Analysis of PBL-based LKPD Development Needs to Improve Critical Thinking Ability in Indonesian Language Learning

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Abstract

This research aims to develop a PBL model-based LKPD on Indonesian language subjects in SDNI Pelita class IV. The method in this research is research and development using the ADDIE development model. Collecting research data using evaluation leaflets and test questions. This research phase focuses on the analysis phase for the development of PBL based LKPD to enhance the ability to think critically about the Indonesian language learning of 1 Pelita State Elementary School students. Consider some important points, including 1) Students struggle to analyze, evaluate, and interpret text readings. 2) Students find it challenging to make argumentative solutions from the wrong text; 3) Teachers need to use LKPD teaching materials for the learning process. The results of the literature analysis have been obtained that for the implementation of the PBL-based LKPD in implementation the study refers to the sixth step: 1) Preparation; 2) Observation; 3) Analysis of problems; 4) Formulation of a solution plan; 5) Presentation of results of work; 6) Reflection and evaluation. Critical thinking skills indicators in this study focus on text analysis, text argument evaluation, text interpretation, critical information in text and problem-solving.

I. Introduction

The change in access to learning that leads to 21st Century skills in learning in the century explicitly has an impact on the implementation of education in Indonesia today (Care, Esther and Kim, Helyn. 2018; Halidjah, dan Pranata, 2021 dan Rohman, et.al 2019;). The change in education in the 21st century demands the achievement of final learning to have some skills such as critical thinking, communication, collaboration, creativity that are more often referred to as 4Cs skills (Care, dan Kim, 2018; Rohman, et.al 2020; Trilling, dan Fadel, 2009.). The critical 4Cs skills must be mastered by pupils at the level of primary to secondary education (Halidjah, and Pranata, 2021; Scott, 2015), with this change teachers must integrate learning that will make it easier for pupils to 4C's skills.

The achievement of 4Cs skills in learning is challenging to acquire by pupils when the implementation of education is still done conventionally (Akcay. 2009; Arends, 2008) by applying a model of lecture learning and textual orientation where teachers become a source of knowledge or commonly called Teacher Central Learning (TCL) (Bayat, and Tarmizi, 2012; Mustika,. (2014)). Conventional learning is often focused on the passive transfer of information, which provides little opportunity for learners to develop critical thinking skills. The researchers conducted A preliminary case study on learning Indonesian language in class IV SDN 1 Pelita. The results were obtained that in the

implementation of Indonesian language learning, the teacher only relies on reading, writing, and working on the practice of the subject. Hence, this implementation impacts the students' low critical thinking ability on the subject of Indonesia.

Furthermore, the researchers conducted an initial test on the critical thinking ability of the students towards the subject of the story text, the results showed that the students are still many who are less able to carry out analysis, evaluate with argumentative inference and interpretation as well as think critically about the text information to argue and solve problems.

The result of the literature study that the researchers did, to activate critical thinking was by implementing the Problem-Based Learning (PBL) model. (Akcay, 2009; Bayat, dan Tarmizi, 2012 dan Sugiharto, et.al 2019). The PBL model offers learning steps that involve students in solving real-world problems relevant to the Indonesian language. Thus, learners can see the correlation between learning and its use in real life (Sugiharto, et.al 2019). The PBL model encourages learners to solve problems actively by working in groups (Kimianti and Prasetyo, 2019; Nafiah, Y. N. (2014); Ramadhani et al., 2020). They face complex situations encouraging them to think critically, collaborate, and develop communication skills. (Sari, et.al. 2016; Sungur, S., & Tekkaya, 2006; Tan, 2004 dan Yuan et.al, 2009). The PBL model provides an opportunity for students to engage in analysis and evaluation of the problems they encounter (Duch, et al. 2001). The discussion will highlight how the PBL model helps students in developing the ability to analyze and evaluate the materials taught. The development of PBL-based LKPD becomes a very important thing to establish. (Wijnen, et.al 2015; Miao et.al, 2000, dan Yoon et.al 2012). In the context of Indonesian language learning, the result of a PBL-based LKPD model has the potential to help learners interact with text readings, make opinions, and compile argumentative writings.

