

Developing a Local Genius Based Pocket Book for Character Strengthening Elementary School Students

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Developing a Local Genius Based Pocket Book for Character Strengthening Elementary School Students

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3 ABSTRACT

1
Local wisdom-based learning resources are needed to support student character-oriented learning, one of which is a pocketbook, but currently, the number is minimal. This study aims to produce a product in the form of teaching materials in the form of a pocketbook based on local wisdom that has a proper and effective predicate for elementary school students. This research includes research and development research by adopting the ADDIE research method. This research was conducted in an elementary school in Yogyakarta, Indonesia. The results of the questionnaire of material experts, media experts, teacher responses, student responses, learning implementation observation sheets, pre-test, and post-test were obtained in this study. The data analysis technique was paired sample t-test, percentage, and average. The results of this study are as follows (1) the material expert stated that the pocketbook based on local genius is feasible to use with very good criteria. Media experts assessed with good criteria. (2) the effectiveness of the pocketbook is very good. This can be seen from the value of positive student responses. The observation sheet for the implementation of the learning process is very good. Student achievement increased, as indicated by the average score of pre-test and post-test. The pocket book based on local genius was declared effective, as indicated by the results of the t-test calculation. The pocket book based on the developed local wisdom had a positive impact. This can potentially be used for elementary school students as valuable teaching material for strengthening student character.

Keywords: elementary school, teaching material development, pocketbook, local genius.

4 INTRODUCTION

1
Education is a basic need and right of every human worldwide, including Indonesia. Education in Indonesia plays a role in improving the quality and optimizing the development of a student's abilities in knowledge, skills, spiritual growth, behavior, and personality in society. An educational process that runs effectively and efficiently requires adequate and very supportive learning resources, teaching materials, and learning media in the learning process (Arafik et al., 2021). The single factor influencing learning is what the learner has learned or knows (Ausubel et al., 1978).

The Indonesian government through the Ministry of Education and Culture Research and Technology has indeed prepared learning resources for teacher books and student books published by the Book Center. However, the teacher's book and the student's book are still in the form of general knowledge. Furthermore, the teacher still has to have an idea to integrate other knowledge in learning in elementary schools. Teachers can develop more creative and innovative teaching materials (P. Sinaga et al., 2022). The development of teaching materials must also be in accordance with the conditions, social and cultural situations of students according to their environment (Suyitno et al., 2020) namely the definition phase (define). The development of teaching materials when used in the learning process, students are more interested and learning is more meaningful (Purwoko, Nugraheni, et al., 2019). One form of developing teaching materials that can be used as

a companion to the learning process is the use of teaching materials in the form of pocketbook. Pocketbook can be used as effective teaching materials for all levels of education such as elementary school (Siregar et al., 2017), junior high school level (Asyhari et al., 2016); (Eka et al., 2020); (Lestari, 2019); (Rosdiyana et al., 2022), and high school level (Cahyono et al., 2018); (Nurhayati, 2019); (Sinaga and Rakhmawati, 2022). Pocketbooks can be developed at every level of education and according to the needs of students.

A pocketbook is a small book which contains information that can be stored in a pocket so that it is easy to carry everywhere (Afrianti et al., 2021). While the pocketbook can also be interpreted as a book with a small size so that its use is more efficient, practical, and easy to use (Herawati et al.,

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1
2020). Based on the two opinions above, it can be concluded that a pocketbook is a small, attractive, practical book to carry anywhere that contains some information and material. Subject matter that can be taught with the help of pocketbook including natural sciences material (Siregar et al., 2017); (Asyhari and Silvia, 2016); (Nurhayati, 2019); (Rosdianah, 2022), social sciences material (Lestari, 2019), and mathematics material (Cahyono et al., 2018); (Eka, Karim, and Wiratomo, 2020); (M. S. Sinaga & Rakhmawati, 2022).

During the current COVID-19 pandemic, students have a tendency to be less interested in reading thick books. The textbooks that have been prepared by the teacher are less attractive to students because of their relatively large size and the lack of supporting pictures. Teachers can develop more creative and innovative teaching materials (Atmojo et al., 2020); (Alsubaie, 2022); (Jana et al., 2021). The development of teaching materials must also be in accordance with the conditions of the social and cultural situations of students in their environment (Osi Fardani et al., 2020). The development of this pocket book will be more attractive with colors and illustrations and pictures, which is preferred by students. The development of teaching materials is expected to be able to make students interested in carrying out a memorable and meaningful learning process in accordance with the conditions of local genius where students are located (Utami et al., 2021).

