

Integrated Thematic Teaching Materials Based on Local Wisdom to Develop the Elementary School Students' Characters

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Abstract

The study aims at developing, analyzing validity, testing efficiency, assessing practicality, and describing student character development using the integrated teaching materials based on Sugiyono's model of R&D research approach. The subjects were the fourth-grade students of State Elementary School of Ngemplak, Simongan 02 Semarang City. The data technically collected using the techniques of interviews, documentation, questionnaires, and tests and are analyzed using product feasibility, t test and N gain test. The results showed that; (1) the integrated thematic teaching materials covers Semarang's local wisdom of cultural tourism, traditional cuisine, attractive color illustrations and character-building learning activities; (2) These materials are considered feasible. The level of eligibility criteria for the first validator was 89.50 % and the second validator is 91.75 % (very feasible); (3) the integrated thematic teaching materials were used effectively referring to results of the t test which indicate that $t_{count} > t_{table}$ ($6.67 > 2.57$) and assisted by gain test which obtained 0.678 as moderate criteria; (4) the rate of student teaching material practicality at 97,88 % (very positive) and the ratio of teacher responses at 96,87 % (very positive), and (5) integrated thematic teaching materials based on local wisdom can develop the questionnaire character. This concludes that integrated thematic teaching materials are highly appropriate for learning, enhance student learning effectively, are practical and can enhance student characters.

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INTRODUCTION

The 2013 curriculum in Indonesian education provides something different. Learning system is supposed to be able to carry a golden generation into being and welcome a hundred years of democracy. Learning in elementary schools (SD) through implementing integrated thematic learning and using scientific approach to the learning process is highly recommended. This approach sought to scientifically address a problem in the current educational curriculum. Teachers are hoped to prepare a generation who can think critically and has skills for the 21st century (Kemendikbud, 2016).

The use of a scientific approach could improve and balance the ability of students to be good people (soft skills) with skilled people and to understand exactly-how to live properly (hard skills) they should have excellence in attitudes, skills and knowledge (Darling-Hammond, et al., 2020; Cimatti, 2016). The 2013 Curriculum has a distinctive feature and strength. Attitudinal competence is obtained through accepting, carrying out, appreciating, living, and practicing activities. Skills are learned through observation, questioning, experimenting, reasoning, presenting and creating activities (Cahyati, & Suherman, 2018). Meanwhile, knowledge is gained through the activities of recollection, comprehension, implementation, review, assessment, and development. A teacher is supposed to be able to create engaging, diverse and enjoyable learning in order to achieve competency in knowledge and skills so that students are motivated and will not think that learning is boring.

The 2013 curriculum seeks to improve students' integrated competence between attitudes, knowledge, and skills. Spiritual attitudes and social attitudes according to the nature of the Indonesian nation will develop into noble characters. The 2013 curriculum introduces thematic learning which is learning designed in the form of a theme to be integrated between one subject to another. Thematic learning should be related to the students 'environment which leads to knowledge attainment and introduction to the students' environment. The typical learning offered in elementary schools (SD) should be thematically developed with cross-subject integration to improve their attitudes, skills, knowledge and help them to be more grateful to appreciate their local cultural diversity (Kemendikbud, 2013).

One of the thematic learning activities that can be carried out is the integration of local knowledge into learning. Integrating local passion

for learning to increase the sense of local wisdom in the environment and as an effort to preserve the presence of local wisdom in the midst of the rapid currents of globalisation (Shufa, 2018). In practice, however, many teachers have not incorporate local wisdom into thematic learning which consequently the educational objectives have not been well-achieved, in addition to the fact that the students are not optimally familiar with local wisdom in their community.

Local wisdom is etymologically composed of two terms, namely wisdom and local. Other local wisdom terms include local knowledge and local genius (Mariane 2014: 111). In this context, local wisdom can also be called local wisdom, as noted by the Ministry of Education and Culture, to use the term local wisdom as a learning concept in schools to increase people's local skills across regions in Indonesia. The objective of preserving local wisdom is to develop the students' capacity to create and sustain local wealth in Indonesia by developing cognitive, affective and psychomotor (Prasetyo, 2013; Guerrero-Gatica, 2020).

Local knowledge, the result of local geniuses from different ethnic communities is reflected in the Indonesian national identity, which must be integrated in a cultural unit for realizing of a country: the Indonesian nation. In this intergenerational cultural change, a younger generation needs to be able to grasp the older generation and communicate in the language of the next generation (Garnaut, 2009). We have to be proud of the local culture passed on to us from generations of national fighters. In order to increase the youth's passion for local culture, it is important to instill nationalism values in the youth. Consequently, strategic steps should be taken to increase love and care for local cultural wisdom to the next generation.

Based on a questionnaire on the needs of teachers and students regarding the teaching materials used in State Elementary School of Ngemplak, Simongan 02 shows the need to develop teaching materials based on local wisdom themed Beauty of Togetherness and the sub-themed with Gratitude for Togetherness as a companion to teacher books and student books from the Indonesian Ministry of Education and Culture. Teachers and students need additional training tools to deepen or strengthen their comprehension of integrated thematic learning in science, social studies and Indonesian language learning, which can help develop students' outcomes and character. These issues can be solved by real efforts to conserve the noble ideals of Semarang's traditional cultural wisdom by integrating the-

matic learning materials with local wisdom. The creation of educational material was chosen as educational materials are a source of information directly linked to students.

