

# Development of Learning Media Electronic Pocketbooks Jember Local Wisdom Based For Class 5 Students Theme 8 Environment of Our Best Friends Subt Theme 1 Humans and the Environment at SDN Jember LOR 03

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**Abstract:** This study aims to describe the process of developing learning media electronic pocket book based on Jember local wisdom in order to generate learning motivation and to determine the validity and effectiveness of the development of learning media electronic pocket book for 5th grade students. This study uses a type of research development research (research and development/ R&D) which refers to research conducted by Borg and Gall. The subjects of this research were the 5th grade students of SDN Jember Lor 03. The data in this study were analyzed using product validation, relative effectiveness, and student responses. Product development results are in the validation stage and get a score of 97.9 for learning media and a score of 94.4 for the validation of test instruments. The results of the rating scale in the use trial obtained a score of 88% so that the development product was said to be feasible for effectiveness testing. The results of relative effectiveness get a score of 49% in the category of moderate effectiveness. The results of the student response questionnaire in the effectiveness trial for class 5A students at SDN Jember Lor 03 were 89% in the very effective category.

**Keywords:** *learning media, electronic pocketbook, local wisdom*

## 1. INTRODUCTION

Learning media is a tool or intermediary that is used to make it easier to convey information on learning material from the conveyor of the material, in this case the teacher, to the recipient of the information or students. Based on the opinion of Gerlach & Ely (in Arsyad: 2002) media is material, people, and events that create conditions so that students can gain knowledge, skills, and attitudes. Learning media can be a driving tool for the success of learning activities. According to Jennah (2009), learning media is anything that can be used to channel messages or teaching materials, so that they can stimulate the attention, interest, thoughts, and feelings of students in learning activities to achieve certain learning goals.

One of the benefits of learning media is as a tool that can bridge the delivery of teaching material from the teacher to students so that it is more easily accepted and understood by students. According to Rohani (2019), the benefits of learning media are that they can make the delivery of learning material uniform, the learning process becomes clearer and more interesting, and the learning process becomes more interactive. The content outlined in the learning media must also be adapted to the learning material in thematic textbooks in order to achieve harmony. One of the learning materials in the thematic textbooks for grade 5 students is a discussion of national culture.

Local wisdom or local wisdom according to Rahyono (2009) is a certain ethnic group that has intelligence obtained through community experience. That is, local wisdom is the result of certain communities who have experience which other communities do not have. Abubakar (2010: 12) means

that local wisdom is a kindness based on philosophy, values, behavior, and ethics that are traditionally used to manage human, natural, and cultural resources. Discussions related to national culture are included in the class 5 student book Theme 8 Our Friend's Environment. Based on the results of interviews with grade 5 teachers at SDN Jember Lor 03 which revealed that teachers are more likely to provide explanations about learning according to what is presented in the student book where the teaching material in student books is known to be general and comprehensive in the sense that the material presented is outside the classroom the scope of the student's residence, so that students' understanding of the scope of their residence is still lacking. This is of particular concern because students also need to be given an understanding and explanation regarding the culture of the area where they live. so that students' understanding of the scope of their residence is still lacking. This is of particular concern because students also need to be given an understanding and explanation regarding the culture of the area where they live. so that students' understanding of the scope of their residence is still lacking. This is of particular concern because students also need to be given an understanding and explanation regarding the culture of the area where they live.

Based on the 2013 Curriculum Teacher's Book (Revised 2017), one of the subject matter contained in the Class V Theme 8 student book, to be precise in sub-theme 1 is Indonesian KD 3.8 which contains descriptions of sequences events or actions contained in non-fiction texts. Subtheme 1 Humans and the Environment mostly discusses non-fiction text stories that only focus on natural science material. Based on these problems, learning media will be developed electronic pocket book based on Jember local wisdom to optimize students' understanding of the local

potential of the area where they live as a medium that can support the delivery of material to students.

Pocketbooks or what is commonly referred to as a pocket book is a book that is small in size and contains concise information and knowledge that can be easily carried anywhere because it can be stored in a pocket (Mustari and Sari: 2017). Eliana and Sholikah (2013) said that pocketbooks is a book that has a lot of effectiveness because it can be carried and read anywhere and anytime because of its small size which is only pocket size. Mediaelectronic pocket book developed with help google sites. Google sites felt to be able to help create web-based applications with steps that are not too difficult to follow for beginners. Based on the explanation that has been described, a development research was carried out with the title "Development of Learning Media". Electronic Pocketbook Based on Jember Local Wisdom for Grade 5 Students Theme 8 Environment Our Friends Sub-theme 1 Humans and the Environment at SDN Jember Lor 03.

