

Development of Web-Based Thematic Teaching Materials Using Weebly on Theme 8 Sub-theme 1 Class IV SDN 065000 Medan Marelan

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Abstract, abstract

This research was conducted with the aim of knowing the feasibility and effectiveness of using Weebly-based web teaching materials on theme 8 sub-themes 1 class IV SDN 065000 Medan Marelan. This research is about research and development, which refers to the ADDIE research and development model. The results of this research and development show that web-based teaching materials using Weebly that have been developed obtain a percentage eligibility from media experts of 75% and are declared "decent", a percentage eligibility from material experts of 85.71% and are declared "very feasible", and a feasibility percentage from education practitioners of 97.3% and are declared "very feasible". The results of personal trials for web teaching materials using Weebly get an average score of 1, which is in the "good" category. The results of the field trial phase showed that the effectiveness criterion achieved with a total of 19 students in the post-test was around 85.71%. Based on these tests, web-based teaching materials using Weebly are declared suitable for use in the teaching and learning process

Keywords : Development of Teaching Material, Web-based Teaching Material, Weebly

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I. INTRODUCTION

long with the times, education in Indonesia continues to increase. But right now, education in Indonesia is being hampered due to COVID-19. COVID-19 has never been identified as attacking humans, and this virus is classified as a

deadly virus. Transmission of the 2019 Corona virus is very easy, namely by direct contact, so you need to watch out for it. Flu-like characteristics, namely coughing, fever, high fever, and shortness of breath, can be found in people who have contracted COVID-19. The coronavirus 2019 can also attack human immunity. Responding to

this, the minister of education in Indonesia issued a policy to carry out learning boldly. This is stated in the Ministry of Education and Culture Circular No. 4 of 2020. Courageous learning also requires facilities and infrastructure that are different from engaging learning. Learning that has been carried out offline has become a habit that has attached itself to teachers and students. Schools as places of learning during the COVID-19 period can only be filled with teachers and not with students. This results in space and time limitations and can disrupt the usual teaching and learning system. Teachers must be able to create new innovations in the form of methods, the use of media, or sources of teaching materials for students. Then the researcher will provide a solution by developing a Web-based teaching subject that contains thematic materials that are in accordance with the basic competencies that have been determined and are not limited by space and time and can be accessed anytime and anywhere with a smartphone whose operation is considered easy and can also provide new experiences for teachers and students in teaching and learning activities in the era of the COVID-19 pandemic. Meaningful teaching and learning activities will lead to a better understanding of students than before. According to Nurdin (2016), teaching materials, commonly

called learning materials, broadly mean knowledge, skills, and attitudes—these three things students must learn in order to achieve predetermined competency standards. Prastowo (2014) argues that teaching materials are all materials (both information, tools, and text) that are arranged systematically and display the full body of competencies that will be mastered by students and plans used in the learning process with the aim and review of learning implementation. Majid (2014) argues that thematic learning is learning that combines a concept in several different fields of study with the hope that students will learn better and more meaningfully.

The characteristics of student-centered thematic learning are that students play more active roles and place themselves as learning objects. While the teacher only acts as a facilitator. That is, to provide convenience to students in carrying out learning activities. According to Beki (2015), a website is a collection of pages that are used to display text information, still or moving images, animation, sound, and/or a combination of all of them, both static and dynamic, which form a series of interrelated buildings that are connected by a network of pages. Weebly has a function that allows users to create a website without having to be charged. Weebly acts as a means or bridge to create a website for free.

This function is usually used by those who are just learning to blog because they can more freely modify their website as they wish.

II. RESEARCH METHODS

The research method used in this study is the ADDIE research and development method, which includes Analysis, Design, Development, Implementation, and Evaluation. According to Simarmata and Mujiarto (2019), the ADDIE learning development model contains systematic and interactive steps. The development of learning multimedia is also studied in depth using the ADDIE main framework. The subjects of this study were fourth grade students at SD Negeri 065000 Medan Marelan, Medan Marelan District, Medan City, with a total of 19 students. The instruments used in this study include: 1) Observation interview sheets with class teachers; 2) Media assessment questionnaires for media experts, subject matter experts, and education practitioners; 3) Test sheets to find out student learning outcomes; and 4) Questionnaires to find out participant responses.