In order to incorporate local knowledge into learning, education resources should summarize materials, approaches, models, methods, strategies, media and learning evaluation. Printed teaching materials are the materials developed for teaching. Presentation of the City of cultural tourism and traditional food, with a selection of colourful image, structural, contextual and nuanced local wisdom. This teaching material includes materials related to the key ideas and thoughts on Indonesian language, the content of the classical diets in social studies and the sound, resonance, echo and vibration characteristics in scientific topic content. Illustrations and descriptive images allow students to understand the materials being learned (Marble, 2012; Bobek & Tversky, 2016). This actually leads students in their community to understand, own and enjoy local cultural wisdom. Students will learn more about their local cultural wisdom which will allow them to cultivate their love for the noble values of their country, wider national values which in turn will increase nationalism.

The theme of the teaching materials being developed under the theme of “*Indahnya Keberagaman*” [the beauty of togetherness] which sub-themed with “*Bersyukur Atas Keberagaman*” [being grateful for diversity]. The curriculum used is the 2013 curriculum, therefore, the alternative teaching materials are a companion to the student books and teacher books issued by the 2016 Ministry of Education and Culture, which then it continues to be implemented according to the 2013 curriculum signs. The students are expected to be individuals who can think, speak and act effectively in the global sphere but remain integrated and uphold local cultural wisdom, which is in line with Made Sudiana ‘s thought (2018). Developing local knowledge-based teaching resources can enhance students ‘ comprehension, skills which can also lead students to internalize in themselves noble characters by always thinking, behaving and speaking appropriately and correctly.

Attractive teaching materials can improve student interest in reading. This is in line with Lestari’s (2013) statement, that teaching materials are a set of learning tools comprising systematically and attractively designed learning materials , methods, limitations and ways of evaluating them. According to Dick, Carey, and Carey (2009, p.230), teaching materials include infor-

mation that students need to understand, either in print or encouraged by teachers in order to attain those objectives (Nugraha, and Suherdi, 2017). Panen (2010) further notes that teaching materials equipped with various types of illustrations play an important role in teaching materials, as illustrations may clarify concepts, messages, ideas or ideas expressed in teaching materials. Attractive illustrations combined with good layouts and colorful and meaningful images can create study materials more interesting.

The government initiated the *Penguatan Pendidikan Karakter* (PPK) [Strengthening Character Education] as stipulated in Permendikbud Number 20 of 2018. PPK is applied by applying Pancasila values in character education, covering specific religious values, honesty, tolerance, discipline, dedication, creative, autonomous, democratic, curiosity, national spirit, country love, respect for accomplishment, communicative, love of peace, love of reading, care of the environment, care of the social and are responsible. These values are the manifestation of 5 (five) core values which are interrelated in the curriculum, namely religiosity, nationalism, independence, mutual co-operation, and integrity. Integrated thematic teaching materials focused on local wisdom aim at improving the character of students in elementary school.

Local Wisdom as wise thoughts, values, local views, full of wisdom and good value, rooted in and practiced by community members. Through local wisdom-based education programs, it is hoped that local wisdom and character that cares about the environment can develop and otherwise leverage the environmental ability. The author will therefore discuss the incorporation of character education into the integrated thematic learning based on local knowledge entitled “the Integrated Thematic Teaching Materials Based on Local Wisdom to Develop Students of Elementary School Character”.

METHOD

The allocated time to conduct this study was on April-November 2020 at the Elementary School of Ngemplak, Simongan 02 of West Semarang. Additionally, this study uses the Research and Development (R&D) method. The R&D is a research method used to produce certain products and test the effectiveness of these products. R&D is an approach to producing new products or enhancing existing products, which consists of ten steps (Sugiyono, 2016). However, in this study the steps to use this method were

carried out only up to the sixth step, namely product testing on a small scale (potential problems, data collection, product design, design validation, design revision and product testing). The limitation to only being carried out on small-scale trials is the reason for the Corona-19 pandemic. Integrated Thematic Teaching Materials based on local wisdom will be tested on a small scale to be tested for their effectiveness and practicality. The product feasibility analysis is taken from the assessment of the feasibility of teaching materials based on local wisdom on the sub-theme of being grateful for diversity. The data were analyzed through percentage descriptive test including questionnaire data regarding teacher and student responses to the feasibility of teaching material products based on local wisdom analyzed by percentage descriptive test. The effectiveness test using the t test used in this study was the paired t-test. The magnitude of the increase in students' average learning outcomes can be calculated using the N-gain formula.

