

Development of Concept Map-Based Student Worksheets (LKPD) in Grade IV Science Learning

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ABSTRACT

Learning is one of the core activities that must be followed by students because this learning is used to interact with others and increase knowledge that will be provisions in the future. This study aims to develop a product in the form of Student Worksheets (LKPD) Based on Concept Maps in Science Learning for Grade IV of SD Negeri 09 Lubuklinggau and to produce valid, practical and effective LKPD. The research method used is research and development (R & D) with the model used is 4D. The object of this study is 20 grade IV students. The results of this study indicate that: 1) the quality of LKPD seen from the validity aspect is said to be included in the valid category with an Aiken v coefficient for language experts of 0.85, material experts 0.80, media experts 0.76 with a high category. Meanwhile, the results of the analysis of the assessment of the practicality of the teacher and student LKPD sheets met the practical criteria with an average score of 76%, and effectiveness with an average of 84.9%, so it can be concluded that the LKPD in science learning meets the valid, practical, and effective criteria so that it can be used in learning.

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1. INTRODUCTION

Education is a learning process for students to be able to know, evaluate and apply every knowledge gained from learning in the classroom or experiences that occur in daily life. In line with that, in Law No. 20 of 2003 Chapter 1 Article 1 Paragraph 1 concerning the National Education System that Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have spiritual, religious, self-control, personality, intelligence, noble morals, and the skills they need, society, nation and state (Sahvira et al., 2021:217).

Learning is one of the core activities that must be followed by students because this learning is used to interact with others and add knowledge that will be a provision in the future. Learning is carried out with many concepts ranging from questions and answers with teachers and others. Good interaction will encourage how a learning or learning goal can be realized. Teachers must have methods and strategies used to become learning tools so that they can run in accordance with the learning objectives that have been implemented. Learning is one of the components that must be done to carry out the learning process at school, apart from being one of the important components for the realization of the learning process other than teachers and students (Aminah, 2022:244). In elementary school learning, there are several subject contents that must be understood by students, one of which is natural and social sciences.

IPAS (Natural and Social Sciences) is a curriculum development from science learning combined with social studies in the independent curriculum. Social studies learning is currently also a learning that leads to science and social learning. Science subjects in the independent curriculum are integrated with social studies subjects into social studies. (Nurul, et al. 2022:4654). The purpose of learning science in the independent curriculum is to develop interest and curiosity, inquiry skills, and understanding of concepts in students. Science learning is a learning that is scientific inquiry, which is the provision of direct learning experience through process skills and scientific attitudes (Anjar Palupi and Husamah 2023:4654)

The needs analysis carried out at SD Negeri 09 Lubuklinggau is based on the results of observations and interviews that have been conducted by the author on teachers and students of SD Negeri 09 Lubuklinggau in grade IV still using teaching materials from the government whose concept is still general. Teaching materials in the form of LKPD have not been developed using concept maps, in LKPD that is developed in accordance with the environment and concept maps owned by their respective regions, for example the traditional dance of silampari kahyangan tinggi, cultural carnival parades, drum waterfalls, magic hills, folklore and other concept maps owned by the Lubuklinggau area and equipped with more interesting materials and concepts.

In addition, it is also known that the results of the analysis of the needs of schools, teachers and students that have been carried out at SD Negeri 09 Lubuklinggau, the school still lacks learning resources, one of which is LKPD, this causes obstacles in the learning process in grade IV teachers in providing effective teaching also find it difficult to design a learning experience that invites students to be actively involved and stimulate students' critical thinking, due to the lack of suitable learning resources. Meanwhile, students who are faced with learning activities are less active in the learning process because the learning resources are less interesting so that there is a lack of interest in learning students in the IPAS learning process. The average low learning outcomes of IPAS are 60% - 40% due to several factors, one of which is limited learning resources and students have a low interest in learning.

It is hoped that as a solution to the IPAS Student Worksheet as expected, the right way is needed by utilizing the role Concept Map-based learning in every learning process activity that uses this Student Worksheet, so that students not only get material from teachers and books but can also learn on their own with the help of the Student Worksheet which makes it very easy for students to learn, So that the learning results can be in accordance with the goals to be achieved.

