

APP.YET APK Assisted Thematic Learning Through The Case Method to Increase The Love of Local Wisdom for Elementary School Students

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Abstract: The purpose of this research is to produce teaching materials based on App. Yet apk through a valid Case Method or the feasibility of cultural-based teaching materials, the practicality of teaching materials, and the effectiveness of teaching materials with a touch of local wisdom. This research and development is carried out using a 4D model (Define, Design, Development, Dissemination). With the research subject, the fourth grade students of SD IT Ashabul Kahfi Medan Tuntungan. Data collection techniques are observation, interviews, scales, and tests. Data collection techniques are observation, interviews, scales, and tests. Data analysis techniques are qualitative and quantitative. The results of the validation assessment of material experts I and II, Design and Technology experts, and practical experts obtained 85.25% and, 91.57%, 92.78% with qualifications very feasible and practical to use without any revision. Before conducting the pretest, the validity and reliability of the questions were tested, with the results of 20 valid questions from 35 questions and a reliable value of $r_{count} > r_{table}$, namely $0.7153 > 0.432$. It can be concluded that the question as a whole is reliable. The results of the pre-test and post-test showed the results of the 22 students who took the pretest there were 18 students who had not completed and only 4 students completed with a percentage of 56.13%, while the results post-test there are 18 students who completed and 4 students who did not complete with a percentage of 84.54%. Based on the calculation of class completeness, the percentage of the effectiveness of teaching materials is 84.54% with 81%-100% completeness criteria categorized as very effective.

Keywords: Thematic Learning, Case Method, App. Yet Apk, Local Wisdom

1 Introduction

In the current era of sophisticated technology, increasing human resources (HR) plays an important role, one of which is through education. Education is an important factor of human resource development [13]. Education is a human activity that is optimally planned for students to be able to develop human qualities through government regulations or current curriculum developments. The curriculum is a comprehensive plan related to learning activities. Therefore, all learning activities are always guided by a curriculum that is in accordance with the demands of the school and the needs of the community.

In the 2013 curriculum, students are taught to be able to interpret the learning they receive in real terms through the implementation of various disciplines. According to Regulation Number 57 of 2014 concerning the basic framework and structure of the SD/MI curriculum, it

is stated that "The implementation of the 2013 Curriculum is carried out through learning with integrated thematic models in SD/M." Therefore, it is necessary to improve that the implementation of the obstacles that are often faced by teachers and students during thematic learning in elementary schools, the implementation of thematic learning models in schools has not been as expected [6].

Schools are required to be able to face the developments of the times in the 21st century. With the industrial revolution 4.0, students are expected to be more skilled in applying technology for daily activities, including in the world of education. Seeing these conditions, the integration of technology in the world of education is very necessary, and it is not too late to incorporate the values of local wisdom into learning, it is hoped that the nationalism and local characteristics of students will remain firmly maintained in the midst of the swift currents of globalization. One way to apply technology to the world of education is to integrate student learning resources with technology. One of the efforts that can be made to incorporate the values of local wisdom is by designing,

At the present time, especially in the Elementary School Teacher Education Study Program, Medan State University, the current teaching materials or textbooks have not revealed locality which is a regional wealth, which means that there are no teaching materials based on local wisdom. Based on this, the development of electronic teaching materials based on local wisdom is very necessary. This is a form of creativity for lecturers and students to develop a unique, culture of excellence based on local wisdom according to the needs of students [5].

Komalasari [8] revealed that in developing textbooks, it refers to approaches that come from problems faced by students or problem-based learning. Case-based learning or case method is a learning method that applies problems that actually occur so that students know how to think critically, are curious and are able to get knowledge of concepts or ideas from the content being taught, namely the existence of reading texts, learning videos containing cultural problems, ethnicity and language in technology-based electronic materials.

The application of technology into student learning resources can be done, one of which is by integrating application technology without coding, namely App.Yet.apk. Through the use of a platform, we can develop applications by connecting to the internet. App.Yet.apk is a service connected to the internet that can function as a build (build) a free application that does not use coding, this application can include content; Podcasts, YouTube videos, email, goggle form, google slide and another HTML App. Yet.apk can attract students' interest because it is different and presents a learning atmosphere that is no longer limited to textbooks. Additionally, App.Yet.