Students at Gamping Elementary School also declined interest in studying books. Based on the results of interviews conducted with fifth-grade teachers in the learning process, the lack of supporting books or companion books and the lack of inclusion of local genius materials in Sleman Regency have caused students to lack understanding of local genius around their homes. The teacher said that when students were asked what culture existed in Sleman Regency, students only answered the culture of their village environment, namely Bekakak, Kunthulan, and Gunungan. Students do not answer local geniuses from other villages or sub-districts in the Sleman Regency area, so the development of teaching materials based on local genius is needed to improve students' understanding of local genius. The teaching materials used by the Gamping Elementary School still have shortcomings, including those that are still incomplete and interesting, so some students have not yet completed the learning process. These shortcomings make authors interested in developing pocket book teaching materials based on local genius at Gamping Elementary School, Sleman Yogyakarta.

Local genius must be part of the material being taught in learning activities either directly or integrated (Purwoko, Astuti, et al., 2019). According to Ki Hadjar Dewantara, good learning is learning that combines culture and nature (Gularso et al., 2019). Kultur means culture, while nature means the environment. Local genius-based learning combines cultural material with the needs of the natural surroundings. The goal

is that students have a strong character in Indonesian culture (Atmojo et al., 2018). Character is fundamental to one's future (Gularso et al., 2019). Education in Indonesia should be able to improve existing local values and synergize with the needs and potential of existing resources in an area with all its limitations. Thus, it is hoped that students will be able to understand and preserve local genius around their environment. In addition, it is also expected that students are also expected to maintain local genius amid large currents. Globalization, as written in Law No. 20 of 2003 article 36 paragraph 2, namely "Development of diversified curriculum development is intended to allow the adjustment of education programs in educational units to the conditions and peculiarities of the potential that exists in the region.

In the learning process, the teacher can integrate the local genius values into the local environment. Teachers are expected to be able to design and develop teaching materials by the socio-cultural conditions of the community and the socio-cultural needs of students, as well as the characteristics of the school environment. Teachers must also be creative in developing teaching materials concerning local geniuses in their teaching environment. The process of integrating learning needs to pay attention to the selection of material used for this learning must also be enough or not too little or too much (Setiana et al., 2021). If the material presented is too little, it will not include the expected competencies and not the student's needs (Purwoko, 2017) (Sulistiyowati et al., 2019). The selection and retrieval of materials must also be appropriate for integrating local genius. The relevant material for integrating local genius in fifth grade is found in the human and environment sub-theme. The sub-theme discusses humans, culture, phenomena, and activities in the neighbourhood so that we can integrate local geniuses around us in the learning process.

Every region in Indonesia has different characteristics of local genius. The local genius also has many variations. Indonesia has a diversity of cultures, ethnicities, and customs. Indonesia has a lot of cultures because Indonesia consists of several islands that are scattered and have various ethnic groups, languages, customs, cultures, traditions, and many others that are different so that they can become a characteristic of the region. Indonesia has the most regional languages in the world after Papua New Guinea, which is 718 regional languages (Budiono, 2021) and 1300 ethnic groups (Pricilla et al., 2022). A local genius is a form of human behavior that changes over time, up to norms and actions and behavior, so that local genius can become like human religion in acting and acting, both in the context of daily life and determining human civilization that local genius if developed in the economic field can increase independence, empower the community and increase economic income (Hidayat, D., & Syahid, A., 2019).

Developing local genius-based teaching materials can increase students' learning media in recognizing and understanding the local geniuses in the surrounding environment. Based on the results of interviews in several elementary schools at Sleman Regency, Yogyakarta, many teachers still had not developed their teaching materials based on local genius. Students lacked teaching materials or companion books in the learning process and did not introduce the culture around them (Melyanti, 2019). The development of local genius-based media has been submitted to prospective elementary school teacher students (Gularso et al., 2017). In the end, it takes a commitment from the teacher to develop a supporting book that contains local genius. This study's pocketbook teaching material is one of the printed teaching materials.

Based on the results of the interview conducted with fifth-grade teachers at Gamping Elementary School, information was obtained that in the learning process, there was a shortage of supporting books or teaching materials that developed local genius about Sleman Regency. This deficiency is due to the student books used being national student books published by the book center of the Ministry of Education and Culture. The teacher has not developed the textbooks used by the local genius of Sleman Regency. This lack of information

in textbooks related to local genius causes students to lack understanding of local genius around their place of residence. Based on the student's need to understand the local genius, pocketbook teaching materials were developed according to the basic competencies of fifth-grade students on the human and environment sub-theme, with an attractive appearance.

METHOD

This study is research and development (R&D) research. The research was conducted in December 2020 - June 2021. The study location at Gamping Elementary School, Yogyakarta Special Region, Indonesia. The subject of the product trial was the fifth grade students. In a limited research trial consisting of 7 students. This study procedure refers to the development of the ADDIE research method (Analysis, Design, Development or Production, Implementation or Delivery and Evaluation) which was developed by Dick and Carry (Sofyan et al., 2019).

Data collection techniques were questionnaires, interviews, and tests. The data collection instruments used were media expert instruments, material expert instruments, teacher learning implementation observation sheets, student response questionnaire instruments, teacher response questionnaire instruments and student test question sheets. The analytical technique used is shown in Table 1.