According to Prastowo (2014: 269), the Student Worksheet (LKPD) is a printed teaching material in the form of sheets of paper containing a summary of the material, and instructions for the

implementation of learning tasks that must be done by students, and refers to the basic competencies that must be achieved. This is in line with the opinion of Majid (2013: 371), explaining that "Worksheets (LK) or worksheets (LT) are intended to trigger and help students carry out learning activities in order to master an understanding, skill, or attitude".

Berdasarkan uraian-uraian tersebut, maka this study aims to develop a product in the form of a Student Worksheet (LKPD) Based on Concept Maps in Science Learning for Grade IV of SD Negeri 09 Lubuklinggau and produce a valid, practical, and effective LKPD. It is hoped that the research will become a reference source that LKPD in science learning meets the criteria of validity, practicality, and effectiveness so that it can be used in learning.

2. METHODS

The development model of this research in the Development of Concept Map-Based Student Worksheets (LKPD) will use the Four-D (4D) model developed by Thiagrajin. The Four-D (4D) development research model consists of 4 stages, namely the definition stage, the design stage, the development stage, and the disseminate stage, (N. Lestari, in Sapiruddin et al., 2024: 24).

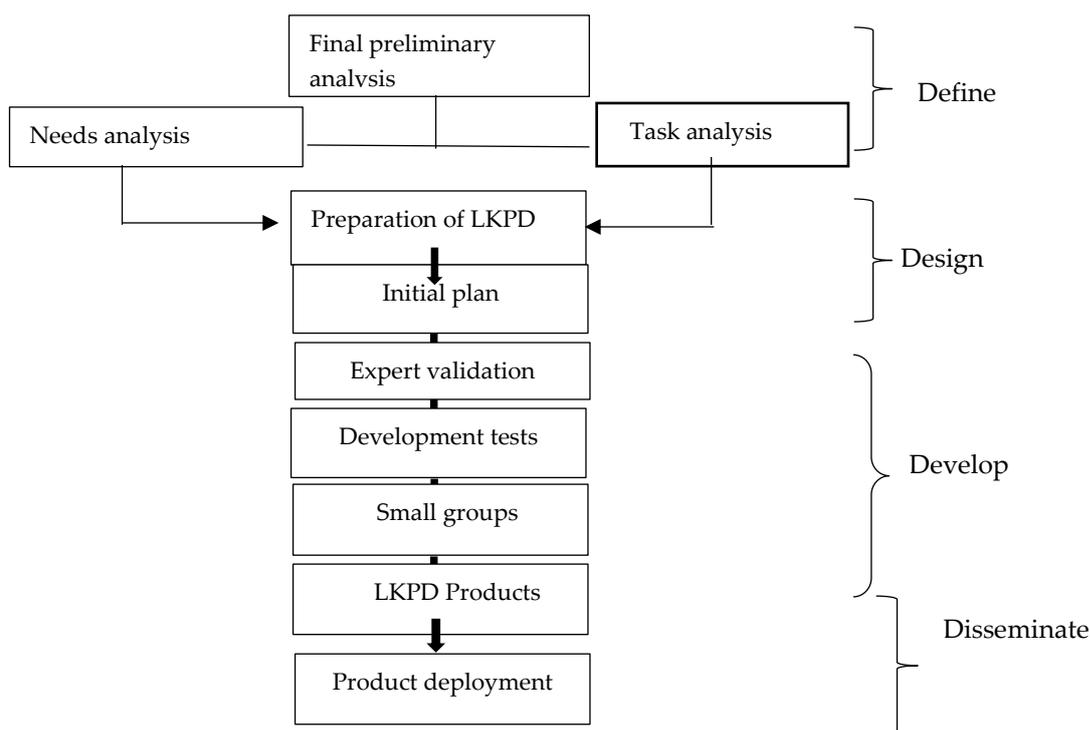


Figure 1. Development scheme

Source: (Trianto 2009:190)

The following are the research and development procedures for LKPD Based on Concept Maps in Science Learning Class IV SD Negeri 09 Lubuklinggau. There are 4 stages, namely Define, Design, Development, and Dissemination: Define, Design, Develop, and Desemination. The subjects involved in the design of this trial are experts, teachers and learners. The research instruments used in the development of this media are in the form of interviews and questionnaires. This data analysis technique is also interpreted as analyzing data that has been obtained in a research. Data analysis in

terms of data validity and practicality is carried out by; LKPD Validity Test, LKPD Practicality Test, and LKPD Effectiveness Test.