Based on what has been described above researcher concluded that teachers need a learning instrument in the form of teaching materials in which it contains problems faced by students in everyday life in which local wisdom is contained and must be resolved or students are able to provide solutions to these problems. In addition, teaching materials that are integrated with technology are also needed and can provide the right choice of learning resources [8]. Contextual Learning. Bandung: PT Refika Aditama is relevant to students. Based on these conditions the researchers developed teaching materials with advantages, namely: 1) Textbooks containing local wisdom where students live, namely North Sumatran local wisdom, so that it reflects the culture and values that need to be mastered by students 2) Case-based textbooks (Case Method) by linking concepts with examples of real problems faced or around. 3) Textbooks that are integrated with App.Yet.apk technology so that later they can help students to access other learning resources such as interactive videos or relevant interactive materials. correct and reliable. 4) The structure of the material, language, and graphics and technology meet the criteria of Eligibility by material experts, design and technology experts, Effectiveness through learning outcomes namely pre-test and post-test and student learning completeness,

Practicality by careful class teachers and homeroom teachers.

2 Research Methods

This study is a Research and Development (R&D) study with a 4D model by Thiagarajan which includes the steps to define, design, develop, and disseminate [1]. Researchers chose the 4D development model by Thiagarajan because the flow of the 4D development model is more systematic to be used as a model for developing teaching materials. This expression is in line with the opinion expressed that the steps of the 4D development model are intended as development steps device learning one of which is the development of teaching materials (material development).

The initial stage in a 4D model is the definition of a development program. Simply put, at this stage is the needs analysis stage. In product development, developers need to refer to the terms of development, analyze and collect information on the extent to which development needs to be carried out. The stage of defining or analyzing needs can be done through analysis of previous research and literature studies. Initial analysis is carried out to identify and determine the basis of problems faced in the learning process so as to underlie the need for development. By conducting an initial analysis the researcher/developer obtains an overview of the facts and alternative solutions. This can help in determining and selecting learning tools to be developed. Student analyzing is an activity to identify how the characteristics of students are targeted for the development of learning tools. The characteristics in question are related to academic ability, cognitive development, motivation and individual skills related to learning topics, media, formats, and language. Task analysis aims to identify the skills that the researcher studies to then analyze into the set of additional skills that may be needed. In this case, educators analyze the main tasks that must be mastered by students so that students can achieve the minimum competencies set. In the analysis of concepts, it is carried out the identification of the main concepts to be taught, pouring them in the form of a hierarchy, and detailing individual concepts into critical and irrelevant things. Concept analysis in addition to analyzing the concepts to be taught also compiles steps that will be carried out rationally. This concept analysis includes competency standard analysis which aims to determine the number and type of teaching materials and learning resource analysis, namely identification of sources that support the preparation of teaching materials. The formulation of learning objectives is useful for summarizing the results of concept analysis and task analysis to determine the behavior of the research object. The summary will be the basic foundation in compiling tests and designing learning tools to be further integrated into the learning device materials to be used.

The problems examined in research and development by researchers are the lack of availability of thematic teaching materials, the lack of use of technological developments in teaching and learning activities in thematic lessons, as well as determining learning methods, the low learning outcomes of students in Theme 7 Sub-Theme 1 The Beauty of Diversity in My Country includes ethnicity, religion, customs of North Sumatra. The purpose of this research is to produce teaching materials based on App. Yet apk through a valid Case Method or the feasibility of cultural-based teaching materials, the practicality of teaching materials, and the effectiveness of teaching materials with a touch of local wisdom. This research and development is carried out using a 4D model (Define is done by analyzing, curriculum, learning resources, assignments and student test scores, The design is carried out by designing teaching materials starting from the cover to the author's biodata, Development is carried out with validation first

on the developed teaching materials and Dissemination of the results of the validity, practicality and effectiveness of teaching materials). With the research subject, the fourth grade students of SD IT Ashabul Kahfi Medan Tuntungan. Data collection techniques are observation, interviews, scales, and tests. Data analysis techniques are qualitative and quantitative. It is hoped that through this research students can be skilled in solving problems that exist around students and have an attitude of tolerance and love for local culture as a form of preserving our nation's culture for future generations. practicality and effectiveness of teaching materials).