The above later studies related to using PBL-based LKPD in learning the Indonesian language for elementary school students are essential. The study aims to explore the effectiveness of the PBL based LKDP in improving students' critical thinking ability in Indonesian language learning and provide recommendations and contributions to the development of better and critical-thinking skills-oriented Indonesian language education.

II. Research Methods

The research method used by the researchers is a development model with the phases of Analysis, Design, Development, Implementation, and Evaluation (ADDIE). This study's phase is still focused on the analysis phase for developing the Working Sheet. Participants based on Problem-Based Learning (PBL) can involve several steps commonly used in development research by referring to the ADDIE phase. (Branch, 2009).

In this study, researchers identify problems and purposes and literature studies. Implementation of problem identification and needs analysis Researchers analyze issues and needs in learning the Indonesian language that are to be addressed with the development of LKPD based on PBL; important points in achieving research objectives also need to be clearly defined.

III. Results and Discussion

3.1 Results of Phase Analysis
a. Results of Demand Analysis

The results of the needs analysis were obtained through the provision of a lift to teachers and students as research respondents of potential users of the product. The lift of the need analysis relates to the needs of teachers, students and students towards the development of PBL based LKPD in learning the Indonesian language. The results of the needs analysis in this study can be presented in Table 1.

Table 1. Results of the analysis of the needs of potential users of the product

No	Question	Teacher's Answer				Student Answers			
		1	2	3	4	1	2	3	4
1.	The teacher carries out the learning process with the model of lecture learning and textual orientation.	100%	-	100%	-	74,1%	25,9%	81,5%	18,5%
2.	The implementation of Indonesian language learning is dominated by reading, writing, and practical work.	100%	-	100%	-	77,8%	22,2%	85,2%	14,8%
3.	Students find it challenging to analyze, evaluate, interpret, and read text	75%	25%	-	10%	85,2%	14,8%	77,8%	22,2%
4.	Students felt they needed help in making argumentative solutions from the wrong text.	100%	-	-	-	74,1%	25,9%	85,2%	14,8%
5.	The learning model used was lectures and questions and answers.	100%	-	-	-	81,5%	18,5%	81,5%	18,5%
6.	Applying the PBL model.	-	100%	-	100%	14,8%	85,2%	85,2%	14,8%
7.	Using LKPD teaching materials for the learning process.	-	100%	-	100%	-	100%	-	-
8.	Teachers and pupils need to develop PBL-based LKPD in Indonesian language learning.	100%	-	-	-	100%	-	-	-

Description: 1 Yes; 2 No; 3 Frequent; and 4 Rarely**.**

Based on table 1, it can be explained that the learning phenomenon that occurs in IV SDN 1 Pelita is still dominated by the learning of lectures, reading, writing, and working on the practice of the subject. Students felt they needed help in making argumentative solutions from the wrong text. To improve the ability of critical thinking, teachers and students required the development of the LKPD-based PBL model in learning the Indonesian language

b. Results of Literary Studies

The literature study aims to study and obtain the theoretical foundations relevant to PBL and learning the Indonesian language. The results of literature studies relating to this stage will help the researchers get an overview of the implementation of the PBL model which will be the basis in the creation of LKPD. The model step of PBL that will be used as a base in the development of LkPD is the model PBL from Sugiharto (2019) which consists of 1) Preparation; 2) Observation; 3) Analyzing problems; 4) Formulating solution plans; 5) Presenting the work results; 6) Reflection and evaluation. Further results of several literary studies of the research (Agnafia, 2019; Care, and Kim, 2018; Mustika, 2014; Nafiah, 2014); Trilling, and Fadel, 2009) the researchers obtained details of critical thinking ability indicators measured the learning of the Indonesian language in this study can be seen in table 2.