3. FINDINGS AND DISCUSSION

3.1. Initial Product Development Results

The concept map-based Student Worksheet (LKPD) is a Research and Development (R&D) type research that uses a 4-D development model. The data that has been obtained is then analyzed to obtain information from research results and research results reports. These stages must be passed by the author so that the Student Worksheet (LKPD) based on concept maps for grade IV is valid, practical, and effective. The following are the steps for the development of the 4-D model model that has been implemented:

The definition stage includes initial analysis, student analysis, task analysis, concept analysis and specific objectives. The author conducted an initial analysis to find out the problems that existed in grade IV of SD Negeri 09 Lubuklinggau City. This analysis was carried out on January 18, 2025, there were problems encountered, namely teachers have problems in teaching IPAS material, namely incomplete teaching materials, still looking for material from other sources, students have problems with few teaching materials that provide incomplete material, making students less understanding of the material taught and students less active in learning, Learning material sources that do not attract students' attention in the learning process.

The student character analysis will be carried out on January 18, 2025, the student character analysis is carried out to find out the character of students who will use the concept map-based LKPD, this analysis is useful as a reference in the product development process so that the products developed can be used according to the student's character. The analysis of student characteristics was carried out by observation and interviews with grade IV students of SD Negeri 09 Lubuklinggau City. From the results of this analysis, it was found that students want interesting teaching materials, in terms of images, colors and content of the material that are complete and easy to understand.

Task analysis is an understanding activity in learning that is carried out to identify the structure of the material to be studied. Then the writing of the LKPD is carried out with steps, namely formulating basic competencies, compiling questions/materials, and writing by paying attention to the structure of the LKPD.

Concept analysis is the identification of the main concepts taught and systematically compiling and relating a concept about the material, norms and customs of my region systematically. Through the flow of learning objectives (ATP) that has been formulated, a map of the needs of the title, learning objectives and the order of the LKPD was developed. Once the concepts used are identified and then form a concept map, skills that students must possess will also be formed. These student skills are a form of achieving learning objectives in accordance with the ATP that has been determined.

The data from task analysis and concept analysis can be used as a reference to formulate learning objectives as an elaboration of the learning objectives flow (ATP). The formulation of learning objectives will be used as the basis for designing a concept map-based LKPD.

The planning stage aims to produce a concept map-based LKPD. There are several steps at this stage, namely: 1) Preparation of the Initial Reference Test; After the learning objectives are formulated, then prepare a benchmark reference test in the form of questions that students often encounter in the

learning process activities. Practice questions are given and done by students directly so that we can see the activeness and independence of students in determining and developing their knowledge. 2) Media Selection; LKPD development research based on concept maps was chosen as a means to help the process of delivering learning materials. By choosing a concept map-based LKPD, it is hoped that the indicators and objectives of Natural and Social Sciences (IPAS) learning can be achieved.

This development stage consists of the development of a concept map-based LKPD containing Natural and Social Sciences (IPAS) learning materials about the norms and customs of my region in grade IV students of SD Negeri 09 Lubuklinggau City. The development stage consists of concept map-based LKPD, validation with linguists, media experts, material experts and concept map-based LKPD revision. This development aims to produce valid learning media products.

This dissemination stage involved students and the same school as the small group trial, with a total of 20 students and 6 students responding by filling out student practicality questionnaires and disseminating others through social media such as youtube. Another goal at this stage of dissemination is for products that have been compiled and developed that can be used by others in the learning process activities.

Presentation of Student Worksheet Trial Data (LKPD)

The presentation of trial data in this study was carried out using the validation method on the LKPD media products that have been developed. This validation was carried out by 3 experts, namely linguists, media experts, and material experts. After carrying out the validation process, the next step is to conduct a small group trial process on 6 grade IV students at SD Negeri 09 Lubuklinggau City. The following is an explanation of the validation process of the three experts, which is as follows:

1) LKPD Validation Assessment Questionnaire;

linguist; The validation of this linguist will be carried out on May 7, 2025. The validation of linguists in LKPD in this class IV science science material is Mrs. Dr. Dian Ramadan Lazuardi, M.Pd., she is a lecturer at PGRI Silampari University in the Indonesian Language and Literature study program. The LKPD validation includes 12 questions. These things that are rated in this product are as follows:

