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Forewords

Praise and gratitude to Allah SWT, because of Allah's love for us so that we are still given a long life and can carry out our various daily activities. May all our activities become our acts of worship, Aamiinnn

in accordance with the commitment of the Jurnal Serambi Ilmu Journal to continue to improve the quality of its manuscripts since the volume 23 number 2 has been published full in English.

We are also be proud that the number of submitted manuscripts is quite large, but only a few are acceptable and worthy of publication. This means that Jurnal Serambi Ilmu has become one of the scientific publications that are considered by experts and education enthusiasts.

For this reason, Jurnal Serambi Ilmu is committed to continuing to maintain the quality, service and discipline that applies in scientific publications.

September 30, 2022
Editor in chief,

Dr. Abubakar, M. Si

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GARUDA
GARBA RUJUKAN DIGITAL



Local Content Integration Model and the Value of Science Characters in Students Junior High School In Banda Aceh

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Abstract

In implementing the teaching and learning process with Islamic characters in junior high schools, it is carried out based on the 2013 character curriculum. In the teaching materials, teachers must be able to relate the pattern of human life to socio-cultural values, religion and ways of interaction in Islamic Acehese society. This study aims to know how patterns and ways to integrate science values with character and how students' attitudes change after the learning process at SMP Negeri Banda Aceh. The population in this study were all public junior high school students in five regions in Aceh whose character represented the area. The sample consisted of 102 third grade students who were taken randomly. They follow the learning process by integrating character values in three meetings with teaching materials on ecosystems and the interaction of living things with the environment which ends with a post test to get the value of student learning outcomes. The data processing method uses t-test statistics. the results of the study showed that there was an increase in student achievement after using the integration model in learning with ecosystem and environmental teaching materials. We also believe that the model of integrating local wisdom values is able to shape the character of students, so it needs support from all parties for implementation in the field.

Keywords: *Student character, learning achievement, local content,*

INTRODUCTION

Since the start of the new school year 2013 has been marked by the implementation of the character curriculum in the odd semester of the new school year throughout Indonesia. The term character curriculum (K-13) is characterized by obedience and piety, good manners, living in a spirit of mutual cooperation and helping each other. The right way to run the character curriculum is to use a learning model that integrates local wisdom values for each student when interacting with the surrounding environment. The character can reflect the way students live or the way a student thinks in participating in activities to act correctly (Jalaluddin, Sri Melfiyati, Zainuddin & Said Ali (2020).

The curriculum concept is in line with the National Education Law, namely developing capabilities and shaping the character and civilization of a dignified nation in the context of educating the nation's life, aiming to develop the potential of students to become human beings who believe and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become a democratic and responsible citizen." Furthermore, it is also stated in the formulation (Indonesian National Education System Law No. 20 of 2003).

The above law also implies the integration of religious values in learning. The constitutional mandate proves that the purpose of education in Indonesia is not only to develop potential and educate but also to form human beings with religious character. So every student needs to experience the values of life in society such as respect, respect, confidence, honesty and wisdom, discipline and responsibility, which are the values of local wisdom in their school.

Demikian juga dalam Qanun pendidikan Aceh menyatakan bahwa sistem pendidikan nasional yang diadakan di Aceh didasarkan pada nilai-nilai budaya Islami dan tidak bertentangan dengan budaya masyarakat setempat. Kemudian dalam visi dan misi dinas pendidikan Provinsi Aceh pelaksanaan kurikulum pendidikan Aceh bertujuan untuk mendidik dan meningkatkan kualitas manusia berdasarkan iman, ketakwaan dan akhlak mulia sesuai dengan syariat Islam. Harapan kita siswa unggul dalam ilmu pengetahuan dan teknologi tetapi juga unggul dalam iman dan taqwa sejalan dengan program kurikulum karakter 2013 yang sedang dijalankan saat ini (Qanun Pendidikan Aceh, 2015).

Likewise, the Aceh Education Qanun states that the national education system implemented in Aceh is based on Islamic cultural values and does not conflict with the culture of the local community. Then in the vision and mission of the Aceh Provincial Education Office, the implementation of the Aceh education curriculum aims to educate and improve human quality based on faith, piety and noble character in accordance with Islamic law. We hope that students excel in science and technology but also excel in faith and piety in line with the 2013 character curriculum program that is currently being run (Aceh Education Qanun, 2015).