Table 1: Data, Data Collection and Data Analysis

Aspects	Data	Data Collection	Data Analysis
Material experts assesment	Material experts check list	Questionnaires	$\bar{x} = \frac{\sum_1^n = 1 x_i}{n}$ $\text{nilai persentase} = \frac{\text{skor perolehan}}{\text{skor maksimal}} \times 100\%$
Textbook experts assesment	Textbook experts check list		
Teachers' response	Teachers' response check list		
Students' response	Students' response check list	Test (30 questions)	$r_{12} = \frac{N\sum X_1 X_2 - (\sum X_1)(\sum X_2)}{\sqrt{(N\sum X_1^2 - (\sum X_1)^2) - (N\sum X_2^2 - (\sum X_2)^2)}}$ $R_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{(N\sum X^2 - (\sum X)^2) - (N\sum Y^2 - (\sum Y)^2)}}$ $t = \frac{\sum D}{\sqrt{n\sum D^2 - (\sum D)^2}} \cdot \frac{1}{n - 1}$
Validity and reliability of question	Students's study result		

Aspects	Data	Data Collection	Data Analysis
The effectiveness of textbook	Students's study result	Question test valid and reliable	$t = \frac{\Sigma D}{\sqrt{n\Sigma D^2 - (\Sigma D)^2}} \cdot \frac{\Sigma D}{n - 1}$

Note:

R 1.2	Correlation coefficient	ΣD	The distinguish of two tests score
N	Respondents number	X1	The first test score
ΣY	Score of Y variable	X2	The second test score
D	The distinguish of two tests score (X1, X2)	Rxy	product moment correlation
ΣX	Score of X variable	n	Amount of subject
\bar{x}	The average of each assessment score		

The decision of pocket book which is good or not, deserve or not deserve in this study refers to table 2 below:

Table 2: Textbooks Criteria

Percentage interval	Score Scale	Classification
85% - 100%	A	Very good
75% - 84%	B	Good
60% - 74%	C	Sufficient
40% - 59%	D	Less
0% - 39%	E	Very less

RESULT AND DISCUSSION

This study provides information about the stages of preparation of pocket book learning media and the implementation of media results related to the effectiveness and feasibility of pocket books in learning in the following discussion.

1 Product Development Stage

Analysis

Based on interview result with the fifth grade teacher, Gamping Elementary School on December, 3rd 2020, the informations found as follows (1) students need teaching materials that are able to assist students in the learning process, (2) lack of students' understanding of the culture in Indonesia and the local culture in Sleman Regency, (3) teachers are still encouraged to use books provided by the government while the coverage of material presented in student books is still not comprehensive, (4) lack of pictures, illustrations that support students' knowledge of the learning process, (5) the size of the teaching materials used is too large, so students are less interested in using them.

From the information and opportunities above, the authors will develop a pocket book teaching material product based on local genius. This pocket book was developed referring to the 2013 Curriculum. The sub-themes used as objects of

development was the human and environmental sub-themes. The development of this pocket book teaching material will develop the material to be more in-depth and comprehensive so that it can meet the students' need in the learning process. This pocket book was also developed to help teach students to recognize and understand the importance of preserving culture in Indonesia, especially local culture in the Sleman Regency area. In addition, the development of teaching materials also aims to attract students' interest in learning so that students can improve their learning achievements. If students are interested in a learning process based on local wisdom, the learning will be carried out meaningfully and leave an impression on the students (Nuraini, 2022)

Design

At this stage, the authors prepared all the components that will be displayed in the pocket book that will be developed including: designing learning activities, designing materials, designing learning evaluations and designing structures and covers (Figure 2). At this stage, one thing that must be considered is the use of fonts in teaching materials. Font is a complete collection of letters, numbers, symbols, or characters



Fig. 2. Early Designs of Pocket Book Based: on Local Genius

that have certain sizes and characteristics. Fonts are an important part of graphic design, without fonts a design is difficult to understand because fonts contain the alphabet and symbols for non-verbal languages (Nyoman et al., 2022).

Development

At this stage, authors not only developed teaching materials, but also prepared supporting components such as instruments, syllabus, and lesson plans, including: initial plans for developing pocket book products based on local genius (Figure 3), developing syllabus, developing lesson plans, and the validation stage (material experts, media experts) until the final stage of the preparation of the pocket book. A good syllabus and lesson plans are learning tools that must be made by teachers. The good category here is the syllabus and lesson plans made by the teacher by considering the conditions of the students and the environmental conditions around the school (Ibnu, 2022). (Figure 3)

Implementation

In this implementation stage, the examiner conducted a limited trial with a sample of 7 fifth grade students at Gamping Elementary School (Figure 4). In this study, data were obtained in the form of teacher responses, student responses, and the results of the pretest and posttest scores of fifth grade students in the learning process using a pocket book based on local Genius. In this study, the results of the student response and questionnaire were conducted to determine student responses to the development and learning process using a pocket book based on local genius. The results of this teacher's response were carried out with the aim of knowing the teacher's response to the learning process using pocket book teaching materials based on local genius. The results of the observation of the implementation of the learning process using a pocket book based on local genius aims to determine the teacher's delivery,



Fig. 4: The Using of Pocket Book at Fifth Grade, Gamping Elementary School

achievement and effectiveness in using pocket book teaching materials in the learning process.