Table 1. Linguist Validation Results

No	Assessment indicators	Score that Obtained
1.	The sentences used represent the content of the message and information that is to be conveyed while still following the Indonesian sentence grammar	4
2.	Terms used in accordance with the Great Dictionary of the Indonesian Language	4
3.	Messages or information are conveyed in interesting and common language in Indonesian written communication	4
4.	The language used evokes a sense of pleasure when students read it and encourages them to learn to use the media	5
5.	Pictures and illustrations according to the content	5
6.	The language used in explaining a concept must be in accordance with the development	5
7.	The language used is according to the emotional maturity of the student	5

8.	The sentence system used to convey the message refers to the rules of good and correct Indonesian grammar	4
9.	The terms used in the LKPD are consistent	4
10.	The use of symbols in the LKPD is consistent	4
11.	Grammar used to convey informational messages in accordance with EYD	4
12.	The use of language in LKPD is easy to understand according to student development	5
	Sum	53

Material Expert

The assessment sheet for material expert learning media contains the assessment of LKPD. The validator of the IPAS material expert is Mrs. Dwi Purwasih, S.Pd grade IV teacher of SD Negeri 09 Lubuklinggau City. The statement on the material validation questionnaire sheet consists of 9 questions. The results of the validated that have been analyzed are presented in the form of a table as follows:

Table 2. Material Expert Validation Results

No	Assessment Indicators	Scores Obtained
1.	Material completeness	4
2.	Breadth of material	4
3.	Depth of material	4
4.	Suitability of students' ability level	5
5.	Data and fact accuracy	5
6.	Image accuracy	5
7.	Clarity of the norms and customs of my region	4
8.	Creating the ability to ask questions	4
9.	Suitability of material presentation	4
	Sum	39

Media Member

Media expert validation is carried out to validate the media components contained in the developed LKPD. The questions contained in the media validation questionnaire consisted of 13 questions. The media expert validator is an expert in the field of media design, the media expert in this LKPD is Mr. Dr. Dodik Mulyono, M.Pd. criticism and suggestions are provided by the author so that researchers get input on improving the LKPD. The results of the media expert assessment that have been analyzed and the validation results of media experts are arranged based on the following aspects assessed:

Table 3. Media Expert Validation Results

No	Assessment Indicators	Scores Obtained
1.	Color combinations	4
2.	Color on the letters	4
3.	Colors in the picture	4
4.	Consistency of the font style	5
5.	Harmony of the letter style	4

6	Font size fit	4
7.	Clarity of the letters used	4
8.	Layout of each page	4
9.	Clarity and layout	4
10.	Display and background color compatibility	4
11	Animations used	4
12.	Color balance and layout elements	4
13.	Image use	4
	Sum	53

LKPD Practicality Assessment Questionnaire

The practicality assessment questionnaire consisted of a teacher's response questionnaire, and the student response questionnaire consisted of questions arranged with answer categories of 5,4,3,2,1, with consecutive criteria (SB) Very Good, (B) Good, (C) Sufficient, (TB) Not Good, (STB) Very Not Good.

Teacher Practicality Test

The teacher's practicality test was carried out on May 22, 2025 for the fourth grade homeroom teacher of SD Negeri 09 Lubuklinggau City. The researcher explained how to use the LKPD, then the teacher was given a questionnaire to find out the LKPD with 10 questions, the teacher gave the answer to the question using (√) in the question answer selection column with a score of 1, 2, 3, 4, 5.

Table 4. Results of the Teacher's Practicality Test

No	Assessment Indicators	Score obtained
1.	The Student Worksheet (LKPD) based on concept maps is easy to read by students	5
2.	In the concept map-based Student Worksheet (LKPD), I cannot control the development of students in learning materials	4
3.	On the Student Worksheet (LKPD) based on concept maps it is easy to use	4
4	The content of the material is easy for students to understand	4
5.	The material in the Student Worksheet (LKPD) based on concept maps is not in accordance with learning outcomes (CP) and learning objectives (TP)	4
6.	The language used in the Student Worksheet (LKPD) based on concept maps is easy to understand	5
7.	The color combination used in the concept map-based Student Worksheet (LKPD) did not increase my enthusiasm for learning	4