In addition, K13 the students must have basic skills and scientific attitudes to easily follow the teaching and learning process, including (1) quality and proactive education in facing the challenges of the tough times in following a change, (2) having a

foundation of faith and piety to God. The Almighty, noble, knowledgeable, skilled, independent and creative (3) as a democratic citizen and responsible for the progress of the nation and state (A. R. A. Putri, 2019).

The process of integrating scientific values with character in the implementation of education in Aceh is carried out by following the national education curriculum by combining religious values related to morals, character, morality as members of the community and schools in accordance with local laws or customs. For learning cannot be separated in the implementation of education, so that the influence of cultural and technological modernization that is not good can be prevented as early as possible, therefore the readiness of teachers and students to integrate their experiences in a balanced way (Sumantri 2007).

The integration of moral and cultural values can increase the sense of nationalism without leaving the local culture itself (Aziz, & Anwar, K. 2016). The pattern of integrating character/moral values as the main character to build student competencies and skills so that they are able to compete in the world of work. With the model of integrating local cultural values, teachers can improve students' character values and in accordance with the culture of the Islamic Acehnese community, direct support is needed such as school principals, committees, supervisors, educational quality assurance institutions (Jalaluddin, Sri Melfiaty & Saminan, 2020).

The integration of values in learning/education is a process of guidance through educational role models that are oriented towards the cultivation of life values which include religious, cultural, customary and aesthetic values towards the formation of students who have religious spiritual intelligence, self-control, good personality. whole, with noble character, and the skills needed by himself, society and the state.

The integration of values in education as an aid to students to realize and experience values and place them thoroughly in their lives (Mulyana 2003). Values education is not only a special program that is taught through a number of subjects, but also covers the entire educational process. In this case, those who instill values in students are not only value and moral education teachers and not only when teaching them, but whenever and wherever, values must be an integral part of life (Ibrahim et al. 2018; Mat Rahimi, Y. et al, 2020.).

Value integration is a unified whole, not divided in learning by combining certain values against another concept so that it becomes a coherent whole in science learning and character/cultural values are applied to the subject matter of moral education, namely Islamic values in delivery. science learning or vice versa religious matter integrated with science matter religious subject matter with general subjects at school.

In accordance with the integrative Qur'an, which unites the meaning of the life of the world and the hereafter, general education is essentially religious education, science is also religious education, and vice versa, the Qur'an does not contradict science and religion. In fact, in many verses it is emphasized that humans always think about events in nature to strengthen their religious beliefs (Q.S. al-Anbiyaa, [21]:30). Science in this

case is also not a separate part of religion. Science is an integral part of the Islamic religion.

The current condition is that students in elementary, junior high, and high school are generally emphasized only on improvising cognitive intellectual intelligence or in other words on developing the affective domain so that the moral realm is neglected, for that it is necessary to know how the teacher's ability to integrate science and moral values , specifically for junior high school students in Banda Aceh City.

RESEARCH METHODS

Data source

The sources of research data were students of SMP Negeri 3, SMP Negeri 4, SMP Negeri 6, SMP Negeri 13 and SMP Negeri 14 Banda Aceh. As for the number of research subjects as many as 102 students we teach biology science education with a local content integration approach model. Time of conducting the research in semester one of the academic year 2021/2022, by using a pilot/trial test at SMP which is equivalent to the object of research at the beginning of the year before the actual research. This research includes an experiment, namely the implementation of the teaching and learning process by involving ninth grade junior high school students with quantitative data.

All students who have been sampled can be involved in the teaching and learning process of science with an integration model because the teacher uses Indonesian when citing examples of local culture that may be integrated in everyday life. In the first stage, we conducted a trial in one school to test the research tools/instruments that were declared valid, reliable, and valid by involving evaluation experts and senior teachers who were trained for one month. The initial study aimed to measure the validity and reliability of the instrument for implementing science learning in Acehese secondary schools. Preliminary studies also aim to obtain input to improve the measurement items and obtain student suggestions, views and comments about the instrument (Wiersma, 1995; Creswell, & Clark, P, 2007).

The trial of this device was carried out three times by involving three different validators so that the validity of the instrument could be trusted. (Borich, G. D. 2004). The reliability of the test items in this study was tested using Statistics (SPSS), version 2.0. Cronbach's Alpha test has been carried out to ensure the reliability of the instrument used.

