)**	**Experiment Class B (STAD Learning Model)**
Number of Students (N)	22	22
Average value (Mean)	58.18	57.95
Middle value (Median)	55.00	60.00
Minimum Value	40	30
Maximum Value	80	80
Standard Deviation	12,492	13,153
Total value (sum)	1280	1275

Based on table 1 above, it can be explained that there are differences in student learning outcomes in experimental class A and experimental class B, but this difference is not significant. In experimental class A (*MT BAJEE Learning Model*) the average value obtained is 58.18, and the standard deviation is 12.492, while in the experimental class B (STAD) the average value obtained is 57.95 and the standard deviation is 13.153.

Thus it is known that student learning outcomes at the theme of caring for living things in experimental class A obtained. The results of the pre-test are almost the same as those of the experimental class B. The comparison of the value distribution of experimental class A and experimental class B can be seen in the following table:

Table 2: Distribution of Pretest Results for Experiment Class A and Experiment Class B

Score	**Experiment Class A. (MT BAJEE Learning Model)**		**Experiment Class B (STAD Learning Model)**	
	Frequency	Percentage	Frequency	Percentage
30	-	-	1	4.5%
40	3	13.6%	2	9.1%
45	1	4.5%	1	4.5%
50	4	18.2%	5	22.7%
55	4	18.2%	1	4.5%
60	3	13.6%	3	13.6%
65	4	18.2%	3	13.6%
70	1	4.5%	4	18.2%
75	2	9.1%	-	-
80	3	13.6%	2	9.1%
total	**22**	**100%**	**22**	**100%**

Table 2 shows that the lowest value obtained from the experimental class A.(MT BAJEE Learning Model)is 40, and the lowest score in experimental class B (STAD) is 30.While the highest score obtained in experimental class A and experiment B is 80.

The lowest score on student learning outcomes obtained from experimental class A is 40 (there are 3 people =13.6%) and the lowest score in experimental class B is 30 (there is 1 person = 4.5%). While the results of the highest score of student learning outcomes obtained in the experimental class A were 80 (there were 3 people =13.6%) and the highest score obtained in the experimental class B is 80 (there are 2 people = 9.1%).

Between experimental group A and experimental group Bthe theme of caring for living things adjustment of living things to their environmentnot much different. With such conditions, the research can be carried out by giving the two different experimental group A with use MT BAJEE Learning Model while the experimental group B with the application of the model *Student Teams Achievement Division* (STAD).

2. Posttest Results Data for Experiment Class A and Experiment Class B

The final test or posttest data analysis was carried out after the experimental group A was given science learning the theme of caring for living things through MT BAJEE Learning Model while the experimental group B with the application of the model *student Teams Achievement Division*(STAD). The pre-test results show whether the sample used in this study has the same or different learning outcomes after treatment with these different learning models. The data from the final test results were compared to the average class score and the t-test.

3. Comparison of the Results of the Final Test (Posttest) of Experiment Class and Experiment Class B.

Data from the results of students' posttest scores in experimental class A and experimental class B can be presented in the table below:

Table 3: Comparison of Posttest Value Results

Classification	**Experiment Class A. (MT BAJEE Learning Model)**	**Experiment Class B (STAD Learning Model)**
Number of Students (N)	22	22
Average value (Mean)	76.82	68.64
Middle value (Median)	75.00	70.00
Minimum Value	55	45
Maximum Value	100	100
Standard Deviation	12,492	12,647
Total value (sum)	1690	1510

Based on the table above, it can be explained that there are differences in student learning outcomes in experimental class A and experimental class B after implementationMT BAJEE Learning Model and models *Student Teams Achievement Division* (STAD) significant. In experimental class A (MT BAJEE Learning Model model) the average value obtained is 76.82, and the standard deviation is 12.492, while in the experimental class B the average value obtained after the application of the Student Teams Achievement Division (STAD) is 68.64 and the standard deviation is 12.647.

Thus it is known that student learning outcomes in science lessons the theme of caring for living things in experimental class A (MT BAJEE Learning Model model) obtained the result of the posttest was higher than the experimental class B (Student Teams Achievement Division(STAD). The comparison of the value distribution of the experimental class and experimental class B can be seen in the following table:

Table 4 Distribution of Posttest Results for Experiment Class A and Experiment Class B

Score	**Experiment Class A.**		**Experiment Class B**	
	Frequency	Percentage	Frequency	Percentage
45	-	-	1	4.5%
50	-	-	2	9.1%
55	1	4.5%	-	-
60	1	4.5%	4	18.2%
65	2	9.1%	1	4.5%
70	6	27.3%	8	36.4%
75	3	13.6%	2	9.1%
80	3	13.6%	2	9.1%
85	2	9.1%	-	-
90	1	4.5%	1	4.5%

100	3	13.6%	1	4.5%
total	**22**	**100%**	**22**	**100%**

The results from the table and graphic images above show that the lowest score in the posttest results obtained from experimental class A is 55 (there is 1 person or 4.5%) and the lowest score in experimental class B is 45 (there are 1 person or 4 , 5%). While the highest value of the posttest results obtained in experimental class A is 100 (there are 3 people or13.6%) and experiment B is 100 (there is 1 person or 4.5%).

