



Development of Microlearning Teaching Materials Based on Local Culture of North Sumatera in The Subject of Elementary School Social Studies Education

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Abstract

This study aims to: (1) describe the results of expert tests on the product of E-Book Based on Local North Sumatra Culture in the Elementary School Social Studies Education Course of PGSD Unimed, and (2) describe the usability of the development of Microlearning Teaching Materials Based on Local North Sumatra Culture in the Elementary School Social Studies Education Course of PGSD Unimed. The research method used is the research and development model (Research and Development/R&D) with the Van den Akker development model by developing Microlearning Teaching Materials for Elementary School Social Studies Education Based on Local North Sumatra Culture. The location of the research was carried out at the PGSD study program, FIP Unimed, located on Jl. Willem Iskandar / Pasar V, Medan. The population of this study was all PGSD Unimed students of the 2020 batch totaling 225 students consisting of 11 (AK) regular and extension classes. The sample of this study was carried out through class events and one class was selected, namely class B Regular 2020, totaling 40 students. The results of the study indicate that the Local Culture-Based E-Book of North Sumatra in the Elementary School Social Studies Education Course of PGSD that was developed has been validated by material and media experts. The average score obtained from the material experts in stage I was 71% with the criteria "Feasible" and the average score of the material experts in stage II was 90.6% with the criteria "Very feasible". And the results of the media expert assessment were 91.43% with the criteria "Very feasible". In the trial of the Microlearning Teaching Material product to students, a pre-test trial was obtained with a completeness of 23.07% and a post-test result with a completeness of 96.15%. It is concluded that the Microlearning Teaching Material product Based on Local Culture of North Sumatra in the Elementary School Social Studies Education Course of PGSD Unimed is feasible, effective, and practical to use for PGSD Unimed students in 2020

Keywords: Microlearning Teaching Materials, Local Culture, Elementary School Social Studies Education

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INTRODUCTION

The development of standardized teaching materials through innovation needs to be done to meet good quality materials and can improve human resources. Good quality and standardized higher education teaching materials will be able to help students in learning, so that CPLU and CPMK can be achieved. Through



elementary school social studies courses, students are expected to be able to master the facts, concepts and generalizations of social studies learning. With elementary school social studies courses, students are also expected to be able to design and implement learning approaches in learning in elementary school, and students are expected to be able to design and compile evaluation tools in elementary school social studies learning.

Associated with the spread of the corona virus pandemic or COVID-19 in Indonesia, many universities and schools have stopped the face-to-face learning process. So that researchers face a new phenomenon regarding the learning system. Based on the announcement made by the Minister of Education and Culture Nadiem Makarim (2020), he admitted that he was reviewing the possibility of implementing an emergency curriculum due to conditions that require studying at home during the corona virus pandemic (Covid-19). In addition, students or students must also be ready to adapt to changes in learning regulated by schools and universities. Remote learning can be seen as freer and more flexible to access from home.

In addition, Law No. 20 of 2003 emphasizes that national education is based on Pancasila and the 1945 Constitution of the Republic of Indonesia. One of the points of Pancasila that can be applied is developing a sense of love for the homeland and nation. Based on the statement above, educational activities that occur in Indonesia must be in accordance with, based on, and an effort to implement the values of Pancasila. This is intended so that the spirit of nationalism of students can continue to grow and develop. This is due to the extinction of local wisdom in each region so that early introduction is needed through the younger generation.

In line with this statement, the introduction of regional culture or potential is important. This is because the spirit of nationalism will emerge when an individual has been able to internalize love for his/her region in everyday life. In an effort to develop values within citizens through education, one of the strategies taken is through the integration of local wisdom material in subjects, especially elementary school social studies courses.

Naisbit (in Mardapi 2005) said that the era of globalization will give rise to a global image with a global culture that directly opposes local culture. The information and communication revolution as a direct impact of the progress of science and technology has eliminated regional and territorial boundaries, so that for certain communities this condition must be addressed quickly and comprehensively so that they do not lose their national identity.

