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Development of Learning Media Boxes Paper Materials Measuring Length and Weight Units to Improve High Level Thinking

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Abstract: This study aims to produce Boxs Paber media products for measuring units of length and weight that are appropriate for use by grade III (three) students in learning Mathematics in Elementary Schools. This study uses the ADDIE development model, through five stages, namely analysis (analyze), design (design), development (develop), implementation (implement), and evaluation (evaluate). The research was conducted at SDN Glagahan 1 with 30 students in class III as an experimental class and 30 students in class III at SDN Perak 2 as a control class. Data collection techniques use observation, questionnaires, tests and interviews. Data analysis techniques include qualitative analysis and quantitative analysis. The results of the research show that: (1) the development of Boxs Paber media consists of several aspects of development, namely media, material and language. In terms of media, it's simple, good, displaying varied colors, neat, and flexible. In terms of material, the material is in accordance with KI, KD, and learning objectives as well as attractive pictures. Furthermore, in terms of language, communicative, according to EYD and straightforward; (2) The feasibility level of Boxs Paber media is in the very feasible or very valid category. This can be seen from the results of the media expert's assessment being 94, the material expert's assessment being 77, and the language expert's assessment being 91 so that the average validity of the media is 87 (Very Valid). (3) In terms of interest and ability, it can improve higher order thinking skills after using Boxs Paber media. This is shown by students' interest which was initially 31.48 increasing to 52.32 and students' high level thinking abilities which were initially 47.4 to 87. From the increase in students' interest and high level thinking abilities, it shows that the use of the Boxs Paber media is long unit material and effective weight is used in learning.

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Introduction

According to Chairul Anwar (2014) education is something that is very inherent in humans so that education can be a differentiator between humans and other living things. Education is one of the tools for humans to be able to increase their ability to develop identity to become a better person. According to Muhibbinsyah (2014) Education is defined as a series of methods or certain processes that aim to obtain a knowledge, thought and in-depth understanding and to be able to behave in accordance with the norms that have been established and developed in society. Education can be obtained through formal, informal and

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non-formal institutions. In these three institutions the aim of education remains the same, namely to make students smart, potential and better individuals.

Education is obtained through a teaching and learning process between teachers and students with various systems that have been established and adapted to the vision and mission of the existing education unit. In the learning process there are several components that must be met, namely teachers, students, management, learning materials, learning systems, objectives, media and learning evaluation. According to Muhammad Anwar (2018) educators or teachers are the spearhead of a learning process, the success or failure of the learning process depends on the management, methods and media used by the teacher in teaching. In the learning process the teacher must have special learning methods and media that can attract students' attention and make the classroom atmosphere more lively and fun.

It is hoped that the learning media used by teachers in the teaching and learning process is learning media that is creative, innovative, appropriate to the student's character and appropriate to the learning environment. Learning media that is creative, innovative, appropriate to the student's character and appropriate to the learning environment are the main requirements for making the classroom atmosphere lively and not boring. Learning media can convey messages or values that teachers cannot convey directly through words, so every teacher must use learning media as a learning medium in every teaching and learning process..

Research Method

This research is a type of research and development (R&D). According to I Made Tegeh (2020) research and development is one of the research methods used to develop and create new learning media in the form of applications, books, modules, materials, media, tools or so on with the aim of creating a more innovative learning process as well as effective. Research and Development Methods are usually called Research and Development (R&D). This method can be used to see how much the effectiveness of a product developed by researchers. This development research not only functions to produce a new product but also can improve old products so that these products can be more innovative and effectively used in the learning process.

The development carried out in this research is the development of the Boxs Paber media. There are 3 assessment indicators used to see the quality of the media to be developed, namely validity, practicality, and effectiveness. According to Sigit Purnoma (2013) educational research and development is a process used to produce, perfect and validate an educational product. According to Sugiyono (2013) development research is research that is used to analyze needs in learning and test the effectiveness of the media developed so that the media can benefit the general public, especially the world of education. In this study the development model used by researchers is ADDIE. This model has four stages in the development process, namely: 1) Analysis or Analyze; 2) Design or Design; 3) Development or Devolve; 4) Dissemination or Dissemination; and 5) Implementation or Implementation.