8.	Able to attract students' interest in learning and create a learning atmosphere that is in accordance with the real life of students	4
9.	With a concept map-based Student Worksheet (LKPD), it provides motivation to students	5
10.	The design of the Participant Learner Worksheet (LKPD) based on the concept map is not attractive	4
	Sum	43

Small Group Trials

The implementation of a small group practicality test consisting of 6 students with high, medium and low abilities was selected according to the advice of Mrs. Dwi Purwasih, S.Pd, before being given a practicality sheet, six students were first asked to see and observe the LKPD independently under the guidance of researchers. After that, each student was given a practicality sheet consisting of 10 questions. Students can provide answers to questions by giving a check mark (√) on the student practicality questionnaire which aims to find out the practicality of the LKPD developed.

Table 5. Small Group Practicality Test Results

No	PD	Question Item										Sum	Percentage	Criterion
		P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10			
1.	S1	0	0	1	1	1	1	1	1	1	0	7	70%	Practical
2.	S2	0	1	1	1	0	1	1	1	1	0	7	70%	Practical
3.	S3	1	1	1	1	1	1	1	1	1	1	10	100%	Very Practical
4.	S4	0	1	1	1	1	1	1	1	1	1	9	90%	Very Practical
5.	S5	1	1	0	1	1	1	1	1	1	1	9	100%	Very Practical
6.	S6	1	0	1	1	1	1	1	1	1	1	8	80%	Practical

LKPD Effectiveness Assessment

The implementation of large group trials (field tests) was carried out in 4 days. The trial was carried out on all grade IV students of SD Negeri 09 Lubuklinggau City with a total of 20 students who have high, medium, and low levels of ability. The author shared the pre-test questions on May 26, 2025 to be done, then the next day the researcher explained the material using the LKPD after that on May 27, 2025 students worked on the post-test questions. The results of the effectiveness test given to 20 students in grade IV of SD Negeri 09 Lubuklinggau are detailed in table 6 as follows:

Table 6. Results of Pre test and Post test Effectiveness Test scores

No	PD	Question Item										Sum	Percentage	Criterion
		P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10			
1.	S1	0	0	1	1	1	1	1	1	1	0	7	70%	Practical

2.	S2	0	1	1	1	0	1	1	1	1	0	7	70%	Practical
3.	S3	1	1	1	1	1	1	1	1	1	1	10	100%	Very Practical
4.	S4	0	1	1	1	1	1	1	1	1	1	9	90%	Very Practical
5.	S5	1	1	0	1	1	1	1	1	1	1	9	100%	Very Practical
6.	S6	1	0	1	1	1	1	1	1	1	1	8	80%	Practical

LKPD Effectiveness Assessment

The implementation of large group trials (field tests) was carried out in 4 days. The trial was carried out on all grade IV students of SD Negeri 09 Lubuklinggau City with a total of 20 students who have high, medium, and low levels of ability. The author shared the pre-test questions on May 26, 2025 to be done, then the next day the researcher explained the material using the LKPD after that on May 27, 2025 students worked on the post-test questions. The results of the effectiveness test given to 20 students in grade IV of SD Negeri 09 Lubuklinggau are detailed in table 7 as follows:

Table 7. Results of Pre test and Post test Effectiveness Test scores

No	Student Name	Pre test scores	Post test scores
1	S1	30	75
2	S2	40	80
3	S3	55	90
4	S4	35	80
5	S5	80	100
6	S6	60	95
7	S7	65	90
8	S8	55	80
9	S9	50	90
10	S10	40	95
11	S11	60	85
12	S12	40	80
13	S13	50	80
14	S14	55	95
15	S15	30	80
16	S16	40	85
17	S17	35	85
18	S18	40	85
19	S19	30	80
20	S20	40	85
Average		45,25	83,76

The LKPD is based on a concept map on grade IV elementary school students who have been validated before the field trial of the LKPD that has been appropriately designed, then the validation stage is carried out by providing a validation questionnaire sheet to each expert. The expert validation stage is carried out to get input and suggestions as well as provide an assessment of the media that has been designed. After the media was revised based on input and suggestions from each expert, it was then tested on 6 students and 1 teacher filled out a student response questionnaire and teacher response by giving a score to each item of media assessment as the use of learning media.

The results of the linguist's assessment are LKPD in the learning of IPAS in grade IV of SD Negeri 09 Lubuklinggau City which has been developed and assessed through the questionnaire sheet that has been presented. The following results of the linguists' assessment on the LKPD can be seen in the following table.