Evaluation

This evaluation stage is the stage of pocket book teaching materials that have achieved the goal of developing a pocket book based on local genius. In this case, to understand a local culture and culture in Indonesia, students really need a companion book that has many pictures to explain the material to be delivered. After the trial phase of this pocket book, there were no suggestions for improvement of pocket book products based on local genius of fifth grade in humans and the environment sub theme. The development of teaching materials in elementary schools is an obligation for teachers because the teaching materials that have been provided by the government are national, it means that they can be applied in Indonesia. Because it is national scope, the textbooks have not accommodated the local geniuses in each region.

Product Assesment Result

Product assessments in this discussion include material expert assessments, media expert assessments, teacher assessments/responses, student assessments/responses and student achievement results including average grades, learning completeness and the effectiveness of pocket book teaching materials based on local genius. Material expert assessment includes aspects of content assessment and language feasibility. The expert assessment of teaching materials includes an assessment of the graphic and grammatical aspects of the language, the teacher's assessment/response includes an assessment in terms of student interest, student convenience, and the ability to carry out tests and display research products, student assessments/responses include the attractiveness and practicality of students in using the product of this study. Table 3 shows the results of the recapitulation of the assessment of pocket book teaching materials based on local genius (Table 3).

Before conducting the field testing, the developed teaching materials must be validated. A teaching material is declared to

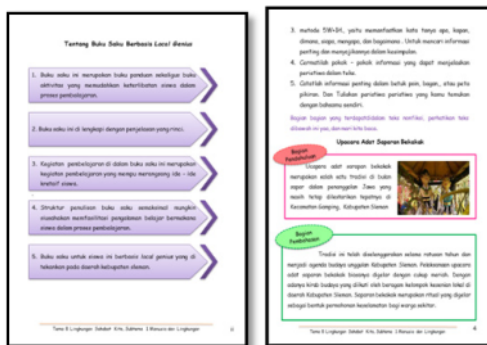


Fig. 3; Pocket Book Based on Local Genius Design (source: private document)

1 be feasible to use in the learning process, if it gets an assessment or validation from an expert. The experts used in this study were material experts and media experts. The material expert was a fifth grade teacher at Gamping Elementary School. The teacher was chosen because the competence of the fifth grade teacher was better than other class teachers. The fifth grade teacher had better understand to the material being taught. The assessment of teaching materials expert was carried out by lecturers of the PGSD FKIP UPY study program who was in charge of the learning media development course for elementary school. The selection of the lecturers took into account the expertise and competence in the field of developing the learning media development for elementary school.

From the results of the assessment given by material experts regarding the development of teaching materials, this pocket book received 86%. If the percentage result is seen in the scoring interval guidelines in Table 2, the result of the material expert assessment was in the percentage interval of 85% - 100% with the "Very Good" criteria. In the assessment of material experts. Meanwhile, when it was compared with research conducted by (M. S. Sinaga & Rakhmawati, 2022), then there was a difference of 8 points lower because it had 94%. The content feasibility aspect got 5 points higher rating than the language aspect. The same thing was also experienced by (Cahyono et al., 2018) where the language aspect had a lower score of 2 points than the content feasibility aspect. The results of the validation of the language aspect in this study was 3.75 points higher than the research conducted by (Lestari, 2019) where the language aspect had 81.25%.

Pocketbook based on local genius must also be assessed or validated by media experts. The goal was that the pocket book teaching materials that have been made can get input from teaching materials experts. In this study, the validator of teaching materials was a PGSD FKIP UPY lecturer who

taught learning media courses for elementary school. Based on Table 2, the results of the assessment given by media experts regarding the development of pocketbook based on local genius got a score of 84% and got a good rating when consulted in Table 2 because they were in the percentage interval of 75% - 84%. As with the feasibility of the material, the feasibility of the content also experienced a difference of 9 points higher than the feasibility of the language aspect. The results of this study were 9.75 points lower in terms of percentage with research conducted by (Lestari, 2019). Where the feasibility of media experts was 93.75% and 3.5 points lower than the research conducted by (Oktafian, 2019) which had 87.5%. The results of this study were also 11.5 points lower than the results of the research by (M. S. Sinaga & Rakhmawati, 2022) which had 95.5%.