Table 2. Indicators Aspects of Assessment of Critical Thinking Skills

No	Assessment Aspects	Indicator
1	Text Analysis	1. Ability to analyze text in depth, including identifying text structure
		2. Ability to understand the meaning of words and phrases
		3. Ability to understand the content to be conveyed in the text.
2	Evaluate Text Arguments	1. Ability to evaluate the arguments presented in the text
		2. Ability to recognize bias in text arguments
3	Text Interpretation	1. Ability to make inferences and interpretations based on the information contained in the text.
		2. Ability to draw conclusions and make well-founded generalizations.
4	Critical of information in text	1. Ability to criticize the information presented in the text
		2. Ability to recognize the truth of facts
		3. Ability to question the underlying assumptions of information
		4. Ability to find weaknesses in argumentation.
5	Problem	1. Ability to apply their ability to think critically in solving problems related to the content of the text.
		2. Ability to correct grammatical errors in the text
		3. Ability to provide solutions by designing sentences accurately from the text portion.

Based on table 2, there are five aspects of judgment in critical thinking skills. These include 1) Text Analysis, 2) Text Argument Evaluation, 3) Text Interpretation, 4) Critical Information in Text and 5) Problem-Solving. (Kim, 2018; Mustika, 2014; Nafiah, 2014; Trilling, dan Fadel, 2009). Further analysis was conducted to find a draft assessment of the trajectory of the LKPD qualification test. The results of the literature analysis that the researchers performed produced several essential points, among them the qualification reviewed from the compatibility aspects with the Learning Goals, Relationship with the Curriculum, Appropriate Difficulty Level, and Participant Engagement. The examination element is grouped into two assessments evaluated by Indonesian learners and linguist, the details of the product validity test indicators can be seen in Table 3

Table 3. Aspects of Learning Qualification Assessment and Indonesian Language

No	Assessment Aspects	Indicator
1	Learning Qualifications	1. Compatibility with curriculum
		2. Relationship with learning materials
		3. Clear and structured presentation of materials
		4. Compatibility between the proposed learning activities.
		5. Compliance with the learning principles of the PBL model
2	Indonesian Language Content Validity	1. Compatibility with the competence of the Indonesian language
		2. Correct vocabulary structure and sentence
		3. Proper use of language for the level of the student
		4. Relationship of language with the cultural context and life of the pupil
		5. Presentation of information with an engaging writing style
		6. Consistency of writing style

Based on Table 3, it is used as a reference for researchers to measure the viability of products implemented at the Development stage involving learners and Indonesian language material experts. Further, the researchers conducted a literature analysis to determine crucial points in measuring the practicality of the test to the user (teachers and pupils). The analysis results show that the indicators in the practicability test can be presented in Table 4.

Table 4. Indicators in the practicality test of LKPD

No	Assessment Aspects	Indicator
1	Resource Availability and Accessibility	The use of LKPD considers the availability of necessary resources, such as textbooks, references, or technology devices.
		Learning materials and activities in the implementation of LKPD pay attention to accessibility for pupils
2	Time Accessibility	The use of LKPD considers the availability of time in the study schedule.
		Activities and tasks using LKPD can be completed within a reasonable time without imposing an excessive burden on the student.
3	Easy Use of LKPD in Learning	The use of LKPD is easily understood by teachers and pupils in the teaching process.
		Clear instructions and an orderly layout in the LKPD can improve ease of use.
4	Availability in LKPD Usage	The use of LKPD is flexible and can be adapted to the needs and learning styles of the students.
		Teachers can adapt or modify the LKPD according to the needs of the class and the pupils.

IV. Conclusion

Analysis of the development of LKPD based on the PBL model to improve the critical thinking ability of students of SDN I Pelita obtained Hasl needs analysis gained several important points among them 1) Students feel difficulty analyzing, evaluating, interpreting reading text. 2) Students find it challenging to make argumentative solutions from the wrong text; 3) Teachers need to use teaching material for the learning process. The results of the literature analysis have shown that for implementation of PBL-based LKPD in implementation the study refers to six steps: 1) Preparation; 2) Observation; 3) Analyzing problems; 4) Formulating solution plans; 5) Presenting the work results; 6) Reflection and evaluation. Critical thinking skills indicators in this study focus on the evaluation of Text Analysis, Text Argument Evaluation, Text Interpretation, Critical to Text Information and Problem-Solving.

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