## 2. RESEARCH METHODS

The type of research carried out is development research (research and development/ R&D). This development research design refers to research conducted by Borg and Gall (in Masyhud, 2016: 227) there are 10 steps. This development research will only use 8 research steps, because at this effectiveness trial stage the researcher can already conclude the effectiveness and validity of the product. The subjects in this study were students in class 5A and 5B at SDN Jember Lor 03. The product to be produced in this study was a learning media called electronic pocket book whose material will be based on local wisdom Jember Regency and is intended for grade 5 students at SDN Jember Lor 03. The data in this study were analyzed using product validation, relative effectiveness level, and student responses. The validity of the development of learning media electronic pocket book obtained from the validity test conducted by expert validators in providing an assessment of the developed media and the validity of the test instrument. Validation results are obtained in the following way:

$$Valpro = \frac{srt}{smt} \times 100$$

Information:

Valpro : Product Validity

Srt : Real score reached

Smt : The maximum score that can be achieved

The results of the product validation analysis are then confirmed with the validity criteria. Product design validation criteria are presented in table 2.1 below:

Tabel 2.1 Kriteria Validasi Desain Produk

Kriteria Skor	Kategori Kelayakan Produk
81,00 – 100	Sangat layak
61,00 – 80,99	Layak
41,00 – 60,99	Cukup layak
21,00 – 40,99	Tidak valid atau tidak dapat digunakan
0 – 20,99	Sangat kurang layak

Sumber: Masyhud (2021)

The effectiveness of the development of learning mediaelectronic pocket book can be seen from the results of the relative effectiveness level (ER) obtained from the comparison of the results of learning scores in the experimental class and the control class using the following formula:

$$ER = \frac{MX_2 - MX_1}{\left(\frac{MX_2 + MX_1}{2}\right)} \times 100\%$$

Information:

ER : The relative effectiveness of the experimental group treatment compared by treating the control group

$MX_1$  : average value of the control group

$MX_2$  : Means or the average value of the experimental group

The relative effectiveness results are then interpreted based on the relative effectiveness test interpretation criteria. The following are the relative effectiveness test criteria presented in table 2.2.

$$Valpro = \frac{srt}{smt} \times 100$$

Tabel 2.2 Kriteria Uji Keefektifan Relatif

Hasil Uji Keefektifan Relatif	Kategori Keefektifan
81,00 – 100%	Keefektifan sangat tinggi
61,00 – 80,99%	Keefektifan tinggi
41,00% - 60,99%	Keefektifan sedang
21,00% - 40,99%	Keefektifan rendah
0 – 20,99%	Keefektifan sangat rendah

Sumber: Masyhud (2021)

The results of student responses can be analyzed using the following formula:

$$Sas = \frac{st}{smt} \times 100$$

Information:

Sas : Student questionnaire score

St : score achieved

Smt : maximum score reached

The results obtained are interpreted using the effectiveness category according to the criteria for the results of the student's response. the criteria for student response results are shown in table 2.3.

Tabel 2.3 Kriteria Hasil Respon Peserta Didik

Skor	Kategori
81,00 - 100	Sangat efektif
71,00 – 80,99	Efektif
61,00 – 70,99	Cukup efektif
41,00 – 60,99	Kurang efektif
0 – 40,99	Sangat kurang efektif

Sumber: (Masyhud:2021)

### 3. RESULTS AND DISCUSSION

The results obtained from the research "Development of Learning Media Electronic Pocketbook Based on Jember Local Wisdom for Grade 5 Students, Theme 8 Environment of Our Friends, Sub-theme 1 Humans and the Environment at SDN Jember Lor 03" is described as follows:

#### 3.1 The Need for Learning MediaElectronic Pocketbook Based on Local Wisdom

From interviews conducted at SDN Jember Lor 03, some information was obtained, including: (1) Presence of learning mediaelectronic pocket bookbased on local wisdom is needed. Seeing the importance of these media and the lack of discussion related to local culture in the scope of student residence (2) Development of learning mediaelectronic pocket book based on Jember local wisdom is urgently needed by teachers at SDN Jember Lor 03. (3) Learning media electronic pocket bookBased on Jember local wisdom, it is deemed necessary to develop this media in the hope that this media can help the learning process in addition to existing learning media. In addition, by containing local wisdom, students are more familiar with the culture and customs that surround them. (4) Local wisdom character education for students in general is still needed so that it is necessary to develop learning media based on local wisdom.

After the needs analysis is carried out, the next stage is the design of learning mediaelectronic pocket bookbased on Jember local wisdom. The following describes the stages. (1) First cover design of learning media. For the title page, it is

designed with attractive illustrations and images according to the characteristics of elementary school students. The title page section contains the title of the material, the author's name, and the target learning media. (2) second, on the next menu tab there is a Basic Competency and Indicator menu which contains competency points presented in learning media. The competencies taken in this learning media material are adjusted to the material in the class 5 student book Theme 8 Sub-theme 1 KD Indonesian 3.8 about describing the sequence of events contained in non-fiction texts. The next menu tab contains material about some of the local wisdom in Jember Regency, such as Music Patrol in Jember Regency, Lahbako Dance, Sea Picks in Puger District, and natural resources for tobacco plants. Table 3.1 and Figures 3.1 and 3.2 below are the KD Indonesian language mapping tables and descriptions of content in learning mediaelectronic pocket book before validated:

Table 3.1 Basic Competency Class 5 Theme 8 Sub-theme 1

Theme	subtheme	Subjects	Basic competencies
Theme 8. Environment Friend We	Subtheme 1. Human and Environment	Indonesian	3.8 outline sequence incident or existing action on non-fiction texts. 4.8 presents return incident or action with notice with story on there background on non-fiction texts.