RESULT AND DISCUSSION

Learning Activity Model through Integrated Thematic Teaching Materials Based on Local Wisdom during Covid-19 Pandemic Era

Unlike the previous years, the challenges posed by the pandemic led to the implementation of applied research where researchers went directly to schools that interacted directly with teachers and students. The applied research was performed by online learning techniques through the teaching materials on learning during the Covid era. However, at the beginning of the study, the face-to-face approach for socializing in school is used, both parents and students came to school. Through WAG parenting and schools, we urge teachers and parents to apply health protocols during the activity by wearing masks, washing hands regularly with soap and running water and keeping one another distant. Corona Virus Disease (Covid-19) has taught many things to people, from living cleaner and healthier lives to allowing residents to learn how to adapt to distance learning. This mechanism for home-learning policy involves parents taking the full role as their children's first and foremost teachers. Home schools focus on life skills education, enhancing the values of character (noble moral values), and doing religious worships with the family. As we described in thematic materials for learning based on local activism. Learning is done at home by collaboration with parents and teachers who have been accommodated through WAG parenting.

We initially interacted and organized learning with parents and then extended it to teaching online materials. Home learning for fourth graders of state elementary school of Ngempalk, Simongan 02 guided by the teacher using WAG with a Learning Implementation Plan (RPP) during a pandemic. (RPP for the pandemic period is attached). The activities required for learning refer to integrated thematic teaching materials based on local wisdom. (Schedule and learning journal attached). Remote communication between researchers, teachers and parents of students to guide the optimization of child development or consultation between parents and teachers in preparing teaching materials, assignments and experiments, fun, student-centered learning and learning videos, therefore, parents can be more adapt to this condition. Diverting learning activities from school with older siblings and with parents' assistance and continuing to carry out routine activities at their respective homes while implementing social distancing.

A. Feasibility Test Results for Integrated Local Wisdom based Thematic Teaching Materials by the Validator

The validity evaluation was performed by experts in materials and medias who refer to the validity assessment instrument grid. The feasibility test during the design validation phase comprises four aspects, namely: content feasibility, presentation aspects, language and graphics. There are four evaluation criteria for each validator's validation score, including very feasible with a range of 85%-100%, feasible with a range of 65%-84%, quite feasible with a score range of 45%-64%, and not feasible with a range of 25%-44%. Integrated thematic teaching materials based on local wisdom are considered reliable, 89.50 percent of the eligibility criteria for the first validator and 91.75 percent (very feasible) for the second validator. Table 1 shows information related to the feasibility test for integrated thematic teaching materials based on local knowledge.

1) Design Revision

The design revisions are obtained on the basis of suggestions and comments both on the validation sheet and orally and after a design validation is carried out, several suggestions are obtained. Some suggestions are: in the feasibility of information completeness, the activities provided focus on providing direct experience of local knowledge and daily activities for students, added with scientific material more related to developing character. In the language aspect, it is re-

commended to use simple, effective and efficient language, and to use brighter colors for the color and image aspects.

2) Small Group Product Trials

The small group trials were tested at Elementary School Ngemplak Simongan 02 to students of four graders, totalling six students. Small group trials were conducted by providing learning with teaching material products based on local wisdom, then students gave their responses through a research groups questionnaire. The learning is processed electronically through online parenting WhatsApp Grup (WAG). The results of the questionnaire recapitulation of student responses to product trials are presented in the following table.

Table 2 The Questionnaire Results for Student Product Trials

No	The rated aspects	Per-centage	Criteria
1.	The teaching materials are easy to understand	100%	Very Positive
2.	The teaching materials include reading about the city of cultural tourism and the variety of pleasant foods of the Semarang city	100%	Very Positive
3.	The teaching material contains readings on the diversity of musical instruments and the practice of interesting sound properties and sound resonances.	100%	Very Positive
4.	Contextual teaching materials to make learning easy	83%	Positive
5.	Teaching materials with clear and attractive illustrations and images	100%	Very Positive
6.	Teaching materials are equipped with adequate questions and practical activities	100%	Very Positive
7.	Teaching materials increase interest in reading fondness	100%	Very Positive
8.	Teaching materials foster character (curiosity, confidence, honesty, hard work, discipline, creative, cooperation and independence)	100%	Very Positive
	Classical Percentages	97,88 %	
	Criteria	Very Positive	

Based on table 2 it can be concluded that the average student responded to the product of

teaching materials developed with a very positive response with the classical percentage reaching 97.88%.

Table 3. Recapitulation of Testing Teacher Assessment of Use

No	Rated aspect	Percent-age	Crite-ria
1.	The teaching materials are easy to understand	100%	Very Positive
2.	The teaching materials include reading about the city of cultural tourism and the variety of pleasant foods of the Semarang city	100%	Very Positive
3.	The teaching material contains readings on the diversity of musical instruments and the practice of interesting sound properties and sound resonances.	100%	Very Positive
4.	Contextual teaching materials to make learning easy	75%	Positive
5.	Teaching materials with clear and attractive illustrations and images	100%	Very Positive
6.	Teaching materials are equipped with adequate questions and practical activities	100%	Very Positive
7.	Teaching materials increase interest in reading fondness	100%	Very Positive
8.	Teaching materials foster character (curiosity, confidence, honesty, hard work, discipline, creative, cooperation and independence)	100%	Very Positive
	Classical Percentage Criteria	96,87 %	Very Positive

Based on table 3 it can be concluded that the average teacher assessed the products of teaching materials developed with very positive responses, the whole percentage reached 96.87%.

