

The Development of Children's Story Website as Social Studies Learning Media for the Grade Four Elementary School Students

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ABSTRACT

Based on the results of pre-research in the form of observations, interviews, and documentation conducted in the fourth grade of SDN Karanganyar 01 Semarang, it was found that the learning resources used by teachers were still limited and not varied. Teachers have not integrated technology into learning activities that should be implemented to support the success of 21st century learning skills. This study aims to develop and test the viability of children's story websites as social studies learning media in the grade four of SDN Karanganyar 01 Semarang. This research is a Research and Development (R&D) study with the Borg and Gall development model. The instrument for data collection is in the form of a questionnaire validation sheet. Henceforth, the quantitative data was analyzed using criteria guidelines with assessment categories to determine the quality of the developed product. The validation results by the media expert validator get a percentage score of 87.5% in the very viable category, the validation results by the material expert validator get a percentage score of 95.3% in the very viable category and the validation results by the linguist get a percentage score of 95.3% in the very viable category. Based on the acquisition of the resulting data, it can be concluded that the children's story website as a social studies learning media for the grade four elementary school students is viable to use or valid.

Keywords: children's story website, elementary school, learning media, social studies,

INTRODUCTION

Education is an effort carried out by people who are given responsibility in a systematic and conscious way to influence students in optimal physical and spiritual growth based on their potential so that the character and character are realized in accordance with the ideals of education. In accordance with the Law on the National Education System no. 20 of 2003 Chapter 1 Article 1 explains 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 religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, nation, and state.

The curriculum currently being implemented is Independent Curriculum (Kurikulum Merdeka) with the objectives listed in the Pancasila Student Profile (Profil Pelajar Pancasila). Indonesian students are expected to have the competence to become democratic citizens and to become excellent and productive human beings in the 21st century. Therefore, Indonesian students are expected to be able to participate in global development that is sustainable and resilient in facing various challenges. (Satria et al., 2022)

The Ministry of Education, Culture, Research, and Technology through the Education Standards, Curriculum, and

Assessment Agency explained that social studies education has a role in realizing the Pancasila Student Profile as an ideal picture of Indonesian students. Social Studies helps students grow their curiosity about the phenomena that occur around them. This curiosity can trigger students to understand how the universe works and interacts with human life on earth. This understanding can be used to identify various problems and find solutions to achieve sustainable development goals. The basic principles of scientific methodology in social studies learning will train scientific attitudes (high curiosity, critical thinking skills, analysis and the ability to draw the right conclusions) which create wisdom in students.

The implementation of social studies learning in elementary schools which gives more emphasis on students being able to develop higher-order thinking skills has not been fully implemented properly in elementary schools, as suggested by Rahayu et al. (2019) social studies learning does not yet reflect skills, while social studies learning really requires skills that support the development of students' thinking abilities. This indicates that social studies learning tends to emphasize memorization and rarely trains higher-order thinking skills, because the learning is teacher-centered and the methods used are in the form of lectures and text books reading, so that it is not in line with the social studies learning objectives that students must have, namely basic skills for critical thinking, curiosity, inquiry, and social life skills.

The pre-research data that the researchers obtained through observation and interviews with fourth grade teachers at Karanganyar 01 Elementary School Semarang revealed that the learning resources used by teachers were still limited and not varied. The learning media used by the teacher was only learning media that are already available at school or make simple learning media that is less effective in clarifying what is conveyed by the teacher. Teachers have not integrated technology into learning activities that should be implemented to support the

success of 21st century learning skills. This makes students tend to passively listen to the teacher's explanations which results in students only accepting the concept of material provided by the teacher without analyzing it in depth and properly criticizing it.

Based on these problems, the researchers aim to develop a children's story website as social studies learning media for grade four elementary school students. Technology-based learning media is an innovation that is currently very much needed in education field, especially in 21st century learning. Djamarah, SB, & Zain (2014) suggest that the presence of media in the teaching and learning process has a very important meaning. Because by presenting the media as an intermediary in these activities it can help the ambiguity and complexity of the material conveyed to students to be simplified and clarified with the help of the media. Kisworo et al. (2022) explained that technology-based learning media can create effective and efficient learning, so the students could understand learning material more easily. Becker et al. (2020) revealed that the use of technology in learning activities aims to enrich the learning environment by presenting multimedia-based learning material content.