The research object in this study consisted of three groups, namely the trial group, the control group and the experimental group. The object of the trial group was carried out by researchers in class III at SDN Glagahan 1. The number of students in class III at SDN Glagahan 1 was 30. There were 2 students who were the object of trial one. The object of the small group trial was 9 students and the object of the large group trial was 16 students. The research objects for the control group and experimental group were carried out at SDN

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Glagahan 1 and SDN Perak 2 with a total of 30 students in the control group and 30 students in the experimental group.

Result and Discussion

The product produced in this development research is Boxs Paber media, material in units of length and weight, in class III elementary school using the ADDIE development model including: (1) Analysis, including needs analysis and literature study (2) Planning, including media selection, material selection , designing Paber Box media and designing instruments (3) Development stage, including media creation, feasibility testing by validators and respondents (4) Implementation for class III control class students at SDN Glagahan 1 and experimental class students at SDN Perak II (5) Evaluation, in the form of creating final media based on suggestions and input from validators and students when the Boxs Paber media implementation was carried out.

Analysis Stage (Analysis)

The analysis stage is carried out in three steps, namely literature study, field study and needs analysis. In the literature study stage, researchers studied previous theories and research that were relevant to the development of Boxs Paber media, material for class III length and weight units. From several relevant studies, it is concluded that the Boxs Paber media, material in length and weight units, can increase the interest and high-level thinking abilities of class III students. Based on several theories studied by researchers, it shows that learning media is an important component that can create a higher quality teaching and learning process. With the existence of learning media, students are more enthusiastic and enthusiastic in listening and paying attention to the teacher delivering lesson material so that students' interest and high-level thinking abilities increase. Learning media is a mandatory component that must be present in the teaching and learning process because there are many benefits and functions of learning media.

Based on the literature review, it can be concluded that the Boxs Paber media can increase the interest and high level thinking abilities of class III students because this media is filled with real images related to the material so that students do not need to imagine or guess the objects being studied in the material Mathematics lesson. units of length and weight. Paber Media Boxes are designed with different or colorful colors so that students are more interested in viewing the media.

The field study was carried out through direct observation at SDN Glagahan 1. This observation aims to determine the condition of the school, class and students during the learning process. Observations were carried out at SDN Glagahan 1 and SDN Perak 2 which were the experimental class and control class. During the observation, several problems were encountered, including: 1) the teacher still used a lecture system, 2) the teacher did not use learning media, 3) many students were busy, 4) many students were talking to themselves, and 5) many students were Sleep. After making observations, the researcher conducted interviews with two class III Mathematics teachers, namely Mrs. Alfi Nur Aini S.Pd. and Mrs. Latifatul Islamiyah S. Pd. The results obtained are: 1) Students lack interest or are less interested in participating in the learning process; 2) Creative and innovative learning media can make students more interested in participating in the learning process; 3) Many teacher councils teach conventionally so that learning media that is simple and comes from the surrounding environment is needed; 4) It is necessary to develop learning media to increase

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students' interest and high-level thinking abilities; 5) Students are more interested in concrete rather than abstract subject matter.

Interviews with two class III female students, namely Daffian Azka Danish P and Salsabila Nur Rahma, were also conducted with the results: 1) The teacher never made or used learning media during the learning process so they were sleepy, bored, and less interested in participating in the lesson; 2) Teachers have only written on the board, students have been asked to summarize and then memorize; 3) Most students are happier and more interested in learning if the teacher is innovative in teaching, one of which is by using learning media that is illustrated and colorful.

Based on the results of the field study and literature study, an initial analysis was carried out for the process of developing the Boxs Paber media, material for units of length and weight. Based on the results of the needs interviews conducted by researchers with Mathematics teachers and students, it can be concluded that learning requires media to improve higher-level thinking skills. The media needed is simple and practical media because many teachers are unable to utilize innovative products in learning so that the media developed is in the form of conventional media. Media must be adapted to the characteristics of elementary school children who like something that is real and concrete and attracts attention, for example, full color so that students are interested in learning the subject matter.

Planning Stage (Design)

The planning stage is carried out so that the product developed is in accordance with the objectives. With the existence of product development planning for Boxs Paber media, unit length and weight material is expected to help improve the high-level thinking skills of class III students. There are several steps taken in the planning stage, namely:

1. Determine Core Competencies (KI) and Basic Competencies (KD).

   The Boxs Paber learning media developed must be in accordance with the 2013 curriculum and the material contained therein must be in accordance with KI, KD and learning objectives. The following are the Core Competencies and Basic Competencies in terms of length and weight units.