Table 4. Student Self-Assessment Recapitulation (Religious and social attitudes)

No.	Statements	P e r - cent - age	Descriptions
1.	I always pray before and after doing activities	100%	Religious character developed very well
2.	I always perform worship according to religious teachings	100%	Religious character developed very well

3.	I never complain when I do assignments	100%	Religious character (attitude of always being grateful) develops very well
4.	I do my own work not made by my parents	100%	Social character is very well developed
5.	I am aware of admitting mistakes	100%	Social character is very well developed
6.	I am consistent in carrying out my duties	100%	Social character is very well developed
7.	I divide my study and play time wisely	100%	Social character is very well developed
8.	I submit assignments / homework on time	100%	Social character is very well developed
10.	I like to read textbooks based on environment and local wisdom.	100%	Social character is very well developed

Based on table 4, it can be concluded that the character of students who develop very well are religious attitudes (praying before and after learning, always being grateful, obeying worship) and social attitudes (responsibility, honesty, discipline, love of reading, fostering curiosity and environmental care).

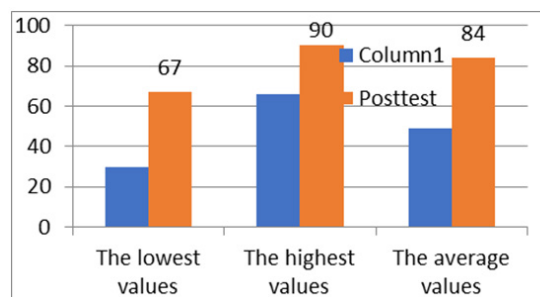
Student Cognitive Learning Outcomes

Students' cognitive learning outcomes include the pretest and posttest scores. The pretest scores were obtained from tests conducted before the students learned using integrated thematic teaching materials based on local wisdom. Posttest scores are obtained from tests carried out after learning activities using the developed teaching material products. The results of the pretest and posttest are presented in the following table.

Table 5. Student Cognitive Learning Outcomes

No.	Information	Pretest	Posttest
1.	Total students	6	6
2.	Mean values	49,16	83,67
3.	Lowest scores	30	67
4.	The highest score	66	90
5.	Number of completed students	0	6
6.	The number of the un-completed students	6	0

The increase in mean values 34,51



Graph 1. Student cognitive learning outcomes

The results of the T-Test on pretest and posttest values

Table 6. t-test results on the pretest and posttest values

Treat-ments	N o . o f Students	Mean	to	t.table	Information
Pretest	6	49,16	6,678	2,571	Ho rejected
Posttest	6	83,67			

Based on table 6, the results of the pretest and posttest t test were obtained to 6.678 while the t table was 2.571. This shows that Ho is rejected because $t_o > t_{table}$. Thus, it can be concluded that there is a difference in the mean pretest and posttest scores. Thus, teaching materials based on local wisdom are effectively used in learning

Table 7. Gain Test Results on Pretest and Posttest Values

Gain Test			
	Mean	N Gain	Criteria
Pretest	49,16667		
		0,678689	Medium
Posttest	83,66667		
Difference in mean	34,5		

Student Codes				Each student's criteria
	Pretest	Posttest	N Gain	
A1	47	90	0,811321	High
A2	30	67	0,528571	Medium
A3	43	87	0,77193	High
A4	53	84	0,659574	Medium
A5	56	87	0,704545	High
A6	66	87	0,617647	Medium

Based on the table, the increase in the mean gain) of pretest and posttest data is considered to be 0.678, with the criteria of moderate increase.

DISCUSSION

A. The Characteristics of Integrated Thematic Teaching Materials Based on Local Wisdom

Integrated thematic materials based on local content include readings on the city of cultural tourism and the variety of enjoyable cuisines of the Semarang city, and include readings on different musical instruments and sound resonances that are interesting, simple, and easily understood use of language.

The teaching materials which have been created are organized in structured way in conformity with the recommendations of preparation and compilation of the contents based on skill standards, basic core competencies and indicators developed for students to achieve learning objectives more easily. The development of educational material, based on local knowledge, is also adapted to the level of children's cognitive development. Similarly, Piaget (cited in Rifa'i, 2012, p. 34) classifies cognitive development stages according to age. In the concrete operating process is included a child aged 7-11 years. Children can operate different logics at this point, but the ability to define already exists in the form of concrete objects but they still can solve abstract problems..

Semarang City is the capital of Java Central Province and has a lot of local knowledge to support Semarang City cultural development and preservation. In the city of Semarang, there is still a lot of local knowledge, such as the Semarang Gambang and its dances, the Warak Ngendog festival and the Rewandha offerings in Kreo cave, custom and cultural processions are exist and very well-maintained by the local community. In addition, the Mayor of Semarang highlighted the local wisdom of residents including Kota Lama, Lawang Sewu, Kampung Jawi, etc. in the tourism boosting project. Students reading the text "Lawang Sewu," Kampung Pelangi at Kalisari, Sampoo Kong, read in this teaching material. Students find key ideas and supporting ideas in the Indonesian learning materials. Characters such as characters of reading and gratitude develop through the learning process. Learning material on the basic skills of social, economic and cultural diversity students in the social studies also read the text "Typical Semarang Food" such as *lumpia*, *bandeng presto*, *soto Semarang*, *wingko babat*, and *mochi* etc.

