

Implementation of an environmental-based alternative integrative thematic model to increase meaningfulness and learning outcome

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Abstract

This study was aimed at improving the meaningfulness and learning outcomes of grade 2 students of SDN Gendongan 02 Tingkir District of Salatiga City by applying an environmental-based alternative integrative thematic design. This study was applied to 39 students as the subject and used Stringer model in 2 cycles with look, think, and act phases. The data collection instruments were test, questionnaires, observation sheets, and field notes. The test instruments were used to determine student learning outcomes. The questionnaire was used to determine the meaningfulness of student learning. While the observation sheet and field notes were used to monitor the course of learning according to the learning scenario. The data analysis technique was descriptive comparative technique. The results show that there is an improvement from cycle I to cycle II, in both meaningfulness and student learning outcomes. Therefore, the environmental-based alternative integrative thematic design can be used to improve learning meaningfulness and student learning outcomes.

Keywords: alternative integrative thematic; meaningfulness of learning; learning outcomes

Introduction

Thematic learning model uses themes to connect several subjects so that they can provide meaningful experiences for students. Integrated learning is defined as learning that connects various ideas, concepts, skills, attitudes, and values, both between subjects and in one subject (Permendikbud No. 57 of 2014).

Majid (2014) stated that integrative thematic learning was a learning approach that integrates various competencies from various subjects into various themes. In addition, thematic learning could be interpreted as a learning by integrating multiple subject matter in one theme/topic of discussion and thematic learning will provide integrated learning opportunities that emphasize student participation in learning (Abduh, 2014). This learning model allowed students both individually and in groups to actively explore and discover scientific concepts and principles holistically, meaningfully and authentically (Rusman, 2012).

The theme chosen in integrative thematic learning should be raised from the living environment of students (Kadir and Asrohah, 2015; Hidayah, 2017). Determining a theme in integrative thematic learning should be: (1) paying attention to the environment that is closest to students, (2) from easy to difficult, (3) from simple to complex, (4) from concrete to the abstract, (5) the chosen theme must enable the thinking process in students, and (6) the scope

of the theme is adjusted to the age and development of students, including their interests, needs, and abilities (Siti, 2015).

Learning was meaningful according to Ausubel (Rahmah, 2013) which was the process of linking new information or material with concepts that already exist in cognitive structure. Therefore, presenting learning teachers must pay attention to the conditions and learning experiences of students before participating in learning. The experience of students can be used as the basis for new experiences that students will learn. Meaningful learning can be done by providing material that is close to the environment of students through integrative thematic learning. Ardiani (2013) stated that when a person was able to apply integrative thematic learning it was possible to have meaningful meaningful learning in accordance with the planning, implementation and evaluation stages.

According to Yogihati (2010), meaningful learning was an approach in managing the learning system through active learning methods towards independent learning. The ability to learn independently was the ultimate goal of meaningful learning. The way of packaging the learning experience designed by the teacher was very influential on the experience for students. The way of packaging learning experiences could be through themes that were appropriate to the environment of students (Trianto, 2011). Thus, the environment greatly influences how students can feel meaningful in learning.

Rumidani (2014) said that the principle of environment-based thematic learning was the learning process of several subjects integrated with the environment. Learning forms were designed for the students to find the theme of the surrounding environment efficiently. The thematic learning function was made for students to understand and explore the concept of material that was incorporated in the theme and could increase the enthusiasm of learning because the material study was contextual and meaningful for students (Kemendikbud, 2014).

Learning that incorporates the needs and environment of students becomes more meaningful. This is related to the outcomes obtained by students. According to Suprijono (2013) learning outcomes are changes in behavior as a whole not just one aspect of human potential. In addition, according to Dimiyati and Mudjiono (2013), learning outcomes are the result of an interaction of learning actions and teaching actions. Based on the above understanding it can be concluded that learning outcomes are changes that occur to students as a whole after carrying out learning with the teacher. So, the teacher's way of packing environmental-based integrative thematic learning so that learning becomes meaningful, ideally can improve student learning outcomes.