Based on the explanation above, the steps to integrate local wisdom material in elementary school social studies subjects through the development of local culture are expected to be able to foster a sense of love for the young generation towards the potential of their region so that they are willing to participate in preserving the local wisdom in their region. Local wisdom can also be used as a means to instill moral values that develop in society, considering that local wisdom is also full of moral values that are able to shape good personalities. Thus, the integration of local wisdom in learning is considered capable of making the young generation participate in contributing to maintaining the superior potential of their region and instilling good moral values that develop in society to form whole human beings.

In the local wisdom that has developed, there are also other functions that are useful for humans as individual, social, and human beings who are in contact with the environment. Among them, it functions for the conservation and preservation of natural resources, for the development of human resources, for the development of culture and science, has a social meaning such as communal/kin integration ceremonies. Other functions can also have ethical and moral meanings and family meanings, for example reviving regional traditions in the form of packaging Social Science materials that contain wisdom.

Based on the current phenomenon, when facing the Corona pandemic that does not know when it will end. Researchers provide one way that can be used to carry out the online learning process is to develop the Development of Microlearning Teaching Materials Based on Local North Sumatra Culture in the Elementary School Social Studies Education Course of PGSD Unimed. In this study, researchers designed valid Elementary School Social Studies Education teaching materials used by lecturers in the learning process according to the characteristics of students and the potential of North Sumatra so that they can increase student creativity and learning outcomes. These teaching materials are also seen from the accuracy of the content which is the validation or validity of the content or the truth of the content scientifically and the harmony of the content based on the value system adopted by a society or nation. Content validation shows that teaching materials are not developed carelessly.

The content of teaching materials is developed based on concepts and theories that apply in the field of science and in accordance with the development of the field of science and the results of empirical research conducted in the field of science. Thus, the content of teaching materials can be scientifically accounted for, scientifically correct. Content validation is very important to note so that teaching materials do not spread conceptual errors or misconceptions that students can bring to the next level of education or into their lives. According to Belawati (2003) to be able to maintain content validation, in developing teaching materials, teachers must always use reference books or library materials, theories and concepts that apply in a field of science and the latest developments in a field of science. Content alignment means the suitability of the content of teaching materials with the value system and philosophy of life that apply in the country and society in the environment where students are. In this case, researchers develop teaching materials that can be used as guidelines for lecturers in making teaching materials. Teaching materials are developed to include learning objectives, logical and systematic presentation of materials and sentences that are easy to understand and comprehend by lecturers and students.

METHODS

This research method is a research and development method (Research and Development/R&D). This method is used because it develops Microlearning Teaching Materials for Elementary School Social Studies Education Based on North Sumatra Local Culture. In this study, it follows the Van den Akker research and development model (1999) which includes 3 main aspects of substantive, procedure and theoretical-empirical. (1)

Substantive aspects, validity, practicality, and effectiveness. (2) Procedural aspects, related to development activities. (a) A front-end analysis to describe the starting situation (context, available theory, and research results), (b) A formative analysis to develop, evaluate, and revise the materials. (3) Theoretical-empirical aspects: related to the theory used and the field data produced. The Van den Akker model is a continuous circle. Each element of development is directly related to revision activities. The development of Microlearning Teaching Materials for Elementary School Social Studies Education Based on North Sumatra Local Culture can start from any element in the cycle. Researchers use six elements contained in the Van Den Akker development model, namely: (1) Initial Analysis, (2) Expert and teacher evaluation, (3) Small-scale trials, (4) Empirical data, (5) Reflection and revision, (6) Search model. The sequence of steps in developing teaching short story texts and LAS based on the Van Den Akker research and development model can be seen in the following figure:

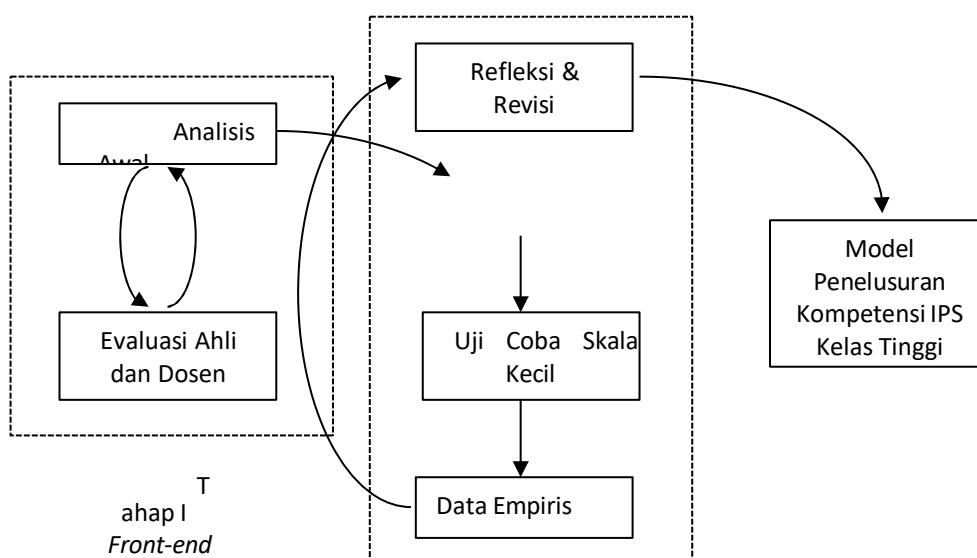


Figure 1. Research and development model diagram (Van den Akker, 1999: 55)

The location of the research was conducted at the PGSD study program, FIP Unimed, located on Jl. Willem Iskandar / Pasar V, Medan, North Sumatra - Indonesia. The population of this study was all PGSD Unimed students of the 2020 batch totaling 225 students consisting of 11 (AK) regular and extension classes. The sample of this study was carried out through class events and one class was selected, namely Class B Regular 2020, totaling 40 students.

RESULTS & DISCUSSION

The media validation stage is carried out by the validator by assessing aspects of content, design, appearance, use, presentation, language, aspects of material content, presentation of learning materials. The validation results from the experts are used as a basis for revising the Microlearning Teaching Materials Based on North Sumatra Local Culture in Elementary School Social Studies Education Courses. Revisions are useful so that the Microlearning Teaching Materials Based on North Sumatra Local Culture in Elementary School Social Studies Education Courses that are made can produce a decent

product. The results of the assessment of the Microlearning Teaching Materials Based on North Sumatra Local Culture in Elementary School Social Studies Education Courses can be seen from the assessment of the validators who are two experts from Medan State University at the Faculty of Education. The following are the results of product validation from material experts.

Table 1. Results Validation Expert Material Stage 1

No	Aspect	Score	Average score	Information
1.	Aspect Content Content	75%	71%	Worthy
2.	Aspect presentation of material	70%		
3.	Aspect Language	68%		

Based on the table above, the results of the stage I material expert validation assessment obtained an average of score 71% stated with criteria "Worthy". On aspect material to obtain score 75% with the criteria of "Eligible". Furthermore, the aspect of material presentation obtained a score of 70% with the criteria of "Eligible". Then The language aspect scored 68% with "Quite Adequate".

After done validation material expert stage I obtained the result data evaluation instrument that the media with revision with a number of criticism And suggestion Which has given. Researchers on date August 26, 2021 conducted stage II material expert validation.

Table 2. Results Validation Expert Material Stage 2

No	Aspect	Score	Average score	Information
1.	Aspect Content Content	90%	90.6%	Very Worthy
2.	Aspect presentation of material	90%		
3.	Aspect Language	92 %		

Based on table on that results evaluation validation expert material stage II to obtain The average score of 90.6% is stated with the criteria of "Very Eligible". In the material aspect, it obtained a score of 90% with criteria very Good. Furthermore aspect presentation material to obtain score 90% with very good criteria. Then the language aspect obtained a score of 92% with good criteria. After being carried out validation from expert material to be continued with expert Validation media done by expert media design. The following are the results of product validation by media design experts.