The integration of local knowledge in learning,

in line with Schufa's (2018) study, is an effort to reinforce the sense of local knowledge in the community, and to preserve local expertise among the swift trends. To ensure that the culture remains strong, a sense of love must be inculcate to future generations for local culture and the national struggle should be straightforward. One approach that can be taken at school is to incorporate the ideals of local cultural experience into the learning process, extracurricular activities, or school events. The development of teaching materials is based on the theory of teaching materials modified with the concept of local wisdom so that the developed products are more attractive to the students because they consist of presenting problems, experimental activities and observations. The science project (IPA) refers to the concept of sounds that children frequently encounter in daily life, including reverb, echo, and resonance. The concept of diversity in guitar, gamelan and drum instruments applies to the concept of resonance. This is in line with the advantages of integrating local knowledge into learning, which focuses on cultivating characters such as reading, fostering curiosity, commitment, discipline, cooperation and trust in presentations where individuals are involved, in particular through the use of mental processes to define such concepts and principles (Koumura, and Furukawa, 2017).

B. The Validity of Integrated Thematic Teaching Materials Based on Local Wisdom

The assessment of the validity of the teaching materials must be carried out for the purpose of producing teaching materials. Validation seeks to gain validation to allow for the validity or use of the teaching materials in the learning process. The validity of teaching materials developed by researchers was assessed based on the feasibility of content, implementation design, language and graphics. 2 lecturers conducted the feasibility check, which included 4 categories, 4 very good scores, 3 good categories, 2 enough categories, and 1 category score was poor. This category uses Likert's scale (cited in Sugiyono, 2015, p.170). On the basis of the validation sheets from validators I and II it demonstrates that teaching materials items based on local knowledge are a good way to learn from revisions so that they have to be revised according to feedback and comment before continuing on to the next level. The percentage of the evaluation that shows > 85 percent is indicating each validator's eligibility. The result for each validator shows a value of > 85 %, which means that the product produced for the education material is subject to some of

the most feasible criteria. For the assessment of Lecturers 1 the percentage score was 89% (very feasible) and for the assessment of Lecturers 2 it was 91% (very feasible).

C. Effectiveness of the Integrated Thematic Teaching Materials

The effectiveness of using "Integrated Thematic Teaching Materials Based on Local Wisdom" in this study was assessed from student learning outcomes as seen by whether there was a significant increase in learning outcomes from grades before using teaching materials. The effectiveness of the teaching material products developed is based on student cognitive learning outcomes. Susanto (2013: 5) suggests that learning outcomes are skills which children gain from learning. Because learning is a phase where someone attempts to make a comparatively permanent change in attitude. The results of student learning in the study include pre-testing and post-test results used to determine the efficacy of developed teaching material products. Due to the Corona 19 pandemic period, the use was not made at a wider level in this study. Learning with the use of WAG parenting and measuring the scores are done through Google form.

Prior to using integrated topical teaching materials based on local information, the pre-test value is derived from student learning outcomes while post-test results are obtained through the use of production items. Testing the effectiveness of the developed teaching material products from Table 6 on the basis of t test results reveals a value of t as significant, significantly different learning or perceived as effective learning outcomes. The t-test is then supported by the pretest and the posttest and the measured values lead to an increase of 0.678 in the mean (gain) of pre-test and post-test data with the medium category increases. Additionally, the preliminary findings showed that the students completed 0%, and 6 students out of 6 were subsequently counted (100%) with the minimum completion criteria (KKM) 64 at pretest and post-test.

What is extremely encouraging is that, in addition to effective learning results, characters praying before and after learning, encourage curiosity and discipline, legibility and responsibility. Students are pleased with the content integrated with local knowledge. The students read the texts such as "Lawang Sewu," text, "Kota Lama" in the Indonesian language learning contents. The texts are in brightly colored images which illustrate Lawang Sewu and Kota Lama create a pleasure for students to find the key ideas and to help their

thoughts reach the learning objectives. The subsequent lessons will also include the text "Sam Poo Kong," the text "Kampung Pelangi in Kalisari," which also provides colorful illustrations that will make students appreciate reading in the form of attractive layouts. The character who develops likes reading, fosters curiosity, self-confidence and responsibility. In the social studies learning contents with basic competencies identifying the diversity of social, economics and culture, students read the text "Typical Semarang Food", including *lumpia* (spring rolls), presto milkfish, Semarang soup, *wingko babat*, *tahu petis*, mochi, *pisang planet*, *gandos* etc. Traditional illustration of Semarang food is also clearly illustrated with images of color to make it easier for students to understand the uniqueness of traditional food. The developed character: loves to read, encourages curiosity, trust and responsibility. In science learning contents students perform sound resonance with different musical instruments. The developed character: foster curiosity, love reading, work hard, work collectively, be independent and appreciate achievement. Cultivating character education for students through the values of local wisdom is not only insightful, but also emotionally and spiritually sensible.