From the assessment result given by the fifth-grade teacher regarding the development of pocketbooks based on local genius, the score was 85%. If the percentage result was consulted in Table 2, the teacher's response had the criteria of "Very Good" because it was in the percentage interval of 85% - 100%. The results of the teacher's response in this study were 0.93 points higher than the results of research conducted by (Siregar et al., 2017), which had 84.07%. Students' responses were obtained when students did learning using this study product. At the implementation stage, a pocketbook was tested on seven students. Table 1 presents students' assessments/ responses to the study product. The evaluation was the sum of the scores of the seven fifth-grade students. There were 15 students in fifth grade but due to the Covid-19 pandemic, only allowed 50% or seven students do face-to-face learning in the classroom. The permission for seven students to conduct face-to-face learning in class was based on the Principal's letter No.09/SD.Gp/VI/2021. Of course, in this study, the learning took place with strict health protocols such as keeping the

Table 3: The Assessment of Pocket Book Based on Local Genius Recapitulation

No	Aspect	Result	Criteria
1	Material expert	86%	Very good
	a. Content assessment	89%	Very good
	b. Language feasibility	84%	Good
2	Textbook expert	84%	Good
3	a. Chart aspect	89%	Very good
	b. Language feasibility	80%	Good
5	Teacher response	85%	Very good
6	Student response	89%	Very good
7	Product effectiveness test	Significant score (2 - tailed = 0,003 < 0,05)	Effective
	Average score	Pre test = 64 Post test = 88	Increased
	Students' completeness	Pre-learning process = 20% Post learning process = 80%	Increased

distance, washing hands and wearing masks (Figure 4). From the assessment results in student responses regarding the development of pocketbooks, the score was 89% or very good criteria if the percentage result was consulted with Table 2. The result of the student response of 89% was 5.5 points higher than the result. Students in a study conducted by (Siregar et al., 2017) had a student response score of 84.5%.

The next step to test the effectiveness of pocketbook based on local genius by conducting pre test and post test. Table 4 presents the results obtained by the fifth grade students before and after carrying out the learning process using a pocketbook based on local genius humans and the environment sub theme. (Table 4)

Based on the results of the analysis, it is known that the average score of students before using pocketbook based on local genius was 64. It showed that the average score of students was still under the specified minimum completion criteria score, which is 75. Minimum completeness criteria is the standard score of lessons/basic competencies/indicators set by the school which is calculated from the complexity of the material, the carrying capacity and the student's intake. However, the average score after using pocketbook based on local genius, the average score of students became 88. Likewise, students learning mastery increased from 71.4% to 100% after learning was carried out using this study product (Table 2). The results of this study follow previous research, which states that the results of the pretest and posttest scores are significantly different, and there are differences in learning mastery in the pretest and post-test. Students who complete the pretest are 20 (80%), while in the posttest, the number of students who complete is 25 (100%). So it can be said that there is an increase in learning achievement before and after using this product (Pudjiastuti et al., 2020).

The differences of pretest and posttest score were also found in (Siregar et al., 2017) research, where in the pretest test, the score was 2790, and in the posttest, the score was 3400. Similar results also found (Suryaman & Ratna Indah Sari, 2022) research where the fourth grade learning achievement at Pringgodai 03 Elementary School Malang, East Java increased,

it was seen from the difference in pretest and posttest scores. The conclusion that can be drawn is that if there is a difference between the pretest and posttest score, where the posttest score was higher than the pretest score, there was an increasing in learning achievement after using pocketbook based on local genius.

The results of the effectiveness of using pocketbook based on local genius can also be strengthened based on the t-test on the two-mean difference in paired data. Before conducting the T-Test, the authors conducted a prerequisite analysis test, namely the normality test and the data homogeneity test. Normality test was used to determine whether the data was normally distributed or not. The normality test used in this study was Kolmogorov Smirnov using the IBM SPSS 21 application. Based on the decision making in the normality test as follows, if Sig. (Significance) or probability score <0.05 then the data was not normally distributed and if Sig. (Significance) or probability score > 0.05 then the data was normally distributed. Based on the normality test table above, it was known that the pretest significance score was 0.783 while the posttest score was 0.665. Based on the test results above the score of Sig. (2-tailed) was greater than 0.05, so the pretest and posttest data above were normally distributed (Table 5).

T-test technique used IBM SPSS 21 software. Based on the decision if Sig. (significance) < 0.05 then the hypothesis is accepted, and if (significance) > 0.05 then the hypothesis is rejected. The significance score (2 - tailed) was 0.003 < 0.05, so the hypothesis in this study was accepted, namely there was a significant (meaningful) change. In the process of learning of humans and the environment sub theme by using pocketbook based on local genius. Meanwhile, if it was seen from the t score in the T-Test, the resulting score was 4.760 which was greater than the t table, which was 2.365. Therefore, in this study the development of pocketbook based on local genius had a high effectiveness in terms of posttest score which was higher than pretest scores (Table 6).