Table 8. Linguist Analysis Results

No	Member Name	Assessment Indicators											
		Language											
		1	2	3	4	5	6	7	8	9	10	11	12
1.	Dr. Dian Ramadan Lazuardi, M.Pd.	4	4	4	5	5	5	5	4	4	4	4	5
2.	Sum	4	4	4	5	5	5	5	4	4	4	4	5
3.	$\sum s = (r-lo)$	3	3	3	4	4	4	4	3	3	3	3	4
4.	$[n(c-1)]$	4	4	4	4	4	4	4	4	4	4	4	4
5.	$V = \sum s / [n(c-1)]$	$V = 41/48$											
	V Total	0,85											
	Category	Tall											

Known:

$$\begin{aligned}
 V &= 41/[12(5-1)] \\
 &= 41/[12(4)] \\
 &= 41/[(48)] \\
 &= 8,85
 \end{aligned}$$

From this formula, the Aiken V coefficient given by linguists, namely: 0.85 is categorized as "High", which can be interpreted as very valid to use. The results of the assessment of material experts on LKPD in the science of science class IV SD Negeri 09 Lubuklinggau City have been developed and assessed through the questionnaire sheet that has been presented. The following results from the assessment of material experts on the LKPD can be seen in the following table:

Table 9. Results of Material Expert Analysis

No	Member Name	Assessment Indicators								
		Material								
		1	2	3	4	5	6	7	8	9
1.	Dwi Purwasih, S.Pd.	4	4	4	5	5	4	4	4	4
2.	Sum	4	4	4	5	5	4	4	4	4
3.	$\sum s = (r-lo)$	3	3	3	4	4	3	3	3	3
4.	$[n(c-1)]$	4	4	4	4	4	4	4	4	4
5.	$V = \sum s / [n(c-1)]$	$V = 29/36$								

V Total	0,80
Category	Tall

Known:

$$\begin{aligned}
 V &= 29/[9(5-1)] \\
 &= 29/[9(4)] \\
 &= 29/[(36)] \\
 &= 0,80
 \end{aligned}$$

From this formula, the Aiken V coefficient given by the subject matter expert, namely: 0.80 is categorized as "High", which can be interpreted as very valid to use. The assessment of media experts was carried out on May 7, 2025 with media validator Dr. Dodik Mulyono, M.Pd which was assessed consisted of 13 questions using the Likert scale, namely 1 (very poor), 2 (less), 3 (adequate), 4 (good), 5 (very good). The results of the assessment of media experts found that LKPD in the learning of science class IV SD Negeri 09 Lubuklinggau City had been developed and assessed through the questionnaire sheet presented. The following results from media expert research on LKPD can be seen in the following table.

Table 10. Media Expert Analysis Results

No	Member Name	Assessment Indicators												
		Language												
		1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Dr. Dodik Mulyono, M.Pd.	4	4	4	5	4	4	4	4	4	4	4	4	4
2.	Sum	4	4	4	5	4	4	4	4	4	4	4	4	4
3.	$\sum s = (r-lo)$	3	3	3	4	3	3	3	3	3	3	3	3	3
4.	$[n(c-1)]$	4	4	4	4	4	4	4	4	4	4	4	4	4
5.	$V = \sum s / [n(c-1)]$	V = 40/52												
V Total		0,76												
Category		Quite High												

Known:

$$\begin{aligned}
 V &= 40/[13(5-1)] \\
 &= 40/[13(4)] \\
 &= 40/[(52)] \\
 &= 0,76
 \end{aligned}$$

From this formula, the Aiken V coefficient given by media experts, namely: 0.76 is categorized as "Quite High", which can be interpreted as valid to use. The overall results of the LKPD assessment from the three validators, namely: language validators, material validators, and media validators on the development of LKPD can be seen in the following table:

Table 11. Assessment Results of All Validators

No	Member Name	Score that Obtained	Aiken V	Category
1.	Dr. Dian Ramadan Lazuardi, M.Pd.	41	0,85	Tall
2.	Dwi Purwasih, S.Pd	29	0,80	Tall
3.	Dr. Dodik Mulyono, M.Pd	40	0,76	Quite High

Based on the data of filling out the questionnaire by the three validators shows that in the development of "High" linguists, "High" subject matter experts, media experts who have been corrected based on the calculation of questionnaire filling data with the "Quite High" criterion, it can be concluded that the development of LKPD is feasible.