A study by Oktarina and Ribuwati, entitled "Local wisdom-based education in the State Elementary School 8 of Rambutan, Banyuasin Regency Towards Global Citizen," leads to creation of Indonesian language material to explain the topic of local wisdom which can be taught through giving students materials such as guiding them how to produce works of writing, as proverbs and poetry. Other topics on the local subjects may also be taught. Shufa's study (2018) "Learning from local knowledge in elementary schools," is another research supporting this study. It should be paid more attention that teachers should apply learning based on local knowledge, which is useful in raising student understanding and knowledge and for developing positive characteristics according to the local values. The results are based on local knowledge. This is also confirmed by a Chairiyah study (2017), titled "Implementation of character education at the elementary school Taman Siswa Jetis of Yogyakarta, through local knowledge values, which leads to an improvement of quality of education, improved national morale, and improved quality of implementation through local wisdom values. Based on an explanation of the study results carried out by across researchers, the product development of integrated thematic teaching materials based on local wisdom can be inferred that

the product “Integrated Thematic Teaching Materials Based on Local Wisdom for Developing Student Character in Primary Schools” is used effectively in learning activities. It can also be used as a complement to the Integrated Thematic Teacher Book and Student Book published by the Ministry of Education and Culture.

D. Practicality of The Integrated Thematic Teaching Materials Based On Local Wisdom

The practicality of a product is based on the results of teacher and student responses when the learning process is carried out in the small-scale trial stage using the developed teaching material products. Based on table 5.4 the questionnaire results from 6 fourth grade students of the state elementary school Ngemplak Simongan 02 Semarang show that there is a very positive response to teaching material products. This is shown from table 2, then conclusion can be derived that the average students respond to the product of teaching materials developed with very positive responses which reached 97.88%. This can be seen from the maximum percentage of aspects 1,2,3,5,6,7 and 8 that teaching materials are easy to learn, teaching materials provided with clear illustrations and images, materials containing Semarang city local content, colorful and motivating to love learning. The fourth aspect reflects the minimum 88.88%, that is to say the contextual teaching material from the information of students who do not understand what contextual terms are meant. But all of them reacted to the very positive category. The next indicator is the practicality of teaching material products developed based on teacher responses during small-scale trials. Table 3 shows that the average teacher with very positive responses evaluated the product of the teaching material, on average 96.87%.

Many studies have been conducted, among others, the advantages of teaching materials based on local wisdom can be seen from the responses of students when reading and understanding the teaching materials: students stated that the teaching materials are easy to understand, interesting to read because they are equipped with clear and attractive illustrations and colorful images, increasing their enthusiasm. read and cultivate curiosity with challenging and interesting science experiments (Santosa, et al., 2019; Mumtaz & Wati, 2020). Fostering creative character in the conducting the resonance experiments, objects that can represent and absorb sound throughout the content of science learning. Fostering a creative character and social care when doing *lumpia*-making activities, making posters about *wingko*

babat and *soto Semarang* on social studies learning content and fostering creative character, likes to read and is disciplined when making a map of the main ideas and supporting ideas in Indonesian content learning. Improve critical thinking and honest, independent and disciplined character when doing activities. Let's practice the questions. This is also reinforced by Linda Febriyanti (2019) Character education for elementary students can be developed through local wisdom.

E. Integrated Thematic Learning Based on Local Wisdom Can Develop Children's Character

Referring to the results of the research as shown in table 4 Recapitulation of Student Self-Assessment (Religious attitudes and social attitudes) the conclusion is drawn that the character of students who develop very well is a religious attitude (praying before and after learning, always being grateful, obeying worship) and social attitudes (responsibility, honesty, discipline, love to read, foster curiosity, love to read and care for the environment). This is in line with Sudarmini's study (2018) in building children's character with local wisdom culture in the learning process. The result is that education not only builds intelligence and transfer of knowledge, but also must be able to build character or behavior.

There are also some encouraging findings in the implementation of lessons learned during the pandemic, such as: students have more learning experiences compared to previous learning, students are able to collect data via the internet, process data, verify and draw conclusions carefully and independently and with confidence, students can overcome their learning difficulties. This is reinforced by Hariyanto (2016) that learning based on local wisdom is proven to be able to develop students' academic abilities and character, and Nur Khabibah (2019) implementing local wisdom-based character education, the Java's Day program aims to foster character values

CONCLUSION

You may choose either 'conclusion' or 'concluding remarks' as title of the final part of your paper. In this section, you have to provide the general conclusions of your paper followed by the your recommendations for future studies or your future prediction of the potential consequences of the conclusion of your study. You may also put your personal reflection after conducting your study.

Following this section, in the separate pages please put the list of references you use in making of your paper. The references must be listed in accordance to APA guide.