Table 3. Results Validation Expert Design Media *Microlearning Teaching Materials* Based on Local Culture

No	Aspect	Score	Average score	Information
1.	Aspect content or Contents	92%	91.43%	Very Worthy
2.	Aspect appearance	95.38%		
3.	Aspect use	93.34%		
4.	Aspect Language	85%		

Based on table 3. above, the content aspect obtained a score of 92% with the criteria of "Very Eligible". Furthermore, the appearance aspect obtained a score of 95.38% with the criteria of "Very Eligible". Then the usage aspect obtained a score of 93.34% with the criteria of "Very Eligible". The language aspect with a total score of 85% with the criteria of "Eligible". The results of the media expert validation assessment obtained an average score of 91.43% stated with the criteria of "Very Eligible".

The student evaluation stage is carried out after the learning activities using *Microlearning Teaching Materials* Based on Local Culture of North Sumatra are carried out. Elementary School Social Studies Education Course. The following are results from evaluation use *Microlearning Teaching Materials* Based on Local Culture North Sumatra On Eye Studying Elementary school social studies education is based on mark pre-test and post-test as well as the results of the assessment instrument through student response questionnaires.

Table 4. Pre-test results Use of Local Culture-Based *Microlearning Teaching Materials* In The Eyes Elementary School Social Studies Education Lecture

No	Category	Range of values	Frequency	Total value	%	Average
1.	Very Completed	95- 100	-	-	-	
2.	Completed	85- 94	-	-	-	
3.	Quite Complete	75- 84	6	465	23.08%	
4.	No Completed	75	20	1170	76.92%	= 62.88
Amount			26	1635	100%	

Based on table 4. above shows that students who get grades with category "Enough Completed" (75-84) amount to 6 student with percentage 23.07% with a total score of 465. Furthermore, the scores included in the "Not Complete" category (amounting to 20 students with a percentage of 76.92% with a total score of 1170. The results of the pre-test scores obtained by students reached a total score of 1635 with an average score of 1170. – flat mark that is 62.88 with criteria "No Completed". After done pre- test, then the next step is to conduct a final post-test to determine the level of achievement of the learning outcomes of students in the Elementary School Social Studies Education Course.

Table 5. Pre-test results Use of Local Culture-Based *Microlearning Teaching Materials* In The Eyes Elementary School Social Studies Education Lecture

No	Category	Range of values	Frequency	Total Value	%	Average
1.	Very Complete	95- 100	8	785	34.61%	
2.	Completed	85- 94	13	1140	46.15%	
3.	Quite Complete	75- 84	4	315	15.39%	
4.	No Completed	< 75	1	65	3.85%	= 88.65
Amount			26	2305	100%	

Based on table 5. above, it shows that out of 26 students who obtained a score in the category of "Very Complete" (95-100), there were 8 students with a percentage of 34.61% with a total score of 785. Students who obtained a score in the category of "Complete" (85-94) numbered 13 students with a percentage of 46.15% with a total score of 1140. Students who obtained a score in the category of Quite Complete (75-84) numbered 4 students with a percentage of 15.39% with a total score of 315. Furthermore, students who obtained a score in the category of "Not Complete" numbered 1 person with a percentage of 3.85% with a total score of 65. That the results of the post-test scores

obtained by students reached a total score of 2305 with an average score of 88.65 with the criteria of "Complete".

Table 6. Results Difference pre-test And Post-test Use *Microlearning Teaching Materials* Based on Local Culture in Elementary School Social Studies Courses

No	Group	Mark average	Difference
1.	Test beginning (<i>pretest</i>)	62.88	25.77
2.	Test end (<i>post test</i>)	88.65	

The table above shows a comparison of the average values of the pre-test and post-test obtained 25.77 with an average pre-test of 62.88 stated with the criteria "Not Complete" and an average post-test of 88.65 with the criteria "Complete". The trial was conducted on students of class B Regular 2020 PGSD by providing a student response questionnaire to find out practicality use *Microlearning Teaching Materials Based on Culture Local* On Eye Elementary School Social Studies Education Lecture . The results of the student response assessment can be seen in the table below.