4. Normality test

Test the normality of the research hypothesis using the test Kolmogorov-Smirnov with the help of the application program SPSS.20. The results of the normality test can be seen in the following table:

Table 5. Normality Test

One-Sample Kolmogorov-Smirnov Test

		Pre-test of MT BAJEE Learning Model Class	STAD Class Pretest
N		22	22
Normal Parameters, b	Mean	58.18	57.95
	Std. Deviation	12,492	13,153
Most Extreme Differences	Absolute	, 146	, 136
	Positive	, 146	, 136
	Negative	-, 146	-, 113
Kolmogorov-Smirnov Z		, 685	, 640
Asymp. Sig. (2-tailed)		, 735	, 807

ı. Test distribution is Normal.

›. Calculated from data.

Source: Research Data for 2020

Based on the results of the normality of the posttest value data, it is known that the posttest scores of students in the MT BAJEE Learning Model class and the STAD class in the theme of caring for living things with a normal distribution. The p-value for the experimental class A (MT BAJEE Learning Model model) of 0.735 and the p-value for experimental class B (STAD) of 0.807. Data is normally distributed if the p-value is> 0.05. The p-value of both sample classes is large than 0.05, so it can be interpreted that the data for experimental class A and experimental class B are typically distributed.

5. Homogeneity Test Results

The results of calculating the homogeneity test using the Annova test can be seen in the following table:

Table 6. Test Homogeneity

Test of Homogeneity of Variances

Result

Levene Statistics	df1	df2	Sig.
, 078	1	42	, 781

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	568	1	568	003	953
Within Groups	6910,227	42	164,529		
Total	6910,795	43			

Source: Research Data for 2020

Homogeneity calculation using test Annova was carried out with the help of SPSS 20 software. Based on the calculations, the p-value was 0.781. The data requirement is said to be homogeneous if the calculated significance value is more significant than 0.05. The p-value obtained was 0.781 (0.781> 0.05), so it can be concluded that the data in experimental class A (MT BAJEE Learning Model model) and experiment B (STAD) is homogeneous.

6. Hypothesis Test Results

The collected data were analyzed using the T-test formula. This t-test aims to determine whether there is a difference in final ability between the two groups by testing the average posttest acquisition in each group. The results of the t-test that researchers have analyzed through the SPSS.20 application can be seen in the following table:

Table 7. Hypothesis Test

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Mean Error	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Postest Class Learning Model MT BAJEE - Postest STAD Class	3,182	19,733	4,207	, 567	16,931	1,945	21	065

This analysis test is used to determine student learning outcomes in science lessons in the theme of caring for living things after treatment with a different learning model. Experimental group A with use MT BAJEE Learning Model model while the experimental group B with an application of the model *Student Teams Achievement Division* (STAD). Based on the results of the t-test analysis calculation, it can be summarized in the table as follows.

Table 8. Comparison results of the Class t-Test Experiment A and Experiment Class B On the Posttest

Variable	N	Mean	Std. Deviation	t-count	t table	df
Experiment Class A.	22	76.82	12,492	1,945	1,72074	21
Class Experiment B	22	68.64	12,647			

The results of calculations with the t-test obtained t-count = 1,945and the calculation of the table's calculation, namely 1,720. Because t-count > t table namely 1,945> 1,720then a conclusion can be drawn between experimental class A (MT BAJEE Learning Model model) and experimental class B (STAD model) has learning outcomes on the theme of caring for living things differently. Experimental class A has a better learning outcome compared to the learning outcomes of experimental class B. Because the average for experimental class A use MT BAJEE Learning Model model obtained an average value of 76.82, while in the experimental group B using the application model *student Teams Achievement Division* (STAD) obtained an average result of 68.64. These results indicate the two classes have significant differences because t-count > t table or 1,945> 1,720.

So it can be concluded that the MT BAJEE learning model is very useful in the fourth grade of SD Aceh Selatan District, Aceh Province.

IV. DISCUSSION

This research was motivated by the low quality of learning in South Aceh Regency, especially in thematic learning in grade IV elementary schools. Also, students are not proud / respect the local culture. They are more proud of foreign (westernized) culture. This problem is getting more and more attention in line with future demands and the shift in old learning patterns towards a new paradigm of learning in elementary schools.

Conditions in the field indicate that classroom teachers in schools implement the learning that is not relevant to the learning objectives and thematic learning characteristics. Thematic learning has not implemented learning that contains cultural elements in the learning process to optimize students' mental function to understand concepts and solve problems, and the use of social interaction patterns in organizing student learning to be actively involved in reconstructing knowledge that comes from facts and culture.

Efforts are being made to overcome these problems by developing a thematic learning model based on Aceh culture based on the Aneuk Jamee culture integrated with KBAT that is valid, practical and effective. This learning model is used as a guide for teachers to help students develop higher-order thinking skills and solve problems and make students independent learners.

V. CONCLUSION

Based on this explanation, the MT BAJEE Learning Model and Student Teams Achievement Division (STAD) application gives different average results. In the MT BAJEE Learning Model, Student learning outcomes are higher due to students' freedom to choose problems. Based on its characteristics, MT BAJEE Learning Model starts with a problem that students can raise in this case; then students deepen their knowledge of what students already know and what needs to be known to solve the chosen problem. Students can choose problems that are considered attractive to solve to encourage them to play an active role in learning.

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