Tabel 1. Core Competencies and Basic Competencies in terms of length and weight unit

Basic competencies	Indicator	Nomor Butir	Tingkat Kognitif	Jumlah Butir
3.7. Describe and determine standard units for length and weight in everyday life	Know the relationship between units of time, between units of length, and between units of weight	1 2	C2	2
	Classifies units of length and units of weight	3 4	C2	2
	Determine the unit of measure in solving everyday problems	5 6	C2	3
	Determine the relationship between units of time: minutes.	7 8	C2	3

2. Determine Learning Objectives

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The learning objectives of the material for units of length and weight for class III SD are: 1) Students can define units of length and weight related to everyday life; and 2) Students are able to carry out and determine the results of operations on units of length and weight related to daily life.Pembuatan Soal Evaluasi

The evaluation questions were made by the researcher based on a grid that had been previously made by the researcher. After the evaluation question grid was completed, the researcher developed the grid into a test instrument. The following is a grid of test instruments that have been created by researchers:

Tabel 2. Test Instrument Grid

Kompetensi Dasar	Indikator	Nomor Butir	Tingkat Kognitif	Jumlah Butir
3.7. Describe and determine standard units for length and weight in everyday life	Recognize the relationship between units of time, between units of length, and between units of weight	1 2	C2	2
	Classifies units of length and units of weight	3 4	C2	2
	Determine the unit of measure in solving everyday problems	5 6	C2	3
	Determine the relationship between units of time: minutes,	7 8	C2	3

After the high-level thinking skills instrument has been created, the next step that researchers must take is to calculate the increase in students' high-level thinking skills using

$$Gain = \frac{Spost - Spre}{100 - Spre}$$

the Gain value.
Information:
G (Gain) = Gain
Spre = initial score
Spost = final score
After getting the Gain, the value is correlated with the Gain score criteria.

Tabel 3. Score Gain Criteria

Information	Gain Value
Tall	g 0,7
Currently	0,7>g 0,3

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Low	g<0,3

Product Development Stage (Development)

In this stage the aim is to produce the final product of the development of the Boxs Paber media material on units of length and weight for the level of increasing the higher order thinking skills of grade III elementary school students. The following are the stages of developing the Boxs Paber media for length and weight units:

1. Product Creation.

   The product manufacturing stage is an activity of combining all the materials needed in the process of developing Paber Box media, material in units of length and weight. These materials include materials on units of length and weight and pictures related to these materials. The steps for making Paber Boxes media in units of length and weight are as follows: 1) Collection of materials; 2) Making designs for Paber Boxes; and 3) Starting the manufacture, namely cutting the plywood according to the shape and size, tidying up the cut marks using sandpaper, assembling/combining the pieces of wood to suit the design, installing hinges to combine 1 wooden box with another box to form a rectangular shape, coloring each -each box that forms a rectangle until the colored box dries, and stick a sticker that says the type of unit of length and unit of weight on each box that is already available.

The steps for using Boxs Paber media for material units of length and weight are:

1) The teacher prepares himself in mastering the length and weight unit material contained in the Box Paber media and the teacher masters how to use the Box Paber media;
2) The teacher prepares Box Pabert media and other tools that are roughly needed;
3) The teacher places the Paper Box media correctly so that the media can be seen clearly by all students and teachers, for example the teacher places a bench in front of the center then the media is placed on the table;
4) The teacher introduces Boxs Paber media to all students;
5) The teacher gives sheets of material for length and weight units that have been adapted to the Box Paber media;
6) The teacher explains the material contained in the Paper Box media to students;
7) The teacher explains and occasionally gives questions to students so that the atmosphere becomes livelier;
8) After all the material has been explained, the teacher reflects on the material for units of length and weight;
9) The teacher gives an assessment / posttest test to students;
10) The teacher records the results of the students' posttest.

Product Validation

Product validation activities are carried out with media, language and material experts. The purpose of this validation is to see the level of validity and practicality of a product to be developed, namely Paper Boxes, material for units of length and weight. The following are the names of validators in this development research: 1) Dewi Andriyani, S.Pd.M.MPd as Media Validator; 2) Nurul Khotimah S. Pd, M.MPd. as Language Validator; and 3) Nining Widarwati, S.Pd, M.MPd. as Material Validator.