The research product in the form of developing an effective pocketbook for learning has also been carried out with the result that 89% of students experienced an increase

Table 4: Pretest and Posttest Result

No	Student name initial	Pre test score	Note	Post test score	Note
1	RZN	44	Incomplete	82	Complete
2	LNG	52	Incomplete	91	Complete
3	SFA	84	Complete	95	Complete
4	NBL	72	Incomplete	96	Complete
5	ADN	72	Incomplete	82	Complete
6	ADR	80	Complete	91	Complete
7	RGA	48	Incomplete	82	Complete
Average score and percentage of completeness		64	71,4	88	100

4 Table 5: Result of Pretest and Posttest Normality Test

One-Sample Kolmogorov-Smirnov Test		PRETEST	POSTEST
N		7	7
Normal Parameters ^{a,b}	Mean	64.57	88.43
	Std. Deviation	16.236	6.294
	Absolute	.248	.275
Most Extreme Differences	Positive	.209	.275
	Negative	-.248	-.230
Kolmogorov-Smirnov Z		.656	.728
Asymp. Sig. (2-tailed)		.783	.665

a. Test distribution is Normal.
b. Calculated from data.

5 Table 6: T-Test Result

Paired Differences									
		95% Confidence Interval of the Difference				t	df	Sig. (2-tailed)	
Mean	Std. Deviation	Std. Error Mean	Lower	Upper					
Pair 1	POSTEST - PRETEST	23.857	13.259	5.012	11.594	36.120	4.760	6	.003

1 in learning (Afrianti et al., 2021). Then learning achievement and students' critical thinking skills also increased, as evidenced by the Gain test significance score of 0.42 (Melyanti, 2019). Judging from several aspects that strengthen the effectiveness of developing teaching materials, ranging from teacher responses, student responses, observation of learning implementation, and student achievement, the study results show that the local genius-based pocket book teaching materials have a good level of effectiveness for use in learning. The learning process of the sub-theme of humans and the classroom environment in fifth-grade students of SD Gamping. Learning achievement in the learning process also experienced a significant change, with an increase of 30% from pretest to posttest questions.

The conclusion was that the pocketbook product based on local genius was feasible and effective to use in the learning process for fifth grade students at Gamping Elementary School. Local genius must be a material in every learning at school so that students remain rooted in the unique and distinctive local culture and character of Indonesia even though globalization has made the tendency of society to become homogeneous (Soviafirdaus et al., 2018), (Afrianti et al., 2021). Preserving local genius is one way to maintain society values (Ketut & Ardiawan, 2018). This pocketbook based on local genius is one way to preserve the cultural values in Sleman community of Yogyakarta through learning in elementary schools. graphical results here. Make sure to describe all figures and add inferences. If needed, add statistical analysis here.

3 CONCLUSION

1 A pocket book based on local genius is feasible and effective for students to use as a companion book for thematic books that the Indonesian government has prepared. The pocket book based on local genius is said to be feasible because it has been validated by media experts and got a score of 86% in the very good category, and has been validated by teaching materials experts and got a score of 84% with good criteria. In addition, the teacher's assessment/response is 85% and the student response is 89% which is also included in the very good category. Local genius-based pocket books are effective because they can increase the average value of student learning by 24 points and increase the percentage of students' completeness by 60%, with a significance value (2 - tailed) = 0.003. The pocket book based on local genius that has been developed is recommended as a learning resource that has a positive effect on elementary school students and can be developed according to the characteristics of each student and school

SUGGESTIONS

Teachers are expected to have creativity in developing learning materials and resources. In particular, by utilizing local genius as a context in learning so that students are close to the existing reality and for inculcating student character. In addition, pocketbooks as a companion reference to the main book can be used because they are proven to be very practical and accepted by students.

LIMITATIONS

This research is limited to the fifth grade of elementary school on the sub-themes of humans and the environment. The learning process cannot be maximized due to the COVID-19 pandemic, so a policy of limiting activities is carried out. As a result, not all students can fully participate in school. In this regard, conducting further research on other relevant themes and subjects is necessary using a pocketbook based on local genius.