According to Hidayat (2010) a website is a collection of pages that are used to display information in the form of text, images, animation, sound, video or a combination of all, both static and dynamic which form a series of interrelated buildings, each connected with web pages. This is reinforced by the use of Mayer's principle (Meduri et al., 2022) that the combination of using text, video, animation, images and audio will make learning better than just using text-only, video-only, animation-only, images-only, or audio-only. The website is a medium that can be used as a teacher as an effort to improve the quality of the teaching and learning process anytime and anywhere.

The output of this research is a children's story website containing text, images, videos, other materials and animations. With

the advantages of this product, it is hoped that the learning process will be better and students can play an active role in the learning process and can make it easier for students to understand the subject matter. If the process of delivering this material is run well, effectively, and efficiently, then students could easily understand the subject matter delivered, and this research would have a very positive impact on sustainability education in Indonesia.

MATERIALS & METHODS

The type of this research is an R & D (Research and Development). This research will produce a certain product. According to Sugiyono (2016), development research is a research method that aims to produce a product through a needs analysis process and test the effectiveness of a product so that it can provide benefits to society. The development model used by researchers is the development model according to Borg and Gall. The Borg and Gall model steps according to Sugiyono (2016) consist of 10 steps, which include: 1) Potentials and problems; 2) Data collection; 3) Product design; 4) Design validation; 5) Design revision; 6) Product trials; 7) Product revision; 8) Trial use; 9) Product revision; 10) Mass production.

In the research and development of Children's Story Website Learning Media, researchers use the development model only up to the 5th step because the research only reaches design revisions. The research data collection instrument (R&D) is in the form of a validation questionnaire given to several expert validators. The expert validators consist of three experts, namely media expert, material expert, and linguist. The data analysis from the media expert, material expert, and linguist obtained by analyzing quantitative data using the criteria category assessment guidelines to determine the quality of the product being developed.

This research uses Likert scale with the use of qualitative data and quantitative data. Qualitative data will later be seen through criticism, suggestions and input provided by

expert validators. Meanwhile, quantitative data can be seen through an assessment of learning media products on children's story websites provided by expert validators (Khairunnisa et al., 2019)

The viability of the Children's Story Website as Social Studies Learning Media for 'My Region and Its Natural Resources' is tested by an expert validators based on the viability questionnaire. The viability test of the media used the formula:

$$NP = \frac{R}{SM} \times 100\%$$

(Purwanto, 2017)

Information:

NP = Percentage Mark that is expected

R = Raw Score gained

BC = Ideal Maximum Score from the test

The percentage of viability result then interpreted to in some criteria with method determine distance intervals (Ji) used formula intervals as following:

$$Ji = \frac{t - r}{k}$$

Information:

Ji = distance class intervals

t = the highest ideal score on the scale

r = the lowest ideal score on the scale

k = number of class intervals

(Widoyoko, 2014)

Based on the terms, the assessment result classification with presentation scale of 100% rating is as follows:

a. Percentage highest ideal = 100%

b. Percentage Lowest ideal = 0%

c. Distance intervals = $(100\% - 0\%) : 4 = 25\%$

The classification of media percentage result converted in the following table:

Table 1. Media Viability Criteria

Percentage	Criteria
76%-100%	Very Viable
51-75%	Viable
26-50%	Fair
0-25%	Not Viable

RESULTS AND DISCUSSION

The research and development process begins with seeking information on potential and problems that occur in the field. In this research, the first step was carried out at Karanganyar 01 Elementary School Semarang by observing and interviewing grade four teacher. Sugiyono (2016) explained that observation is a data collection technique that has specific characteristics compared to other data collection techniques. The compiled format contains details about the incident or behavior that occurred or expected to be occurred. The observation form in this study is structured observation. Interview is data collection technique aim to know the deeper problems from the respondent. The next stage is to collect data and literature regarding the product to be developed. Furthermore, after getting problems, potentials and sufficient literature, the researchers designed a new product design to be developed.

The learning media for children's story websites is one of the electronic learning media which combines texts, pictures, videos. The material in this media is 'My Region and Its Natural Resources' for grade four students. The design development of children's stories websites learning media is as follows:



Figure 1. Login Page

The First Page of Children's Story Website learning media contains the title of the website and guidelines for using the website so that students can learn how to use it first. Then students can enter or log in using the

username and password that are available for each student. On the lower part written the year and the name of the children's story website.



Figure 2. Home page "Welcome"

The home page is the main page of the children's story website which contains a welcome greeting to students. On this page students can also see all menus starting from material, preface, CP & TP, Pretest, Posttest, Grades, Guidelines, About and Profile. There is an open material button for students to open available materials.