The first stage is define, namely the definition stage where the researcher analyzes the needs and learning objectives. The definition stage consists of several analytical steps such as student textbook analysis, student analysis, task analysis, concept analysis, and learning objectives analysis. 1 form of teaching material design starting from the cover, application form icon and apk content that contains teaching materials.

Next is develop where the teaching materials that have been compiled are analyzed and reviewed by experts including material experts to assess the contents of the book, graphic experts to assess the appearance and layout of the book, and linguists to assess linguistic rules in books and technology experts to assess the display of learning videos, Animation Sound, and Application development for web media. The final stage, which is this stage, is to see how far the effectiveness of the use of teaching materials is to measure the effectiveness of teaching materials. The purpose of Disseminate is to implement and test products and evaluate the results of product revision improvements.

Based on the results of the assessment by each expert, corrections are made according to the input obtained and produce draft 1.



Fig. 1. Author's design

Furthermore, validation of the revised teaching materials is carried out in order to obtain the feasibility of teaching materials. The subjects for the trial in this study were material experts, consisting of lecturers in the history of the social sciences sector at the Faculty of Social Sciences, UNIMED and lecturers in the PGSD FIP UNIMED Department, technology experts in this study were lecturers in the Department of Education, FIP, UNESA, and technology experts at This research is a lecturer at the Department of Computer Science, Ft. UNIMED. After Validation, the next stage is Disseminate the effectiveness of the media developed for SD IT Ashabul Kahfi students in grades IV-B in measuring intelligence knowledge by individuals or groups. In this study, tests were given before and after treatment or also known as pretest and posttest.

This study uses qualitative-quantitative techniques. In the first stage, the teaching materials will be reviewed by each expert using a study sheet and analyzed descriptively. The next step is to revise the teaching materials by adjusting the suggestions for improvement from the

experts. Teaching materials that have been adjusted with suggestions for improvement by each expert will be validated and then the data obtained will be processed quantitatively to determine the feasibility score. Furthermore, the percentage results from the validation data will be interpreted using a percentage according to the following criteria:

Table 1. Eligibility Assessment Criteria

Percentage	Criteria
82% - 100%	Very Worthy
63% - 82%	Worthy
44% - 62%	Decent enough
25%- 43%	less worthy

3 Result And Discussion

The results of this study are a product of negligence, feasibility / validity, effectiveness and practicality. On the Feasibility of Teaching Materials, the material expert in this study is Dr.Lukitaningsi, M.Hum and Masta Marselina, S.Pd., M.Pd. The objects of assessment by material experts include material coverage, material content, material presentation techniques, and material presentation support. The mean score of the material feasibility obtained is 83.95% and 87.97% and has the "Very Eligible" criteria. The results of the material validation assessment are described in the following diagram:

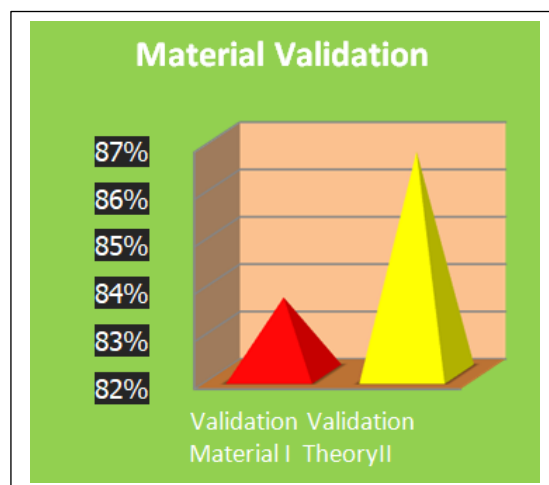


Fig. 2. Results of the Validation of Material Experts II Phase I and Phase II

The second validation stage is the design of teaching materials and technology from Mr. Said Iskandar Al Idrus, S.Si., M.Sc. obtained different percentages that were carried out during two improvements including, Mind mapping design, Improvement of color combinations in learning videos, Animated Sounds enlarged to make it clear, Making applications for web media, The average feasibility score of the material obtained was 62.% and 92% and has the