Table 2
Instrument Validity and Reliability Value

Scale	Item Number	Corrected Item-Total Correlation			
Student grade on	15	.54	.40	.59	.76
Learning Science and		.54	.34	.38	.32
the value of cultural		.54	.59	.47	.54
integration		.41	.31	.52	

Source: 2022 Research Results

According to Nunnally (1978) the trial value exceeds 0.70 both for each dimension used in the study. Thus, the instrument is suitable to be used in this study to measure students' attitudes towards science learning by using an integration model of local cultural character values. Teachers and students participated in the teaching and learning process and were divided into two groups, namely experimental and control. The teacher conducts teaching and learning with each class three times a meeting of science teaching materials with a character value integration model then the last week the teacher conducts a post test to get the value of student learning achievement.

RESEARCH RESULT AND DISCUSSION

The results of [data processing] showed that the results of the pre-test and post-test were analyzed using SPSS version 2.0 so that the test scores were obtained as follows. The results of the teaching and learning test of the integration model of junior high school students with character values.

Table 3

The Results Of The Pre- And Post-Integration Model Learning Student Test Results

	Mean	N	Stand Dev	Sig
Pretest	60.15	102	6.02	0.01
Posttest	73.20	102	7.01	0.01

Source: 2022 Research Results

Based on Table 3, the mean value of the pre-test is 60.15 (SD: 6.02) while the mean of the post-test is 73.20 (SD:7.01), the t-test results show that there is a significant difference between the results of the pre-test and post-test scores (t: -32.22). , Df: 103, $P < 0.001$). This shows that there is an increase in student achievement by using the integration model in science teaching and learning at SMP Banda Aceh.

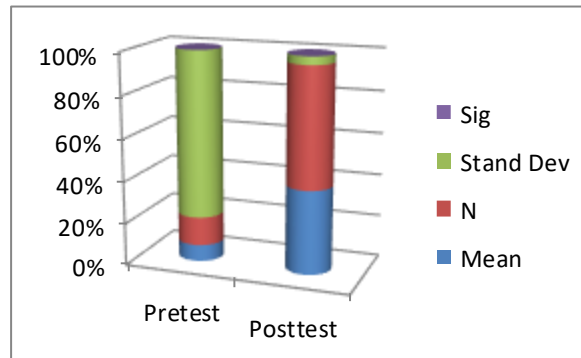
This integration model is carried out by the teacher in the teaching and learning process referring to an understanding of the integration of science teaching materials from the aspects of knowledge, thinking skills, and student attitudes including local wisdom, socio-cultural and religious values. There is a change in attitudes and the way students interact with peers or with seniors with teachers or school admin officers and even with members of the Security Guard.

This is in line with the opinion (A. Putri, T. Hidayat, W. Purwianingsih, 2019) that the guidelines in the school curriculum must refer to the pattern of integration of local cultural values in four skills, namely knowledge (concepts), affective behavior, process skills and attitudes. social/emotional based culture. As for the integration of tolerant religious attitudes with the cultural values of the Indonesian people who are obedient, obedient, respectful, in line with the character curriculum, religious and social attitudes are integrated by teachers with local wisdom.

In teaching and learning carried out by teachers, it must be harmonized with the potential, characteristics, and needs of the community in an area, fostering knowledge, scientific attitudes, and skills according to the level of development of students who are

still teenagers. At that time, it was unique with the attitude/belief of the Acehese people, which had strong Islamic values and a strong religious culture in the formation of student character from improving the quality of education at the secondary school level (Cut Morina Z, et al, 2020).

Grafik. 1 Nilai Pra dan post



Source: 2022 Research Results
Table 4

Nilai uji- t

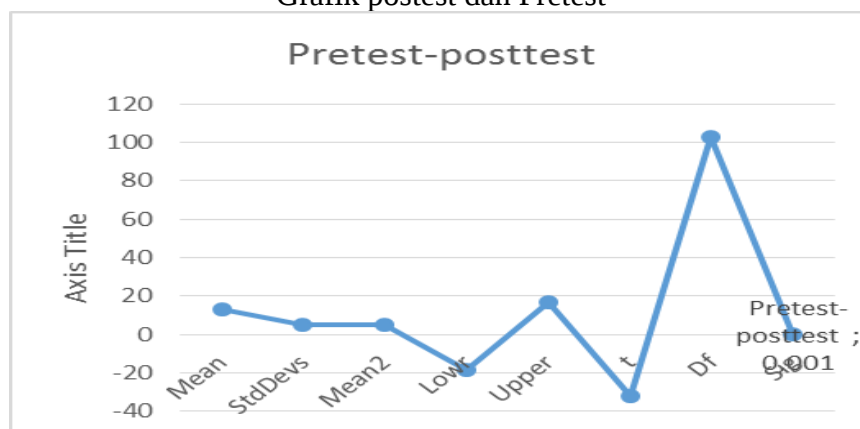
95% Confidence								
	Mean	Stdr Error	Interv of Diffirec		t	Df	Sig	
	Mean	StdDevs	Mean	Lowr - Upper				
Pretest-posttest	13.25	5.18	5.11	-18.46 16.70	-32.22	101	0.001	

Source: 2022 Research Results

Data analysis by statistical test of student test results at the end of teaching in learning achievement. The test scores of 102 respondents found the min pre and post exams in the following graph.