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Validation results from media experts, material experts, and linguists. Based on the validation analysis, the product validity value is 87, so it can be seen that Boxs Paber media is stated to be very valid based on the product validity category table. The following is the Product Validity Category Table.

Table 4. Product Validity Category

interval skor	Validity criteria	Information
$0 < NV \leq 55$	Invalid	Very Inappropriate
$55 < NV \leq 75$	Fairly Valid	It is not in accordance with
$75 < NV \leq 85$	Valid	Not Appropriate
$85 < NV \leq 100$	Very Valid	In accordance

Product Implementation Stage (Implementation)

The implementation of the Boxs Paber product was carried out in class III with a total of 30 students as an experimental class and with a total of 30 students as a control class. Before the researcher implemented the Boxs Paber product, the researcher first conducted a pretest on the experimental class and control class. Researchers implemented the Boxs Paber product in the experimental class, while for the control class learning was carried out as usual without using Boxs Paber media. After learning in the experimental class and control class was completed, the researchers then conducted a posttest on all students to measure the high-level thinking abilities they had acquired.

To get an overview or results from the implementation of the Boxs Paber media product, researchers processed data from pre-test and post-test results from the experimental class and control class. Data processing was carried out by researchers using the independent sample t test. Before the t test is carried out, the data requirements that must be met are that the data is normally distributed and homogeneous.

a) High level thinking abilities

a. Pre-Test Results for Experimental and Control Classes

1) Data Normality

The way researchers find out the normality of data for higher order thinking skills is done by using SPSS. The results of the data normality test for higher order thinking skills at SDN Glagahan 1:

Table 5. Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelas	Statistic	f	Sig.	Statistic	Df	Sig.
BOX PABER high level thinking abilities	Pre-Tes Eksperimen	.133	30	.200*	.959	30	.400
	Pre-TesKontrol	.133	30	.200*	.952	30	.285

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the results of the Shapiro-Wilk normality test. the z value of the experimental group was 0.400 and that of the control group was 0.285. The probability value (Sig) of the two groups is greater than the significance level of 0.05, so the test data for higher order thinking skills in the experimental group and the control group in the pretest are normally

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distributed.Homogenitas Varian

Once it is known that the data is normally distributed, the next step is to test the homogeneity of the data. The data homogeneity test was carried out by researchers using SPSS with the aim of knowing whether the research data was homogeneous or not. The homogeneity test results for the research data are as follows:

Table 6. Test of Homogeneity of Variance

LeveneStatistic			df1	df2	Sig.
High level thinking skills paber box	Based on Mean	1.942	1	48	.170
	Based on Median	1.741	1	48	.193
	Based on Medianand with adjusteddf	1.741	1	47.781	.193
	Based on trimmedmean	1.888	1	48	.176

The results of the homogeneity test carried out by researchers on students' high-level thinking ability data using SPSS showed a Based on Mean value of 0.170 with sig. (p) is 0.170 > 0.05 (the level of significance used by researchers for the homogeneity test is 5%). Thus, the pretest data on high-level thinking abilities of experimental class and research control class students at SDN Perak II contained similar (homogeneous) variants.

1) Product Effectiveness

After the normality and homogeneity test of the research data met the requirements, the next step taken by the researcher was to look for the effectiveness of the Boxs Paber media product in terms of length and weight in increasing the interest and higher level thinking abilities of class III students at SDN Glagahan 1. The effectiveness test was carried out by the researcher to find out whether Box Paber media in improving students' higher order thinking skills can increase significantly or not. The effectiveness test carried out by researchers used an Independent Sample t Test using the SPSS application. The implementation of the pretest and posttest was carried out on 30 control class students and 30 experimental class students.

The results of the pretest and posttest of the control and experimental classes obtained data on increasing higher order thinking skills by 39.6% in the experimental class and 17.6% in the control class. From the results of the comparison of the average values of the control and experimental classes, it can be concluded that the average increase in the value of the experimental class is greater than that of the control class. So that the researcher knows whether the data is significant or not, the researcher uses an Independent Sample t Test using SPSS.