The research subjects were 10 elementary school teachers with civil servant status under the auspices of the Tambusai District Education Office Branch, Rokan Hulu Regency

III. RESEARCH RESULTS AND DISCUSSION

This research was conducted in Class IV SD Negeri 065000 Medan Marelan, Medan Marelan District, and Medan City even semester of the 2022/2023 school year with a total of 19 students. This research was conducted to test the feasibility of media in the form of web-based thematic teaching materials using Weebly on theme 8 subtheme 1 using the ADDIE research model. This research was conducted through five stages: analysis, design, development, implementation, and Evaluation.

1. Analysis Phase

In the analysis stage, the researcher made observations on several aspects, namely the analysis of teacher needs, the analysis of learning tools, the analysis of students, the analysis of curriculum and materials, and the analysis of learning objectives.

a. Teacher Needs Analysis

At the teacher needs analysis stage, the researcher used the interview method, from which it can be concluded that, during the online learning process so far, teachers are still using textbook teaching materials provided by schools. However, students' interest in online learning has decreased drastically due to a lack of teaching materials that can be used. Supposedly,

appropriate and efficient teaching materials can support the learning process.

b. Learning Device Analysis

Based on the results of the analysis, the teacher has never developed teaching materials other than using the printed materials available.

c. Student Analysis

The results of the student analysis carried out revealed the characteristics of students, namely that the average age of students was 10 years and the academic abilities of students were heterogeneous.

d. Curriculum and Material Analysis

The results of curriculum and material analysis on theme 8 (sub-theme 1), which includes Indonesian and Natural Sciences subjects.

In the Indonesian language subject, Basic Competency 3.9 and 4.9, students are expected to be able to examine the characters in fictional texts and convey the results of identification of characters contained in fictional texts orally, in writing, and visually. The material presented is in the form of fictional texts, which are presented, and students are asked to identify the characters contained in the fictional texts.

In science subjects, Basic Competency 3.4 and 4.4 students are expected to be able to relate force and motion to events that occur in the surrounding environment and

present experimental results about the relationship between force and motion. The material presented is pictures and experiments about the relationship between force and simple motion that can be done and shown in class.

e. Analysis of Learning Objectives

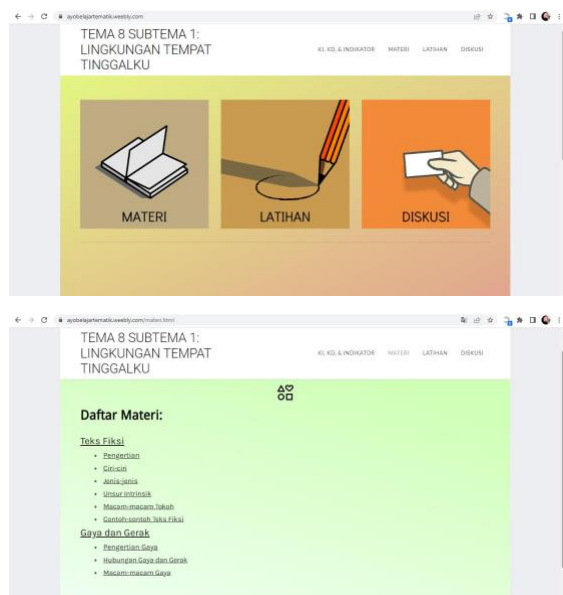
Based on KD and indicators that have been analyzed, the learning objectives set are as follows:

1. By observing various examples of the relationship between force and motion, students can explain the relationship between force and motion.
2. By observing events in the surrounding environment related to force and motion, students can explain the relationship between force and motion through observations in everyday life.
3. By watching fictional story videos, students can identify the characters and characteristics of the characters in fictional texts.
4. By watching fictional story videos, students can determine the message in a fictional text.
5. By discussing fictional stories, students can identify the information and characteristics of fictional texts.

2. Design Phase

At this stage, material design, test questions, and the design of web-based teaching materials using Weebly are carried

out. The following is a print screen of the developed web design.



Picture 1. The Print Screen of the Design in Web-Based Thematic Teaching Materials Using Weebly

3. Development Phase

At this stage, the feasibility validation was carried out with three experts, by the media experts, material experts, and education practitioners, to determine the feasibility of the teaching materials being developed.

Table 1. The Result of Media Expert’s Validation

Aspect	Score	Criteria
Placing Design	0,75	Good
Fungsionalitas	0,77	Good
Content	0,9	Good
Average (in percentage)	75%	Feasible

The results of the media expert's assessment obtained a feasibility percentage of 75% and were in the category suitable for use without revision.