REFERENCES

- Ali, Muhammad. (2003). *Strategi Penelitian Pendidikan*. Bandung: Angkasa Bandung.
- Bobek, E. & Tversky, B. (2016). Creating visual explanations improves learning, *Cogn Res Princ Implic*. 2016 Dec 7. doi: 10.1186/s41235-016-0031-6, pp. 1: 27.
- Cimatty, B. (2016), Definition, Development, Assessments of Soft Skills and Their Role for the Quality of Organizations and Enterprises. *International Journal for Quality Research* 10, (1) 97–130, DOI – 10.18421/IJQR10.01-05
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B. & Osher, D. (2020). Implications for educational practice of the science of learning and development, *Journal of Applied Developmental Science*, 24, (2), 2020: 97-140. Doi: <https://doi.org/10.1080/10888691.2018.1537791>
- Cahyati, S., & Suherman, W.S. (2018). Students, Teachers, and Parents: Urgency Implementation of Water Activity in Physical Education, *Advances in Social Science, Education and Humanities Research*, vol.278
- Cahyaningrum, E.S., Sudaryanti, & Purwanto, N.A. (2017). Pengembangan Nilai-Nilai Karakter Anak Usia Dini Melalui Pembiasaan Dan Keteladanan, *Jurnal Pendidikan Anak*, 6, (2), 2017: 203-213, DOI: <https://doi.org/10.21831/jpa.v6i2.17707>
- Faela Shufa. N.K. (2018). Pembelajaran Berbasis Kearifan Lokal Di Sekolah Dasar: Sebuah Kerangka Konseptual. *Inopendas - Jurnal Ilmiah Kependidikan*, 1, (1), (2018): 48-53, DOI: <https://doi.org/10.24176/jino.v1i1.2316>
- Febrianti, Linda. (3 November 2019), "Pendidikan Karakter bagi Siswa SD melalui Kearifan Lokal", Kompasiana, Beyond Blogging, retrieved from: <https://www.kompasiana.com/lindafebri/5dbec8db097f3648651ff4a2/penguatan-pendidikan-karakter-bagi-siswa-sekolah-dasar-melalui-kearifan-lokal>
- Garnaut, Ross. (2009). Climate change and Indonesia: in honour of Panglaykim, *Bulletin of Indonesian Economic Studies*, 45, (1), 2009: 107-116, Doi: <https://doi.org/10.1080/00074910902836163>
- Guerrero-Gatica, M., Mujica, M.I., Barceló, M., Viogaray, M.F., Gelcich, S., Armesto, J.J. (2020). Traditional and Local Knowledge in Chile: Review of Experiences and Insights for Management and Sustainability, *Sustainability* 2020, 12, 1767; doi:10.3390/su12051767
- Hariyanto, (2016), Membangun Karakter Siswa Berbasis Kearifan Lokal dan Kemampuan Akademik melalui Implementasi Metode Penemuan Terbimbing (Guided Discovery), *Prosiding Seminar Nasional IPA Pascasarjana UM*, Vol. 1, (2016): 771-780, retrieved from: pasca.um.ac.id/wp-content/uploads/2017/02/Hariyanto-771-780.pdf
- Harahap, Zulhamdi Hasian, (2017), "Pendidikan Karakter Berbasis Nilai Moral Dan Nilai Kebangsaan". In: *Seminar Nasional Tahunan Pendidikan Ilmu-Ilmu Sosial*, 20 Oct., 2017, Medan, retrieved: digilib.unimed.ac.id/27557/
- Kementerian Pendidikan dan Kebudayaan. (2012). "Dokumen Kurikulum 2013", retrieved from: <http://www.kemdiknas.go.id/kemdikbud>.
- Kementerian Pendidikan dan Kebudayaan. (2013). "Panduan Kurikulum 2013", retrieved from: <http://www.kemdiknas.go.id/kemdikbud>.
- Koumura, T. & Furukawa, S. (2017). Context-Dependent Effect of Reverberation on Material Perception from Impact Sound, *Scientific Reports - natureresearch, Sci Rep*. 28, (2017)7: 16455. doi: 10.1038/s41598-017-16651-4
- Koesoema, D. (2011). *Pendidikan Karakter Strategi Mendidik Anak di Zaman Global*. Jakarta: Grasindo
- Mariane, Irene. (2014). *Kearifan Lokal Pengelolaan Hutan Adat*. Depok: PT. RajaGrafindo Persada.
- Maunah, Binti. (2015), Implementasi Pendidikan Karakter dalam Pembentukan Kepribadian Holistik Siswa, *Jurnal Pendidikan Karakter*, 1, (2015), DOI: <https://doi.org/10.21831/jpk.v0i1.8615>
- Marble, Shannon, (2012). "How Do Wordless Picture Books Help Develop Writing for All Students?", *Education Masters Paper*, 228
- Mintowati. (2003). *Panduan Penulisan Buku Ajar*. Jakarta: Depdikbud, retrieved: digilib.unimed.ac.id/29321/11/14%20Nim%208146174003%20References.pdf
- Mumtaz, M., & Wati, M. (2020). The Practicality of Physics Teaching Materials Based on Local Wisdom in the Wetland Environment, *Conference: Proceedings of the 1st South Borneo International Conference on Sport Science and Education (SBICSSE 2019)*, January 2020, DOI: 10.2991/assehr.k.200219.053
- Muslimah (2012). Pendidikan Karakter Dengan Pendekatan Kearifan Lokal di Play Group Aisyiyah Sleman Yogyakarta, (*Skripsi Mahasiswa*), UIN Sunan Kalijaga Yogyakarta, retrieved from: digilib.uin-suka.ac.id/9950/
- Nuh, M. (2013). *Kurikulum 2013*, retrieved from: <http://www.kemdiknas.go.id/>
- Nugraha, I.S. and Suherdi, D. (2017). Scientific Approach: An English Learning-Teaching (ELT) Approach in the 2013 Curriculum. *Journal of English and Education*, 5, (2), October 2017, pp 112-119
- Nur Khabibah, (2019), Implementasi Pendidikan Karakter Berbasis Kearifan Lokal Melalui Program Java's Day Setiap Kamis Wage Di MI Islamiyah Candi Bandar Batang Jawa Tengah, (*Skripsi Mahasiswa*), UIN Sunan Kalijaga Yogyakarta, retrieved from: digilib.uin-suka.ac.id/