In accordance with the expectations of the 2013 curriculum, SDN Gendongan 02 has been trying to carry out thematic learning with the demands of the 2013 curriculum. The teacher uses the Teacher's Book and Student's Book as a good learning resource, but some material is perceived as shallow and lacking in instilling meaningful learning in students. Based on the results of interviews with several grade 2 students at SDN Gendongan 02, students said that integrative thematic learning had not been done fully. They are like learning in separate contents so learning is less meaningful. This lack of meaning is caused by students only following the teacher's instructions in doing the assignments in the student book only. As a result, the learning outcomes are still not satisfactory.

Based on the results of reflection with the teachers of Class 2 SDN Gendongan 02, several problems were identified as follows: (1) students said that the learning carried out was separate or less thematic; (2) students tend to be lazy to ask even though they are not really aware of the material being studied; (3) learning only refers to Teacher's Books and Student Books; (4) the teacher does not dare to use sources or references from other books because when the mid test and final test, the questions that will come out only come from the Student Book only so the teacher does not want to add to the learning burden of students with sources from other books; (5) learning is less close to the student environment; and (6) students tend to get more material from listening and seeing activities, but have not yet done the activity. Therefore, we apply environmentally-based alternative integrative thematic learning designs to improve student meaningfulness and learning outcomes.

Materials and Methods

This research was a classroom action research using Stringer model with 3 stages, i.e. look, think, and act. This research was conducted at SDN Gendongan 02 Tingkir District, Salatiga City, with research subjects Class 2 consisting of 25 male students and 14 female students. The independent variable in this study was an alternative environmental-based thematic integrated learning design while the dependent variable in this study was the meaningfulness and learning outcomes. Data was collected using test and non-test techniques. The test given to students was in the form of multiple choices and entries. While the non-test technique was given to students to measure the meaningfulness of learning through questionnaires, observations, interviews, and field notes. We interviewed teachers in Class 2 to get information related to the meaningfulness of thematic learning. Meanwhile, observations and field notes were carried out to observe the learning process by using an environmental-based alternative integrative thematic learning design. At the end of each

cycle, students filled out a questionnaire to find out the level of meaningfulness of students' learning. Data were analyzed descriptively by comparing the meaningfulness and learning outcomes of students in Cycle I and Cycle II.

Results and Discussion

After Cycle I, the students' meaningfulness scores showed good results. 88.88% students achieved very meaningful categories, 5.56% achieved meaningful categories, 5.56% achieved meaningful enough category, and none were at less meaningful and very less meaningful categories. After cycle II, students improved the meaningfulness in learning. There were 94.6% students achieved very meaningful results, 5.4% at meaningful results, and none at meaningful enough, less meaningful, and very less meaningful (Table 1).

Table 1. Achievement of the meaningfulness of learning in cycle I and cycle II.

Category	Interval	Cycle I		Cycle II	
		f	%	f	%
VM	81-100	32	88.88	35	94.6
M	61-80	2	5.56	2	5.4
ME	41-60	2	5.56	0	0
LM	21-40	0	0	0	0
VLM	1-20	0	0	0	0
	Total	36	100	37	100

VM (Very Meaningful); M (Meaningful); ME (Meaningful enough); LM (less meaningful); VLM (Very Less Meaningful); f (frequency); % (percentage).

Based on the results of learning meaningfulness, the application of environmental-based alternative integrative thematic learning can improve student learning meaningfulness. Putri (2015) stated that the learning process using media in the surrounding environment helped students to achieve the expected competencies easier according to the learning objectives. In addition, the use of props and learning directly through the surrounding environment was an effective way to improve children's abilities because they could learn thoroughly and provided meaningful direct experience. Rahmah (2013) emphasized that meaningful learning could be obtained by constructing what students had learned and associating new experiences, phenomena, and facts into their knowledge structure.

Additionally, we measured learning outcomes in Cycle I and Cycle II from three subjects, i.e. Indonesian, Pancasila and Civic Education, and Mathematics. In the first cycle

of Indonesian content there were 19 students from 36 students (53%) with complete categories, and 17 students from 36 students (47%) with incomplete categories. Whereas in cycle II, there were 30 students from 37 students (81%) with complete categories and 7 students from 37 students (19%) with incomplete categories. The average score in classical in the first cycle of Indonesian language load was 74 and in the second cycle was 75 (Table 2).