Figure 3.1 Cover page before Validated



Figure 3.2 Presentation of material before being validated

### 3.2 Expert Validation Questionnaire Against Media Electronic Pocketbook Based on Local Wisdom

The purpose of this validation is to get suggestions and input on the weaknesses and deficiencies of the product to be developed. The aspects assessed in the validation include material, language, and layout. The results of the validation will later be used to revise the product so that deficiencies in the development product can be corrected before the trial is carried out. The suggestions given by the validators are used to improve the design and content of the learning media being developed to make it more attractive and of high quality. The following is a summary of the product validation results presented in table 3.2.

Table 3.2 Product Validation Results

Question No.	Validators 1	Validators 2	Validators 3	Average
1-17				
Amount	82	83	84	83,2

The data is then analyzed using the formula Valpro. The result of the calculation is as follows:

$$Valpro = \frac{srt}{smt} \times 100$$

$$Valpro = \frac{83,2}{85} \times 100$$

$$Valpro = 97,9$$

Based on these data, the media that has been developed is included in the very feasible or very valid criteria because it obtains a feasibility result of 97.9 (in the range 81.00 – 100.00). This means that the developed media can already be used in research trials. The following is an overview of improvements after validation.



Figure 3.1 Cover page after Validated



Figure 3.2 Presentation of material after validated

### 3.3 Product Trial Assessment

The product effectiveness trial assessment was carried out by giving questions pretest and posttest to students in the control class and experimental class. Results of the test pretest and posttest can be seen in table 3.3 below:

Table 3.3 Test Result Data Pre-test And Post test

Number subject	Experiment Class (5A)			Control Class (5B)		
	Pretest (x <sub>1</sub> )	Posttest (x <sub>2</sub> )	Difference (x)	Pretest (y <sub>1</sub> )	Posttest (y <sub>2</sub> )	Difference (y)
1-27						
Amount		2415			1455	
Average		89.44			53.88	

Data from test results pretest and posttest then analyzed using the preparation table to be calculated. The figures obtained in preparation for data analysis - test then plugged into the formula independent sampling test. Based on the results of the calculation, it can be seen that the degrees of freedom for the n value are 52 (54 – 2). 52 degrees of freedom at a significance level of 0.05 is 1.675. So from result - test that has been calculated, the t value is greater than the table value (14.22 > 1.675). Therefore it can be concluded that the use of media electronic pocket book more effective than learning that only uses thematic books.

The next effectiveness indicator is to calculate the relative level of effectiveness used to get an idea of how much the level of relative effectiveness of a treatment is compared to other treatments. Based on the results of calculating relative effectiveness, a result of 49% is obtained so that it can be concluded that learning outcomes use learning media electronic pocket book based on local wisdom by not using electronic pocket book based on local wisdom is 49%, so it can be categorized into moderate effectiveness. Meanwhile, based on the calculation results of student responses, media development electronic pocket book based on local wisdom received a positive response of 89%. These results can be stated that the development of media electronic pocket book got the very effective category.

The final result of the development of learning media electronic pocket book based on local wisdom, Jember Regency in general has advantages in terms of form of presentation and content. This media is presented in electronic form so that it is more practical in its use. In terms of content, learning media electronic pocket book. This paper raises non-fiction material which contains the local wisdom of Jember Regency.

Through local wisdom, it can provide knowledge for students to get to know local culture that comes from the area where students live so that later it can continue to be preserved. In learning media electronic pocket book contains some local wisdom materials in Jember Regency, one of which is the Lahbako Dance as presented in figure 3.3.



Figure 3.3 An example of a typical dance from Jember Regency

#### 4. CONCLUSION

The process of developing learning media electronic pocket book in this study using the type of development research according to Borg and Gall. The development research steps are only carried out up to the 8th stage, namely testing the effectiveness of the product. Product development has gone through the validation stage and received a score of 97.9 for learning media. Based on the scores obtained, the learning media development products in this study can be stated in the very feasible category for use in learning activities.

The validity and effectiveness of learning media electronic pocket book can be seen from the results of validation by expert validators, student learning outcomes, and student responses through questionnaires. The results of relative effectiveness get a score of 49% in the category of moderate effectiveness. The results of the student response questionnaire in the effectiveness trial in class 5A students at SDN Jember Lor 03 were 89% in the very effective category. Based on the results obtained, media development electronic pocket book categorized as very effective and can be used in learning.

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