Table 2. The Result of Material Expert’s Validation Stage I

Aspect	Score	Criteria
Competence	0,2	Very Low
The quality of the material	0,63	Good
Language	0,8	Good
Average (in percentage)	60%	Feasible Enough

Material experts give a percentage of 60% and are categorized as suitable for use with revisions in stage I. Revisions made after the stage I assessment include completing competencies on web pages as well as repairing and completing material content.

Table 3. The Result of Material Expert’s Validation Stage II

Aspect	Score	Criteria
Competence	0,9	Very Good
The quality of the material	0,83	Good
Language	0,88	Good
Average (in percentage)	85,71%	Very Feasible

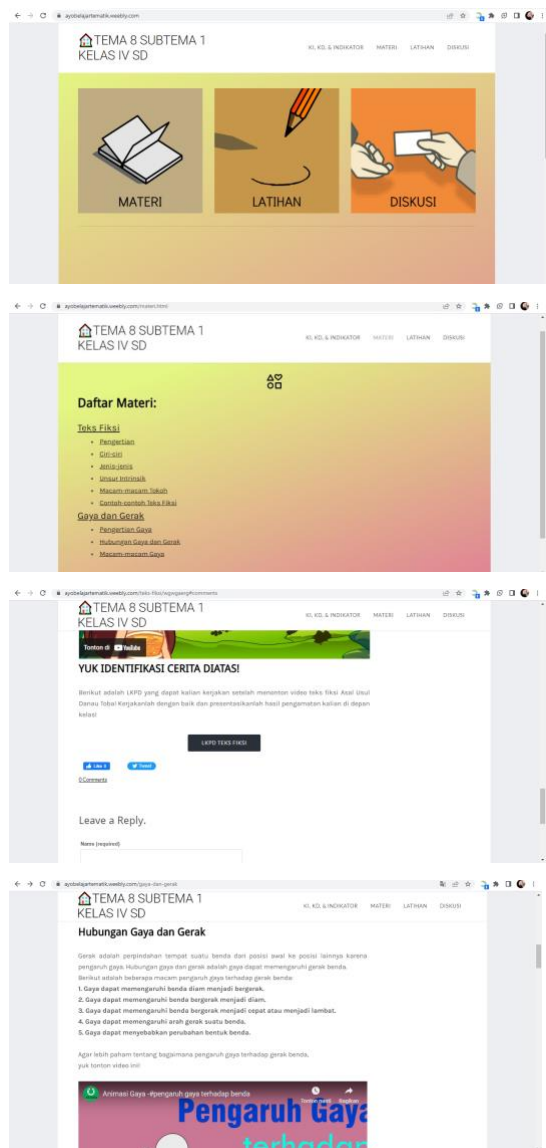
In the second stage of assessment with the material expert, the teaching materials got a percentage of 85,71% and are categorized as very suitable and feasible for use without any revision.

Table 4. The Result of Teacher’s Validation

Aspect	Score	Criteria
Appearance	0,98	Very Good
Material Presentation	0,96	Very Good
Content order benefits	0,96	Very Good
Average (in percentage)	97,3%	Very Feasible

Education practitioners or teacher who are class IV’s teacher at SDN 065000 gave a feasibility percentage score of 97.3%

in the category very suitable for use without revision. The following is a print screen of web-based teaching materials created using Weebly after going through the development and revision stages.



Picture 2. The Print Screen of The Design in Web-Based Thematic Teaching Materials Using Weebly After Revision
4. Implementation Phase

The implementation phase contains individual trials, small group trials, and field trials with the following results:

Table 5. The Result of Individual Trials

Questions	Score	Category
Do you feel excited using the web-based teaching material?	1	Good
Do you feel enthusiast in studying using the web-based teaching material?	1	Good
Is it easy to use the web-based teaching materials?	1	Good
Is the material in the form of text, images and videos already clear enough?	1	Good
Are the videos and audio in the teaching materials already clear enough?	1	Good
Average	1	Good

It can be concluded from the results of the assessment that the feasibility assessment of Web-based teaching materials is based on the results of individual test subject assessments, which are in the "good" category of each question item. From the results of the scores shown above from individual trials, it can be stated that web-based teaching materials are suitable for use as learning media products.

Table 6. The Result of Small Group Trials

Questions	Score	Category
Do you feel excited using the web-based teaching material?	1	Good
Do you feel enthusiast in studying using the web-based teaching material?	1	Good

Is it easy to use the web-based teaching materials?	1	Good
Is the material in the form of text, images and videos already clear enough?	1	Good
Are the videos and audio in the teaching materials already clear enough?	1	Good
Average	1	Good

According to the results of small group calculations, it can be concluded that the feasibility assessment of Web-based teaching materials is based on the results of the small group trial subject's assessment, which is in the "good" category of each question item. From the results of the scores shown above from the small group trials, it can be stated that Web-based teaching materials are feasible to use as learning media products.