The results of the teacher's practicality test on LKPD in the science learning of grade IV SD Negeri 09 Lubuklinggau City. On the teacher's practical worksheet, there are 9 questions. Then the teacher provides assessments, inputs, and suggestions to the LKPD in science learning. The following are the results of the teacher's response questionnaire which aims to find out the response to the LKPD in the following table.

Table 12. Results of the Teacher's Practical Test

Subject	Inquiry Number										Sum
	1	2	3	4	5	6	7	8	9	10	
Classroom	5	4	4	4	4	5	4	5	4	4	47
Teacher											
	Sum										47

$$\text{Practical Rate} = \frac{47}{50} \times 100\% = 94\%$$

So the average response of teachers who got a score of 94% which is categorized as "very practical" can be interpreted as practical to use.

Results of Small Group Trial Analysis

The implementation of a small group of practicality trials consisting of 6 students with high, medium, and low abilities was selected according to the advice of Mrs. Dwi Purwasih, S.Pd. before being given a practicality sheet, 6 students were first asked to see and observe the LKPD independently with the guidance of the researcher. After that, each student was given a practicality sheet consisting of 10 questions. Students can give answers to questions by giving a check mark (√) on the student practicality questionnaire consisting of positive (1) and negative (0) aimed at finding out the practicality of the LKPD developed.

Table 13. Results of Small Group Practicality Test Analysis

No	PD	Question Item										Sum	Percentage	Criterion
		P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10			
1.	S1	0	0	1	1	1	1	1	1	1	0	7	70%	Practical
2.	S2	0	1	1	1	0	1	1	1	1	0	7	70%	Practical
3.	S3	1	1	1	1	1	1	1	1	1	1	10	100%	Very Practical
4.	S4	0	1	1	1	1	1	1	1	1	1	9	90%	Very Practical
5.	S5	1	1	0	1	1	1	1	1	1	1	9	90%	Very Practical
6.	S6	1	0	1	1	1	1	1	1	1	0	8	80%	Practical
		Sum										50	83,33%	Very

Practical

Based on the results of the small group test obtained, it can be concluded that the students' response to LKPD with the criterion of "Very Practical" with a percentage of 83.33%. This shows that the LKPD is ready to be used without revision.

Table 14. Overall Results of the Practicality Test

No	Trial	Many Items	Presentase	Category
1.	Teacher Practicality Test	10	76%	Very Practical
2.	Small Group Trials	10	83,33%	Very Practical
Total		19	84,9%	Very Practical

Based on research from the student practicality test, among others: small group test and teacher practicality test on LKPD. The data can be concluded that the teacher's practicality test is included in the "very practical" category for use with a percentage of 76%, the small group test is included in the category of "very practical" for use with a percentage of 84.9%. Based on the results of the practicality test, an average of 84.9% was obtained and it was very practical to use.

The effectiveness test was carried out on May 26 and 28, 2025 using the subjects of all students, namely 20 people in grade IV of SD Negeri 09 Lubuklinggau City. To determine the effectiveness of the use of LKPD, Pre test questions (before using media) and Post test questions (after using media) were given. From the results of the effectiveness test analysis, it shows the average difference between the Pre test and Post test, then from the results of the Pre test and Post test, it can also be seen how many students meet the completeness criteria adjusted to the school KKM, which is 70.

$$\begin{aligned}
 N - \text{gain (g)} &= \frac{S_{\text{Post-Spre}}}{S_{\text{aks-Spre}}} \\
 &= \frac{83,76 - 45,25}{100 - 45,25} \\
 &= \frac{39}{54,7} \\
 N &= 0.71
 \end{aligned}$$

Based on the data above, the score obtained through the calculation of the N-Gain formula from each pre-test average score gets an average score of 45.25 with the incomplete category and post-test gets an average score of 83.76 with the Complete category and is classified into the N-Gain formula gets a score of 0.71 "High". So it can be concluded that the concept map-based LKPD in the learning of IPAS Chapter 8 Building a Civilized Society Topic A Norms in My Regional Customs for grade IV is effective to use. After Draft 1 has been validated by experts, it is further revised according to the suggestions and inputs provided by the recommended experts. The following is a description of the draft.