Table 7. The results of the t test are:T-Test

	Class	N	Mean	Std. Deviation	Std. Error Mean
High Level Thinking Skills Media BOXS PABER	Pre-Tes Eksperimen	30	47.40	15.078	3.016
	Pre-Tes Kontrol	30	40.40	12.493	2.499

Table 8. Independent Sample Test

Group	Levene's	t-test for Equality Of Means

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	Quality of Variance				
	F	Sig	T	Df	Sig.(2 tailed)
Equal variance assumed	1.942	.170	1.787	48	.080
Equal variance not assumed			1.787	46.398	.080

Based on the SPPSS output, it can be seen that there are similarities in the pretest data. This can be seen when the F value is greater than the α value. The F value is 1,942, so that value is greater than the α value, which is 0.05 (F=0.170 > α = 0.05). This shows that the variance of the experimental group and the control group are the same. Because the data is homogeneous, the researcher looks at the results in the Equal variance assumed column. In this column, it can be seen that there is a very significant difference compared to the control group so that it can be concluded that the treatment given by the researcher to the experimental group before using Boxs Paber media was declared unsuccessful and after using Boxs Paber media it was declared successful.

a. Post-Test Results of the Experimental Group and Control Group

1) Normality Test

The way researchers determine the normality of data for level thinking abilities is done using SPSS. The results of the post-test data normality test for the higher order thinking skills of students in the experimental class and control class at SDN Glagahan 1 are:

Table 9. Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Class	Statistic	df	Sig.	Statistic	Df	Sig.
Kemampuan berpikir tingkat tinggi	Post-Test Eksperimen	.209	30	.006	.929	30	.083
	Post-Test Kontrol	.206	30	.008	.928	30	.076

a. Lilliefors Significance Correction

Based on the results of the Shapiro-Wilk normality test. the z value of the experimental group was 0.083 and that of the control group was 0.076. The probability value (Sig) of the two groups is greater than the significance level, namely 0.05, so the high-level thinking ability test data for the experimental group and the control group in the pretest are normally distributed.

1) Homogeneity of Variants

Once it is known that the data is normally distributed, the next step is to test the homogeneity of the data. The data homogeneity test was carried out by researchers using SPSS with the aim of knowing whether the posttest was homogeneous or not. The homogeneity test results for the research data are as follows:

Table 10. Test of Homogeneity of Variance

LeveneStatistic	df1	df2	Sig.

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Kemampuan berpikir tingkat tinggi media boxs paber	Based on Mean	.138	1	48	.712
	Based on Median	.286	1	48	.595
	Based on Median and with adjusteddf	.286	1	46.853	.595
	Based on trimmedmean	.150	1	48	.701

The results of the homogeneity test conducted by the researcher on data on students' high-level thinking skills using SPSS showed a Based on Mean value of 0.712 with sig. (p) is 0.712 > 0.05 (the level of significance used by researchers for the homogeneity test is 5%). Thus the post-test data for high-level thinking skills of students in the experimental class at SDN Perak II and the research control class at SDN Glagahan 1 have the same variance (homogeneous).

a) High level skills

The implementation of the Boxs Paber product was carried out in class III with a total of 30 students as the experimental class and class III at SDN Glagahan 1 with a total of 30 students in class III at SDN Perak 1 as the control class. To find out the effectiveness of the Boxs Paber media product on high level thinking skills at SDN Glagahan 1, the Independent Sample t-Test was carried out. Before the t test is carried out by the researcher, the conditions that must be met are that the data is normally distributed and homogeneous.

1) Data Normality

The way researchers find out the normality of data for higher order thinking skills is done by using SPSS. The results of the data normality test for high-order thinking skills of SDN Glagahan 1 students are:

Table 11. Tests of Normality Experiment Group

Kolmogorov-Smirnov[a]					Shapiro-Wilk		
	Kelas	Statistic	Df	Sig.	Statistic	Df	Sig.
Results	Experimental Group Interests	.090	30	.200*	.971	25	.680

Table 12. Tests of Normality Control Group

Kolmogorov-Smirnov[a]					Shapiro-Wilk		
	Kelas	Statistic	Df	Sig.	Statistic	Df	Sig.
Results	Control Group Interests	.176	30	.045	.949	25	.235

Based on the results of the Shapiro-Wilk normality test. the z value of the experimental group was 0.680 and that of the control group was 0.235. The probability value (Sig) of the two groups is greater than the significance level of 0.05, so the interest data for the experimental group and the control group are normally distributed.