Picture 1

Grafik posttest dan Pretest



Source: 2022 Research Result

Table 5
The value of integration with student character

	Mean	N	Deviasi	Sig
Karakter	75.50	102	8.70	0.01
Localwisdom	78.70	102	8.25	0.01

Source: 2022 Research Result

Based on table 5, it is found that the mean character value is 75.50 (SD = 8.70) while the mean value of wisdom is 78.70 (SD = 8.25). So this integration model can improve student learning achievement about science and also change the character of students in learning so that the values of local wisdom for junior high schools in Aceh Province get better. This needs our attention as an effort to help teachers improve science learning outcomes while at the same time fostering wisdom in students about local values that must be learned. The condition of the people in Aceh Province, various ethnic groups inhabiting the eastern region of Aceh such as the tamiang, gayo, alas, aneuk jamee tribes, as well as the coastal tribes that inhabit the south west of Aceh have different characters but are united in the same Islamic culture (Ningrum, L.S. et al. , 2020).

Based on table 5, it is found that the mean character value is 75.50 (SD = 8.70) while the mean value of wisdom is 78.70 (SD = 8.25). So this integration model can improve student learning achievement about science and also change the character of students in learning so that the values of local wisdom for junior high schools in Aceh Province get better. This needs our attention as an effort to help teachers improve science learning outcomes while at the same time fostering wisdom in students about local values that must be learned. The condition of the people in Aceh Province, various ethnic groups inhabiting the eastern region of Aceh such as the tamiang, gayo, alas, aneuk jamee tribes, as well as the coastal tribes that inhabit the south west of Aceh have different characters but are united in the same Islamic culture (Ningrum, L.S. et al. , 2020).

Tabel 6
ANOVA between groups within groups

	Sum of Squares	df	Min Squares	F	Sig
Ujian Pra Antar klmpk	1538.63	4	384.66	1250	0.001
Dalam klmpk	3631.28	102	30.77		
Total	5169.91	102			

Source: 2022 Research Results

Based on table 6 above, the ANOVA test has a min score difference (30.77) for the pre-test ($F = 1250$) and is significant 0.001, showing the difference in the sum of squares between the groups of 1538.63, the sum of squares in the 363128 group is also different. The results showed significant ($F=1250$ $p < 0.001$).

The process of integrating character, socio-cultural values that are included in the secondary school curriculum by means of integration for each science teaching material needs to be prepared by the teacher at the beginning of each semester. Character curriculum with a teacher integration model that teaches topics on environmental management, ecosystems and healthy food containing additives / dyes or alcohol, food and nutrition as well as interactions between animals and plants as a link in science teaching materials (Ibrahim, et al. 2022) .

Problems faced by teachers and students and the community such as difficulty in getting clean water, green open land or recreation zones for public facilities are provided by the government. Teachers can discuss materials that integrate the values of local wisdom about the use of clean water and good environmental sanitation in terms of ecosystem/environmental health..

In principle, the concept of integrating local cultural values is to relate the habits of the surrounding community when interacting with their environment. The interaction between the environment greatly determines the continuity of animal and plant life in a sustainable manner (Ibrahim, Jalaluddin, Ridhwan Muhammad, Rasool Akhtar & Zulfajri 2022). All biology teachers can understand the science science material being taught to get double benefits for students from the teaching and learning process they follow, namely students can develop integrated scientific values according to local cultural values.

CONCLUSION

The results of this study indicate that the implementation of the science teaching and learning process with the integration model can be carried out well by teachers and students thanks to the support of the principal, the education office and the surrounding residents. There is an increase in science learning achievement with teaching materials for the environment, the interaction of living things with nature, environmental health and food ingredients.

Students participate in learning by using the model of integration of cultural values and character values to have a better influence on learning achievement with good character. This shows a change in students' attitudes and character to honesty, courtesy, character, noble character towards better quality teaching and learning outcomes. Teachers and students must be able to mobilize all existing potentials to carry out an integration model of character values and in accordance with the Islamic culture of the Acehnese people

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