REFERENCES

- Afrianti, N., Ruslan, D., & Yusuf, M. (2021). Implementation of the E-Pocket Book to Improve Learning Outcomes in Economics at Madrasah Aliyah Madinatussalam, Bandar Khalifah Regency, Indonesia. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 4(1), 125–131. <https://doi.org/10.33258/BIRLE.V4I1.1566>
- Alsubaie, M. A. (2022). Distance education and the social literacy of elementary school students during the Covid-19 pandemic. *Heliyon*, 8(7), e09811. <https://doi.org/10.1016/J.HELIYON.2022.E09811>
- Arafik, M., Putra, A. P., Putro, A. A. Y., Nisa, A. F., & Wiarsih, N. (2021). Development of digital comic technology applications design to increase children's literature reading interest in elementary school. *Proceedings - 2021 7th International Conference on Education and Technology, ICET 2021*, 277–281. <https://doi.org/10.1109/ICET53279.2021.9575105>
- Asyhari, A., & Silvia, H. (2016). Pengembangan Media Pembelajaran Berupa Buletin dalam Bentuk Buku Saku untuk Pembelajaran IPA Terpadu. *Jurnal Ilmiah Pendidikan Fisika Al-Biruni*, 5(1), 1–13. <https://doi.org/10.24042/jpifalbiruni.v5i1.100>
- Atmojo, S. E., Muhtarom, T., & Lukitoaji, B. D. (2020). The Level of Self-Regulated Learning and Self-Awareness in Science Learning in the Covid-19 Pandemic Era. *Jurnal Pendidikan IPA Indonesia*, 9(4), 512–520. <https://doi.org/10.15294/JPII.V9I4.25544>
- Atmojo, S. E., Rusilowati, A., Dwiningrum, S. I. A., & Skotnicka, M. (2018). The Reconstruction of Disaster Knowledge through Thematic Learning of Science, Environment, Technology, and Society Integrated with Local Wisdom. *Jurnal Pendidikan IPA Indonesia*, 7(2), 204–213. <https://doi.org/10.15294/JPII.V7I2.14273>
- Ausubel, D., Novak, J., & Hanesian, H. (1978). *Educational Psychology: A Cognitive View - 2nd Ed.* In Coloso university college. Holt, Rinehart and Winston.
- Cahyono, B., Falasifa Tsani, D., & Rahma, A. (2018). Pengembangan bahan ajar buku saku matematika berbasis pendidikan karakter materi trigonometri. *Phenomenon : Jurnal Pendidikan MIPA*, 8(2), 185–199. <https://doi.org/10.21580/PHEN.2018.8.2.2929>
- Eka, D. A. Y. E., Karim, A., & Wiratomo, Y. (2020). Pengembangan Media Pembelajaran Pocket Book Berbasis Kearifan Lokal pada Pelajaran Matematika SMP Kelas VII. *Prosiding: Diskusi Panel Nasional Pendidikan Matematika*.
- Herawati, I., Putra, F. G., Masykur, R., & Anwar, C. (2020). Pocket book digital berbasis etnomatematika sebagai bahan ajar sekolah menengah pertama. *Journal of Mathematics Education and Science*, 3(1), 29–37. <https://doi.org/10.32665/JAMES.V3I1.132>
- Ibnu, Y. (2022). Upaya peningkatan kompetensi guru dalam menyusun silabus dan rpp melalui supervisi akademik yang berkelanjutan di sekolah dasar. *JPGI (Jurnal Penelitian Guru Indonesia)*, 7(1), 24–35. <https://doi.org/10.29210/021372JPGI0005>
- Jana, P., Nurchasanah, & Adna, S. F. (2021). E-Learning During Pandemic Covid-19 Era: Drill Versus Conventional Models. *International Journal of Engineering Pedagogy (IJEP)*, 11(3), 54–70. <https://doi.org/10.3991/IJEP.V11I3.16505>
- Ketut, I., & Ardiawan, N. (2018). *Ethnopedagogy And Local Genius: An Ethnographic Study*. SHS Web of Conferences, 42, 00065. <https://doi.org/10.1051/SHSCONF/20184200065>
- Lestari, D. (2019). Pengembangan buku saku berbasis mind mapping sebagai media pembelajaran IPS materi jenis usaha ekonomi siswa kelas V SDN Kandri 01. *UNNES Repository*.
- Melyanti, S. (2019). Pengembangan media pembelajaran buku saku berbasis mind mapping untuk pembelajaran ekonomi kelas XI - Test Repository. *Eprints UNM*.
- Nuraini, L. (2022). Integrasi nilai kearifan lokal dalam pembelajaran matematika SD/MI Kurikulum 2013. *Jurnal Pendidikan Matematika (Kudus)*, 1(2). <https://doi.org/10.21043/JMTK.V1I2.4143>
- Nurhayati, E. (2019). Penerapan Buku Saku dengan Pendekatan Saintifik untuk Meningkatkan Motivasi dan Hasil Belajar Siswa Pasca Gempa Bumi. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 5(2), 94–99. <https://doi.org/10.33394/JK.V5I2.1804>
- Nyoman, N., Dewi, P., Gde Bagus, A., Udayana, U., Gde, C., & Swendra, R. (2022). Perancangan Font dan Desain Preview Font Two Hand di Alit Desain Studio - ISI Denpasar | Institutional Repository. *ISI Denpasar | Institutional Repository*.
- Oktafian, F. (2019). Pengembangan buku pendamping muatan sbdp tema 8 subtema 2 berbasis kearifan lokal Malang Raya kelas V SD - UMM Institutional Repository. *UMM Library*.
- Osi Fardani, D., Susila Purwanti, R., Gularso, D., Pembelajaran Palu Andha Aja, M., Belajar Halaman, M., & PGRI Yogyakarta, U. (2020). Pengembangan media pembelajaran papan ular tangga aksara Jawa (Palu Andha Aja) untuk meningkatkan minat dan prestasi belajar siswa pada mata pelajaran bahasa jawa kelas V. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 9(6), 751–764. <https://doi.org/10.33578/jpkip.v9i6.8057>
- Pudjiastuti, S. R., Suparno, Sutisna, M., & Ati, H. M. (2020). The Development of Pocket Book Learning Media Based on Mind Mapping, Dynamic Material Application of Indonesian Democracy in Senior High School. <https://doi.org/10.2991/ASSEHR.K.200320.061>
- Purwoko, R. Y. (2017). Urgensi Pedagogical Content Knowledge dalam Meningkatkan Kualitas Pembelajaran Matematika. *Jurnal Pendidikan Surya Edukasi (JPSE)*, 3(2), 42–55.
- Purwoko, R. Y., Astuti, E. P., Arti, M. S., & Widiyono, Y. (2019). Batik Nusantara Pattern in Design of Mathematical Learning Model for Elementary School. *Journal of Physics: Conference Series*, 1254(1). <https://doi.org/10.1088/1742-6596/1254/1/012001>
- Purwoko, R. Y., Nugraheni, P., & Instanti, D. (2019). Implementation of Pedagogical Content Knowledge Model in Mathematics Learning For High School. *Journal of Physics: Conference*