Table 7. The Result of Field Trials

Variable	Score	
	Pre-test	Post-test
Subjects of the study	21	21
Ideal Score	100	100
Average	64,28	82,38
Maximal Score	90	100
Minimal Score	10	55
Amount of passed students	10	18
Amount of not passed students	11	3

The learning outcomes of class IV-B SD Negeri 065000 Medan Marelan on the theme The Area Where I Live, the sub-theme The Environment Where I Live,

before learning using web-based teaching materials obtained an average score of 64.28 from an ideal score of 100, with a maximum score obtained by students of 90 and the minimum score obtained by students is 10. While the learning outcomes after learning using Web-based teaching materials obtained an average score of 82.38 from an ideal score of 100, with a maximum score obtained by students namely 100 and a minimum score obtained by students namely 55. This shows that student learning outcomes in field trials have increased.

5. Evaluation Phase

a. Formative Evaluation Phase

The formative evaluation stage aims to see the results of the feasibility of each assessment process during validation with media experts, material experts, and educational practitioners.

The results of the media expert's assessment showed a score of 75%, which means it is included in the "proper" category at the level of feasibility for use in the learning process.

The results of the material expert's assessment in stage I showed a score of 60% in the "reasonable enough" category with several suggestions and inputs to improve the teaching materials being developed. In stage II, material experts gave a score of 85.71% in the "very feasible" category in

the feasibility level for use in the learning process.

The results of the assessment of Education practitioners obtained a score of 97.3% in the "very feasible" category used in the feasibility level for use in the learning process.

b. Summative Evaluation Phase

The summative evaluation stage is carried out to find out the response of students and their level of understanding at the implementation stage in schools, namely in individual trials, small group trials, and field trials.

The results of individual trials conducted on 3 students obtained an average score of 1, which was in the "good" category, meaning that web-based teaching materials using Weebly received a good grade rating as teaching materials in the teaching and learning process.

The results of the small group trial conducted on 5 groups consisting of 2 students obtained an average score of 1, which was in the "good" category, meaning that web-based teaching materials using Weebly received an assessment predicate with good grades as teaching materials in the learning process. Learn to teach in groups.

Based on the pre-test and post-test, the effectiveness criteria were met, with the number of students who achieved

completeness reaching as many as 18 people, or around 85.71%. Whereas during the pre-test, students who achieved completeness were 10 out of a total of 21 students, or 47.61%. This also shows that the completeness of the class after learning using web-based teaching materials increases compared to the pre-test, namely with an increase percentage of 38.1%.

IV. CONCLUSION

Development of web-based teaching materials using Weebly by using the ADDIE research and development model based on the results of obtaining the following conclusions:

1. Web-based teaching materials using Weebly in the thematic learning theme 8 (the area where I live), sub-theme 1 (the environment where I live), and learning 1 consist of Web page components, namely the start page or homepage, IP, IC, and Indicator pages, material pages, pages with exercises, and discussion forums in accordance with the material specified in the curriculum.
2. This research and development have validated the feasibility of teaching materials by media experts, material experts, and educational practitioners, namely class teachers. From the results of the assessment by media experts, teaching materials obtained an eligibility percentage of 75%, which was included in the feasible

category; the results of the assessment by material experts obtained a feasibility percentage of 85.71%, which was included in the very feasible category; and the results of the assessment from educational practitioners obtained a feasibility percentage of 97.3%, which is in the very decent category.

3. Individual tryouts and small group trials were carried out during the implementation stage to see students' responses to the use of media in the limited trial stage. The results of the individual trials of 3 class IV-B students at SD Negeri 065000 Medan Marelan, namely getting an average score of 1, which is in the good category, Furthermore, the small group trial was conducted on 10 IV-B students at SD Negeri 065000 Medan Marelan, resulting in an average score of 1, which is in the good category. This indicates that the developed Web-based teaching materials using Weebly can be used by teachers during learning because the medium has been declared feasible.

4. The effectiveness of Web-based teaching materials developed using Weebly is measured through learning achievement test instruments. Based on average student learning outcomes, it is known that the use of Web-based teaching materials in thematic learning can improve student learning outcomes compared to pre-test

results, with an increase percentage of 38.1% in field trials. Therefore, based on average student learning outcomes, the level of effectiveness of Web-based teaching materials using Weebly is included in the effective category in the learning process.

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