- ac.id/37261/
- Nugraha, E.A., Yulianti, D., Khanafiyah, S. (2013). Pembuatan Bahan Ajar Komik Sains Inkuiri Materi Benda untuk Mengembangkan Karakter Siswa Kelas IV SD, *Unnes Physics Education Journal, UPEJ* 2, (1) (2013), retrieved from: <http://journal.unnes.ac.id/sju/index.php/upej>
- Permendikbud, (2018), "Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia No. 20 Tahun 2018 Tentang Penguatan Pendidikan Karakter pada Satuan Pendidikan Formal", retrieved from: https://jdih.kemdikbud.go.id/arsip/Permendikbud_Tahun2018_Nomor20.pdf
- Priyatna, Muhammad. (2016). Pendidikan Karakter Berbasis Kearifan Lokal, *Edukasi Islam- Jurnal Pendidikan Islam*, 5, (10), 2016, DOI: <http://dx.doi.org/10.30868/ei.v5i10.6>
- Santosa, A.B., Basuki, Y., Ika Puspita, A.M. (2019). The Effectiveness of Local Wisdom-Based Teaching Materials in Enhancing Creative Writing Skills of Elementary School Students, *JELTL (Journal of English Language Teaching and Linguistics)*, 4, (3), 2019, DOI: 10.21462/jeltl.v4i3.326
- Suhardi, D. et al. (2017). *Penguatan Pendidikan Karakter- Modul Pelatihan bagi Guru*, Kementrian Pendidikan dan Kebudayaan Republik Indonesia, retrieved from: <https://paska.kemdikbud.go.id/wp-content/uploads/2018/07/170222-Modul-PPK-bagi-Komite-edited.pdf>
- Sudarmiani (2013). Membangun Karakter Anak dengan Budaya Kearifan Lokal dalam Proses Pembelajaran Di Sekolah, *Jurnal Ilmiah Ekonomi dan Pembelajarannya*, 1, (1), 2013, DOI: <http://doi.org/10.25273/equilibrium.v1i1.556>
- Sukmadinata, N. (2005). *Metode Penelitian Pendidikan*. Bandung: PT Remaja Rosdakarya
- Sulistyorini, Sri, & Arini. (2017). Pengembangan Nilai Karakter Siswa SD Melalui Pembelajaran IPS. [Unpublished Research Report], Universitas Negeri Semarang (UNNES)
- Sulistyorini, Sri, & Abidin, Zaenal. (2018). Pengembangan LKPD Berbasis Karakter, [Unpublished Research Report], Universitas Negeri Semarang (UNNES)
- Sulistyorini, S., Abidin, Z. & Sri Sami. (2019). Pengembangan Bahan Ajar Tematik Terpadu Berbasis Penguatan Pendidikan Karakter PPK), [Unpublished Research Report], Universitas Negeri Semarang (UNNES)
- Sulistyorini, S., & Parmin. (2016). Penguatan Kompetensi Berimbang Melalui Pengembangan Model Pendampingan Guru Yang Mengintegrasikan Selft Assesment dalam Implementasi Kurikulum 2013. [Unpublished Research Report], Universitas Negeri Semarang (UNNES)
- Supraptiningrum, & Agustini, A. (2015), Membangun Karakter Siswa Melalui Budaya Sekolah Di Sekolah Dasar, *Jurnal pendidikan Karakter*, 2, (2015), DOI: <https://doi.org/10.21831/jpk.v0i2.8625>
- Wagiran, (2012), Pengembangan Karakter Berbasis Kearifan Lokal *Hamemayu Hayuning Bawana* (Identifikasi Nilai-Nilai Karakter Berbasis Budaya), *Jurnal Pendidikan Karakter*, 3, (2012), DOI: <https://doi.org/10.21831/jpk.v0i3.1249>
- Zuhdan Kun, Prasetyo. (2013). Pembelajaran Sains Berbasis Kearifan Lokal, *Prosiding: Seminar Nasional Fisika dan Pendidikan Fisika*, 1, (1), 2013, retrieved from: <https://jurnal.fkip.uns.ac.id/index.php/prosfis1/article/view/3316>