- Series, 1254(1), 012079. <https://doi.org/10.1088/1742-6596/1254/1/012079>
- Rosdihanah, R., Vitasari, M., & Biru, L. T. (2022). Pengembangan Buku Saku Pendidikan Kebencanaan pada Tema Gelombang dan Bencana untuk Menumbuhkan Keterampilan Berpikir Kritis Siswa SMP. *PENDIPA Journal of Science Education*, 6(1), 291–298. <https://doi.org/10.33369/PENDIPA.6.1.291-298>
- Setiana, D. S., Purwoko, R. Y., & Sugiman. (2021). The application of mathematics learning model to stimulate mathematical critical thinking skills of senior high school students. *European Journal of Educational Research*, 10(1), 509–523. <https://doi.org/10.12973/EU-JER.10.1.509>
- Sinaga, M. S., & Rakhmawati, F. (2022). Desain Buku Saku Matematika Berbasis HOTS Kelas X Sebagai Media Pembelajaran. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 6(2), 1301–1314. <https://doi.org/10.31004/CENDEKIA.V6I2.1361>
- Sinaga, P., Setiawan, W., & Liana, M. (2022). The Impact of Electronic Interactive Teaching Materials (EITMs) in E-Learning on Junior High School Students' Critical Thinking Skills. *Thinking Skills and Creativity*, 101066. <https://doi.org/10.1016/J.TSC.2022.101066>
- Siregar, R. A., Alpusari, M., & Noviana, E. (2017). Pengembangan bahan ajar pocketbook pada pelajaran IPA kelas IV SD Negeri 183 Pekanbaru. *Jurnal Online Mahasiswa (JOM) Bidang Keguruan dan Ilmu Pendidikan*, 4(1).
- Sofyan, H., Anggereini, E., & Saadiah, J. (2019). Development of E-modules based on local wisdom in central learning model at kindergartens in Jambi city. *European Journal of Educational Research*. <https://doi.org/10.12973/eu-jer.8.4.1139>
- Soviafirdaus, D. R., Lubis, D. P., Susanto, D., & Soetarto, E. (2018). The peculiarity of Minangkabau's local genius born from the discrepancy of matrilineal core value, Islamic rules and globalization. *International Journal of Research in Social Sciences*, 8(8), 272–281.
- Sulistyowati, F., Kuncoro, K. S., Setiana, D. S., & Purwoko, R. Y. (2019). Solving high order thinking problem with a different way in trigonometry. *Journal of Physics: Conference Series*, 1315(1). <https://doi.org/10.1088/1742-6596/1315/1/012001>
- Suryaman, S., & Ratna Indah Sari, Y. (2022). Pengembangan media pembelajaran indigo s1 rikal bagi siswa kelas IV sekolah dasar. *Jurnal Cakrawala Pendas*, 8(2), 397–408. <https://doi.org/10.31949/JCP.V8I2.2231>
- Suyitno, S., Purwoko, R. Y., Widiyono, Y., Jatmoko, D., Nurtanto, M., & Hassan, Z. (2020). Development of learning media for automotive charging system based on macromedia flash vocational school. *Universal Journal of Educational Research*, 8(11 C), 64–71. <https://doi.org/10.13189/ujer.2020.082308>
- Utami, N. W., Sayuti, S. A., & Jailani, J. (2021). Indigenous artifacts from remote areas, used to design a lesson plan for preservice math teachers regarding sustainable education. *Heliyon*, 7(3). <https://doi.org/10.1016/j.heliyon.2021.e06417>

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