“Very Eligible” criteria. The results of the material validation assessment are described in the following diagram:

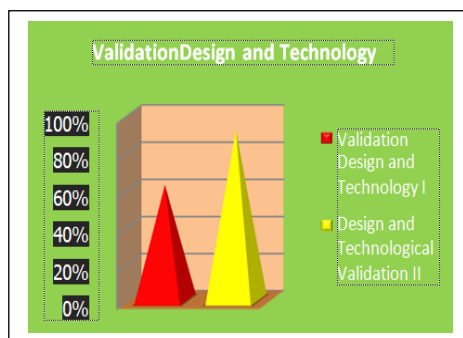


Fig. 3. Results of Phase I and Phase II Design and Technology Validation Assessment

Furthermore, knowing the effectiveness of student learning outcomes in learning activities before and after the use of electronic teaching materials based on app.yet apk through the case method. A small-scale trial was conducted in class IV-B at SD IT Ashabul Kahfi Medan Tuntungan, by giving pre-test and post-test questions in grades IV-B with 22 students as subjects. Preliminary test results data, but before the Validity Test and Test Reliability Test were carried out, the researcher used 31 items which were declared valid based on the results of the validity calculation. Based on the testing of the test instrument, it is known that it is declared valid, as a research instrument shown in the table

Table 2. Test Validity Category

Test Validity Category	Question Number
Valid	1,2,4,5,6,7,8,10,11,13,15,16,17,18,21,24,25,26,29,31
Invalid	2,9,12,18,19,20,22,23,27,30

Furthermore, the results of the calculation of the data obtained from the test instrument test of the Test Reliability Test, obtained the r_{table} price of the product moment with $\alpha = 0.05$ and $N = 31$ is 0.432. when compared with $r_{count} = 0.7153$ with $r_{table} = 0.432$, it is obtained that $r_{count} > r_{table}$ is $0.7153 > 0.432$. it can be concluded that the question as a whole is reliable.

To determine the effectiveness of the learning media developed based on the results of the pre-test and post-test, conducted in class IV-B, the results showed that from the total of 22 students who took the pre-test, there were 18 students who had not finished scoring below the KKM, namely 75 and who completed only 4 students who scored above 75, while in the post-test results there were 18 students who completed scored above 75 and 4 students who scored below 75 it can be concluded that learning uses app-based electronic teaching materials. yet apk through the case method is very instrumental in improving the learning outcomes of participants can be seen in table 1.4 below:

Based on the calculation of class completeness, the percentage of media effectiveness is 81.82% with completeness criteria of 81% - 100% categorized as very effective, thus the effectiveness of the developed media, namely app. yet apk-based electronic teaching materials through the case method, is very effective in improving learning outcomes. learners.

3.1 Educational Practitioner Expert Validation

In measuring the practicality of the app.yet apk-based electronic teaching material product, this case method can be used seen from validation which given by the validator Mrs. Sulastris, SE and Mrs. Putri Angraini S.Pd as class teachers and subject teachers in grades IV-B and IV-A. This validation is carried out in one step directly obtaining an assessment on the "Very Eligible" criteria. The results of the material validation assessment are described in the following diagram:

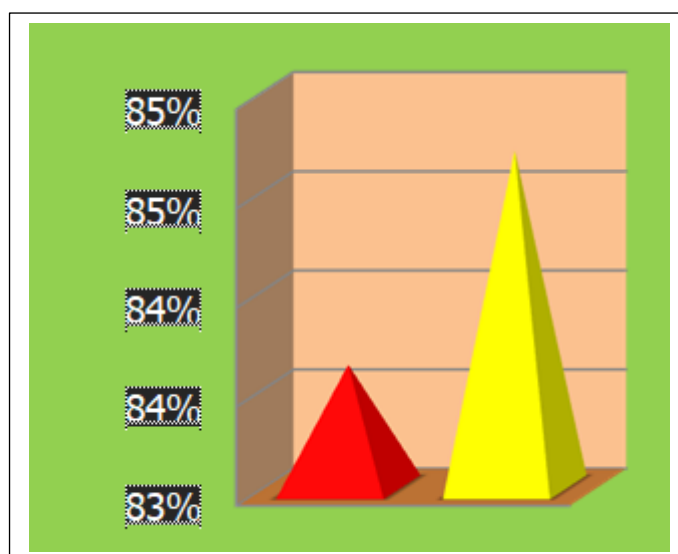


Fig. 4. Material Expert Validation Assessment Results

The advantages and disadvantages of App.Yet Apk-based Electronic Teaching Materials through the Case Method after implementation for elementary school students are as follows:

3.2 The advantages of App.Yet Apk-based Electronic Teaching Materials through the Case Method

Here are some of the advantages of App.Yet Apk-based Electronic teaching materials through the Case Method obtained by researchers at SD IT Asahabul Kahfi: It requires students to think critically through cases, seek information, observe, and find ideas/solutions from problems contained in teaching materials. Build interaction between students with one another. Requires students to be literate and responsive to technology towards education or facilitating the learning process. Provide direct learning experiences to students. The 7 sub-theme theme teaching materials are used as learning resources in offline and online learning. The teaching materials for theme 3 sub-theme 1 were declared feasible and practical by all validators.

3.3 Lack of App.Yet Apk-based Electronic Teaching Materials through Case Method

While the shortcomings of the implementation are the application. yet apk-based electronic teaching materials through the case method as follows: Does not support the android version owned by students, thus making some students difficult to run the application Does not support android RAM owned by students, so they cannot install the application and use requires a stable internet network. The use of app.yet apk-based electronic teaching materials through the case method in the 7 sub-theme 1 theme teaching materials requires a stable internet network.

4 Conclusion

Research and development of thematic teaching materials based on App.Yet Apk through the Case Method on the theme of 7 sub-themes 1 learning 3 and 4 in grade IV SD IT Ashabul Kahfi which has been carried out in accordance with research and development steps. Based on the results of research and development that have been carried out, several conclusions were obtained including: (1). Electronic teaching materials with the theme 7 sub-themes 1 learning 3 and 4 based on the App. Yet Apk through the Case Method were declared appropriate, because the thematic teaching materials developed had been validated by design experts and teaching materials technology experts, namely Mr. Said Iskandar Al Idrus, and obtained the final percentage of 92.78% or included in the "very feasible" category. Then the validation by material expert I, namely Mrs. Masta Marselina, obtained validation results with a final percentage of 83, 75% or included in the "very decent" category. The thematic teaching materials developed were validated by a material expert II, namely Dr. Lukitaningsi. The final percentage obtained from the validation by a material expert was 86.75%, or included in the "very feasible" category. Based on the results of the validation, the teaching materials for theme 7 sub-theme 1 learning 3 and 4 were declared suitable for use by students and teachers of class IV-B in learning. Meanwhile, the practicality test of the teaching materials for theme 7 sub-theme 1 was carried out by two teachers of class IV-B SD IT Ashabul Kahfi. Based on the results of data analysis on the practicality test questionnaire, the average percentage was 92.78%. This percentage shows that the teaching materials for theme 7 sub-theme 1 in PB 3 and 4 are practical to use for elementary school students. (2). The researcher carried out a classical trial, the results of the calculation of class completeness at the time of giving the pre-test and post-test obtained 84.54% with very effective qualifications in improving student learning outcomes. The qualification is based on the reference in table 3.8 regarding the criteria for class completeness, that in the table it is explained that if the percentage assessment is in the range of 81%-100% then the completeness is categorized in a very effective qualification. So from these qualifications, the theme of the App.Yet Apk based electronic teaching material through the Case Method is very easy 8 concerning the criteria for class completeness, that in the table it is explained that if the percentage assessment is in the range of 81%-100% then the completeness is categorized in a very effective qualification. So from these qualifications, the theme of the App.Yet Apk based electronic teaching material through the Case Method is very easy 8 concerning the criteria for class completeness, that in the table it is explained that if the percentage assessment is in the range of 81%-100% then the completeness is categorized in a very effective qualification. So from these qualifications, the theme of the App.Yet Apk based electronic teaching material through the Case Method is very easy effective in improving student learning outcomes.

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