Indonesian learning outcomes in the first cycle still need to be improved because only 53% students completed the learning. Students were lack focus in learning, careless, and there were still some students who did not pay attention to the teacher in classroom. Thus, the researchers took action in cycle II to improve the environmental-based integrative thematic learning scenario. Results showed that the completeness of learning in Indonesian subject were increased to 81% (Table 2). Perwitasari (2018) stated that integrative thematic learning was effective to improve students' critical thinking and scientific attitudes.

From the results of learning Pancasila and Civic Education, in the first cycle there were 29 students from 36 students (81%) with complete categories, and 7 of 36 students (19%) with incomplete categories. In cycle II there were 31 students from 37 students (83%) with complete categories, and 6 students from 37 students (16%) with incomplete categories. The classical value in the first cycle of PPKn load is 79 and in cycle II is 83.

Table 2. Indonesian learning outcome in cycle I and cycle II.

Category	Cycle I		Cycle II	
	f	%	f	%
Complete	19	53	30	81
Incomplete	17	47	7	19
Total	36	100	37	100
Average	74		75	

f (frequency); % (percentage).

Learning outcomes on the content of Pancasila and Civic Education showed good results, the percentage of completeness in the first cycle was 81% and in the second cycle was 84%. Although the increase in percentage of completeness of learning outcomes was not too much but, the average classical score experienced a fairly good increase of 79 to 83.

Table 3. Pancasila and Civic Education learning outcome in cycle I and cycle II.

Category	Cycle I		Cycle II	
	f	%	f	%
Complete	29	81	31	84
Incomplete	7	19	6	16
Total	36	100	37	100
Average	79		83	

In Mathematics, after Cycle I, there were 17 students with complete categories and 19 students with incomplete categories (Table 4). In Cycle I, there was misconception in learning Mathematics contents, especially fraction material. Therefore, we proceed to Cycle II by overcoming the conceptual errors that occurred and improving the results of learning Mathematics with an alternative environmental-based thematic learning design. This misconception had to be straightened out. Sundawan (2016) said that problem solving was a very important activity in Mathematics learning because solving procedures trained students' analytical skills needed to deal with the problems they encountered in everyday life.

After Cycle II, students' learning outcomes were increased. There were 26 students achieved complete categories and 11 students with incomplete categories. Thus, after Cycle I and Cycle II, more students completed the process. Based on the research by Putri (2018) there was a significant difference in learning outcomes between students who took environmental-based integrative thematic learning with students who took conventional learning. There are differences in treatment in thematic learning based on the environment because student learning activities are more than teacher activities. Environmental-based thematic learning is student centered, that is students obtain information through interaction with the environment. An interesting atmosphere causes learning to be meaningful and improves student learning outcomes.

Result showed that there was an increase in the meaningfulness of student learning. The initial condition explained that learning with the Teacher's Book and Student's Book made students less understand the content of the material in depth. Through the implementation of environmental-based alternative integrative thematic designs, presented material was emphasized to the environment closest to students. The application of integrative thematic learning increased student learning outcomes (Asri, 2014; Abduh, 2015). Fatchurrohman (2015) concluded that the integrative thematic learning model was suitable

for use in learning and the material was easier for students to learn (Akbra et al., 2010). And Pringgodani (2016) proved that learning outcome competencies were higher for students who used an environmental-based integrative thematic learning model than those who used the government's integrative thematic learning design model.

Table 4. Mathematics learning outcome in cycle I and cycle II.

Category	Cycle I		Cycle II	
	f	%	f	%
Complete	17	47	26	70
Incomplete	19	53	11	30
Total	36	100	37	100
Average	61		83	

f (frequency); % (percentage).

Conclusion

The application of environment-based alternative integrative thematic learning design in grade 2 of SDN Gendongan 02 has been proven to improve meaningfulness and learning outcomes. However, the environmental-based alternative integrative thematic learning that was implemented had not been maximized. It would be better if the application of this learning design can be applied in every learning process, thus it can increase the meaningfulness and students' learning outcomes.

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