Table 7. Results Response Student Usage *Microlearning Teaching Materials* Based on Local Culture in Elementary School Social Studies Courses

No	Aspect	Score	Average score	Information
1.	Aspect Interest	82.69%	80.28%	Practical
2.	Aspect Appearance	83.58%		
3.	Aspect Language	77.69%		
4.	Aspect usefulness	77.18%		

Based on table 7 above, the results of the student response instrument assessment obtained an average score of 80.28% stated with the description "Practical". In the interest aspect, it obtained a score of 82.69% with the criteria "Very Practical". Furthermore, the appearance aspect obtained a score of 83.58% with the criteria "Very Practical". Then the language aspect obtained score 77.69 % with "Practical" criteria. Aspects usefulness with a total score of 77.18 with the criteria "Practical".

Discussion

The development of *Microlearning Teaching Materials Based on Local Culture* in Elementary School Social Studies Education Courses can help lecturers in delivering information so that students can more easily understand lectures. In line with Sukmadinata's theory, research and development is a process or steps to develop a new product or improve an existing product, which can be accounted for. So researchers in the development of *Microlearning Teaching Materials Based on Local Culture* in Elementary School Social Studies Education Courses were developed based on the absence of *Microlearning Teaching Materials Based on Local Culture* that were utilized by lecturers in lecture activities at PGSD FIP UNIMED. So researchers focused on developing *Microlearning Teaching Materials Based on Local Culture* in Elementary School Social Studies Education Courses.

The assessment result data obtained from the validation of the material expert in the first stage was a score of 71% with the criteria of "Feasible" and with revisions. Referring to the criticism and suggestions that have been given, the researcher conducted the second stage of validation and obtained a total score of 90.67% with the criteria of "Very Feasible" and without revision. Then the results of the assessment of the media design validator expert as a media expert at this validation stage obtained a total score of 91.43% with the criteria of "Very Feasible" and without revision and can be tested in schools. The average assessment results from the experts obtained were 84.3% with the

criteria obtained, namely "Feasible " and without revision and the learning media product can be tested.

Practicality of Local Culture-Based Microlearning Teaching Materials in Elementary School Social Studies Education Courses based on data obtained from student responses. Assessment of student responses based on aspects of interest, appearance, language, and learning aspects. Then the average practicality value is obtained that Flash-based audio-visual learning media is categorized as "Practical" with an average value of 80.28%. Based on the results of student data, the practical criteria can be stated that Local Culture-Based Microlearning Teaching Materials in Elementary School Social Studies Education Courses can be used in the online learning process.

The results of the effectiveness test of the learning media Microlearning Teaching Materials Based on Local Culture in Elementary School Social Studies Education Courses based on the implementation of the pre-test and post-test. From the data, students obtained the completion of learning outcomes, namely 80. The results of the pre-test of students who completed were 5 students (38.46%). Furthermore, the post-test was carried out and the results of the data obtained were 25 students (96.15%). Based on the results of the data obtained from the pre-test and post-test results, there was an increase in student learning outcomes.

CONCLUSION

Based on the results and discussion of the research on the development of Local Culture-Based Microlearning Teaching Materials in Elementary School Social Studies Education Courses, the following conclusions can be drawn:

Based on the results obtained in the research conducted, the development of Microlearning Teaching Materials Based on Local Culture in Elementary School Social Studies Education Courses obtained an increase in feasibility from material experts in stage I, namely with a score percentage of 71% with the criteria "Feasible" and validation of material experts in stage II obtained a score of 90.68% with the criteria "Very Feasible". Then the assessment obtained from media experts was with a score of 92.67% with the criteria "Very Feasible" without revision.

The data from the assessment of student responses based on the aspects of interest, appearance, language, and learning aspects obtained an average value of 80.28% (Practical). So the Microlearning Teaching Materials Based on Local Culture in Elementary School Social Studies Education Courses are good for students to use. Furthermore, the results of the pre-test conducted before using the Microlearning Teaching Materials Based on Local Culture in Elementary School Social Studies Education Courses obtained the learning outcomes of 6 students who completed the learning process (23.06%). For the results of the post-test in the learning process using Microlearning Teaching Materials Based on Local Culture in Elementary School Social Studies Education Courses, the learning outcomes of 25 students who completed the learning process (96.15%). So it was found that the learning outcomes of students increased after using Microlearning Teaching Materials Based on Local Culture in Elementary School Social Studies Education Courses

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