1) Homogeneity of Variants

Once it is known that the data is normally distributed, the next step is to test the homogeneity of the data. The data homogeneity test was carried out by researchers using SPSS with the aim of knowing whether the posttest was homogeneous or not. The homogeneity test results for the research data are as follows:

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Table 13. Test of Homogeneity of Variance

Levene Statistic		df1	df2	Sig.
Kemampuan Berpikir Tingkat Tingg	Based on Mean	2.179	1 48	.146
	Based on Median	2.114	1 48	.152
	Based on Median and with adjusted df	2.114	1 47.405	.153
	Based on trimmed mean	2.121	1 48	.152

The results of the homogeneity test carried out by researchers on high-level thinking abilities using SPSS showed a Based on Mean value of 2,179 with sig. (p) is 0.146 > 0.05 (the significance level used by researchers for the homogeneity test is 5%). Thus, the high-level thinking abilities of the experimental class and the research control class at SDN Glagahan 1 and at SDN Perak II have similar (homogeneous) variants.

1) Product Effectiveness

To find out whether the increase in high-level thinking abilities was significant or not, the researchers carried out an Independent Sample t Test on high-level thinking abilities. The following are the results of the Independent Sample t Test on high-level thinking abilities:T-Test

Table 14. Independent Sample t Test on high-level thinking abilities:T-Test

	Class	N	Mean	Std. Deviation	Std. Error Mean
Kemampuan Berpikir Tingkat Tinggi	Eksperimen	30	47.40	15.078	3.016
	Kontrol	30	40.40	12.493	2.499

Table 15. Independent Sample Test

Kelompok	Levene's Quality of Variance		t-test for Equality Of Means		
	F	Sig	T	Df	Sig.(2 tailed)
Equal variance Assumed	1.942	.170	1.787	48	0.001
Equal variance not Assumed			1.787	46.398	0.001

Based on the data above, it can be seen that the data have similarities, this is obtained from the value of F which is greater than the value of α. The F value obtained is 1,942 so that value is (F = 0.170 > α = 0.05). It can be concluded that the variance in the control group and the experimental group is the same. Because the data is homogeneous, the researcher looks at the results in the Equal variance assumed column. In the column it can be seen that there is a difference at the 5% level, the sig (2-tailed) value is smaller than the α value (0.170 <0.05)

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meaning that the experimental class has a very significant change compared to the control class, so it can be concluded that the use of Boxs media Paber in the experimental class was declared successful.

Evaluation Stage (Evaluation)

Based on the implementation stage, Boxs Paber media needs to be evaluated. At this stage a final revision of the Boxs Paber media material for units of length and weight is carried out based on the suggestions and input of students given during the implementation stage. According to the students of the Boxs Paber media, the length and weight unit material, the font size is not large and the students hope that this media can be available at SDN Glagahan 1. Based on the results of student responses and media validation by experts, namely media experts, material experts and language experts, it was found that Media Boxs Paber material unit length and weight that was developed is very suitable for use in the teaching and learning process.

Discussion

Results of the Development of Paber Media Boxes Material Units of Length and Weight Class III Elementary School. The product produced in this development research is Boxs Paber media, material for units of length and weight for class III SD using the ADDIE development model including:

1. Analysis (Analysis);
2. Design (Planning);
3. Devolempement (Development)
4. Implementation;
5. Evaluation (Evaluation).

The steps of these stages are (1) Analysis, including needs analysis and literature study (2) Planning, including media selection, material selection, designing Boxs Paber media and designing instruments (3) Development stage, including media making, feasibility testing by validators and respondents (4) Implementation for control class III students at SDN Glagahan 1 and experimental class students at SDN Perak II (5) Evaluation, in the form of making the final media based on the suggestions and input of the validators and students when the Boxs Paber media implementation was carried out. Boxs Paber media products, the material for unit length and weight are designed based on the planning stage. In accordance with the research conducted by Suruddin (2016) to obtain valid, practical and effective Boxs Paber media, validation must be carried out to experts, namely media experts, material experts and linguists. The results of this study indicate that Boxs Paber media is very effective in increasing higher order thinking skills. Material experts test the feasibility of Boxs Paber media based on the aspects of material feasibility, learning feasibility and curriculum feasibility contained in Box Paber media. Material expert Mrs. Nining Widarwati, S.Pd, M. MPd who tested the feasibility of the material, namely she was the Principal concluded that the results of the due diligence/validation carried out by the material expert obtained a percentage of 77%, if it is included in the eligibility criteria then it is included in the feasible category , meaning that the Boxs Paber media for length and weight units is suitable for use in Mathematics Class III at SDN Glagahan 1, Perak District for length and weight units. After the researcher carried out the normality test and homogeneity test, the researcher then carried out the Independent Sample t Test. From this test, a value of 0.712 > 0.05 was obtained, with the conclusion that HO was rejected and Ha was accepted. This