As for what is obtained from the Language validator, namely the accuracy of the use of terms, punctuation marks and language used according to EYD.

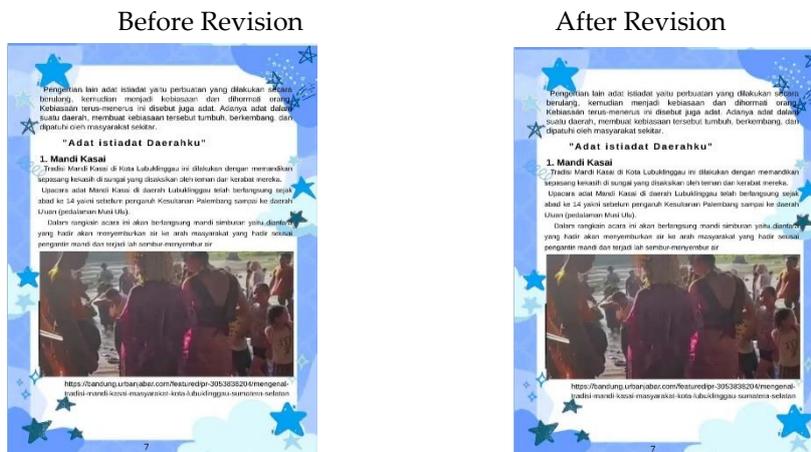


Figure 1. Display in the accuracy of term usage

The suggestions obtained by media expert validators are the cover and illustration of images, the selection of background colors and text, size and letters are considered.

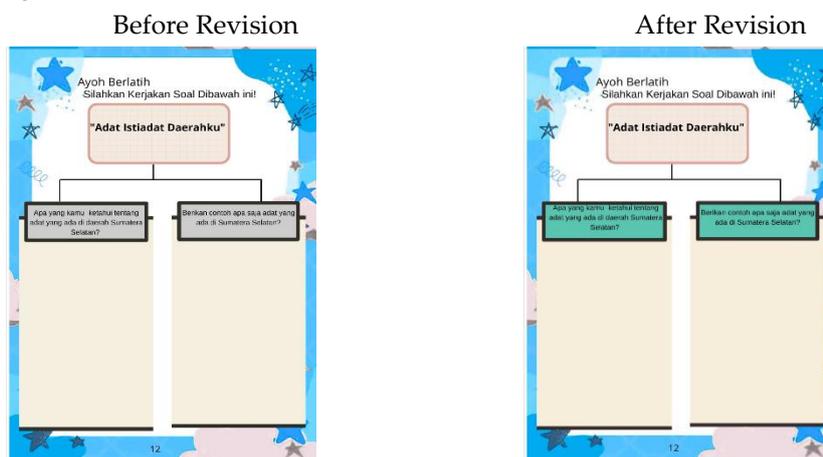


Figure 2. Improved color selection in text and letters

Based on the image above, it can be seen that there are differences between the two media before it is revised and after it is revised, namely: the form of writing and the use of colors in the LKPD text before it is revised, the writing on the LKPD still does not use effective words, while after it is revised, the difference can be seen, namely on the cover of the image illustration, the selection of the background and color of the writing is more attractive and this LKPD can be carried everywhere without finding it difficult to carry it.

4. CONCLUSION

Based on the background and formulation of the problems in the research and development that has been carried out, it can be concluded as follows: The validity of the Student Worksheet (LKPD) Based on the Social Science Learning Concept Map developed is obtained based on the results of the assessment of questionnaire sheets that have been filled out by linguists, with a value of 0.85 in the "High" category, media experts with a value of 0.76 in the "Very High" category, and material experts with a value of 0.80 in the "High" category. So it can be concluded that the Concept Map-Based Student Worksheet (LKPD) is valid and can be used in the learning process.

The results of the small group trial obtained the category "Very Practical" and after being tested for practicality in students, the researcher also carried out practicality for teachers obtained the category of very practical. Concept Map-Based Student Worksheets (LKPD) can be said to be practical so that they can be used in the learning process. Trial of the effectiveness of developing Concept Map-Based Student Worksheets (LKPD) based on pre test and post test results, so that concept map-based student worksheets (LKPD) are suitable for use in social studies learning at SDN 09 Lubuklinggau.

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