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shows that there are differences between classes that use Box Paber media and classes that do not use Box Paber media. From these differences it can be concluded that learning using Box Paber media makes students' higher-level thinking skills better than learning that does not use Box Paber media. This is the same as research conducted by Rheza and Tantri (2019) which states that learning using Boxs Paber media can increase students' interest and higher-order thinking skills because by using this media students can see the human excretory organs in a concrete or real way. Paber's Media Boxes have proven to be very effective in conveying information or material delivered by the teacher because this media contains real or concrete images with colorful backgrounds that match the character of elementary school-age children.

According to Lovita (2017) the use of concrete media in the learning process can provide real experiences to students and can also increase the interest and enthusiasm of students in participating in the teaching and learning process. This theory is in line with the Boxs Paber media developed in research, that using Boxs Paber media in learning can make the learning atmosphere more lively and enjoyable.

Based on student responses and students' high-level thinking abilities, Boxs Paber media is very effective in increasing interest and learning outcomes so that it can stimulate students' high-level thinking abilities because this media has the advantages of being simple, flexible, innovative, creative and teachers can be carried around more easily. where. Apart from that, the Boxs Paber media can also provide stimulus or encouragement to students to be more active, enthusiastic and enthusiastic in learning so that students' interest in learning and high-level thinking abilities can increase according to expectations.

Conclusion

Base on the result can be conclude: 1) Authentic learning media on the effectiveness of the Boxs Paber media in terms of length and weight. 2) Boxs Paber media products with unit length and weight to improve the high-order thinking skills of grade III elementary school (SD) students are appropriate to use according to the assessment of experts. The results of the assessment from media experts were 94, from material experts 77 and from linguists 91 so the average of media validity is 87 (Very Valid). 3) The Boxs Paber media product, which contains units of length and weight, can improve high-level thinking abilities. This increase can be seen from the results of the pretest and posttest calculations of the high-level thinking skills of students in class III at SDN Glagahan 1. The increase in students' higher-order thinking skills was also seen from the initial average of 47.4 to 87 and for students' interest, which was initially 31.48, it increased to 52.32

Recommendation

Based on the results of the study, the researchers provide the following suggestions:

1) Related to the conclusion of making Boxs Paber media as a solution and alternative material for length and weight units because Boxs Paber media is one of the media that is practical, innovative, concrete and effective for improving higher-order thinking skills.
2) Principals need to provide infrastructure including learning media that are practical and concrete in nature to improve students' high-level thinking skills in learning
3) This research and development still has a lot of shortcomings, including if the media is used for a large number of students, the teacher needs to make Boxs Paber media with a larger size according to the number of students in the class so that all students can see the Boxs Paber media separately. bright and clear.

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4) For other researchers, the results of this study can be a reference that can be used to develop learning media with various approaches to be carried out. Principals need to provide infrastructure including learning media that are practical and concrete in nature to improve students' higher-order thinking skills in learning
5) This research and development still has a lot of shortcomings, including if the media is used for a large number of students, the teacher needs to make Boxs Paber media with a larger size according to the number of students in the class so that all students can see Boxs Paber media separately. bright and clear.
6) To other researchers, the results of this study can be a reference that can be used to develop learning media with various approaches to be carried out.
7) School principals need to provide infrastructure including practical and concrete learning media to improve students' high-level thinking abilities in learning
8) This research and development still has many shortcomings, one of which is that if the media is used for a large number of students, teachers need to make Boxs Paber media with a larger size according to the number of students in the class so that all students can see the Boxs Paber media simultaneously. bright and clear.
9) To other researchers, the results of this research can be a reference that can be used to develop learning media with various approaches that will be taken.

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