Figure 3. Pretest and Posttest Pages

Pretest is an activity to measure the ability to master the concept before students obtain information on the children's story website. The pretest is done before students receive material on the children's story website. While the Posttest is an activity to measure the ability to master the concept after students obtain information on the children's story website. The posttest is done after students receive material on the children's story website. The pretest and posttest given refer to learning outcomes and learning objectives on my regional material and its

natural resources.



Figure 4. Material page

On this main page students are presented with material related to ‘My Region and Its Natural Resources’. The material is equipped with story text, images, videos and analytical questions related to the material that has been presented.



Figure 5. Learning Competence and Learning Objectives page

Learning Competences used in Children's Stories Websites Learning Media is Phase B, in which students are able to show the location of the city/regency and province where they live on a conventional/digital map. Students describe biodiversity, cultural diversity, local wisdom and conservation efforts. Learning Objectives contained in the Learning Media on the Children's Story Website is 1) By observing the condition of the area on the website, students can correctly mention the natural wealth in the area where they live. 2) By observing texts and videos on natural resources on the children's story website, students can correlate geographical influences with natural resources in the area where they live.

3) By observing texts and videos on the use of natural resources on the children's stories website, students can mention wise ways to properly utilize natural resources in the area where they live.



Figure 6. Video in Material

The material presented in this website is ‘My Region and Its Natural Resources’ for grade four elementary school students. The material is divided into several sub-materials, namely introduction related to a general explanation of Indonesia and its wealth. Sub-material about the variety of natural landscapes. Sub-material about potential natural resources. The students then analyze the material that has been presented. The material about ‘My Region and Its Natural Resources’ is made up of a story about Pak Rendi's journey starting from going to the markets and various places in Indonesia to find out the natural resources in them and how to use these natural resources.

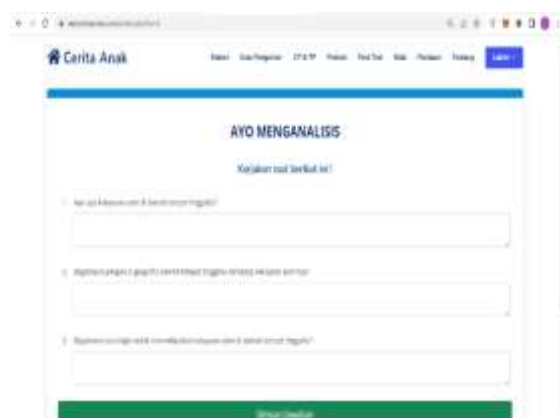


Figure 7. Display of analysis questions

On Children's Story Website learning media there is ‘Let's Analyze’ activities that can be

done by students after studying material about my region and its natural resources . Sheet activity can be found at the bottom after the learning material. Possible activities carried out by students in this learning media is to analyze text stories, images and videos that have been presented in my regional material and its natural resources by answering the questions that have been presented. The purpose of the let's analyze activity on this children's stories websites learning media is to deepen students' understanding form the material which has been studied.



Figure 8. Score page

On this score page students can see directly the results of the pretest and posttest scores they have worked on. Students can compare the differences in scores on the pretest and posttest that have been done. This can make it easier for students to know the extent of understanding they already have.

After the product design developed has been completed, the next stage is media validation to several experts, namely media expert, material expert, and linguist. This process is carried out to determine the feasibility of each part that is developed by providing an assessment related to the product design that has been developed so that it can reveal the advantages and disadvantages of the product. Validation product held with the help of competent and experienced experts so that the product's strenght and weakness would be known (Sugiyono, 2016) .

The assessment from media expert, material expert, and liguist is a stage in analyzing the viability of children's story website learning media which is carried out in two stages. The

first stage is design validation and the second stage is media component validation by vmedia expert. The first stage of assessment consists of three components, namely the viability of content and eligibility component presentation which each consists of four indicator, as well as technical quality components which include two indicators. From these details, the total indicators on the first stage are 10 indicators. The viability percentage range on the first stage covers five criteria: 1) very viable (80% < score ≤ 100%); 2) viable (60% < score ≤ 80%); 3) fair (40% < score ≤ 60%); 4) not enough viable (20% < score ≤ 40%); 5) not viable ≤ 20%.

The following is the recapitulation result table of media viability assessment Stage I.

Table 2. Recapitulation Results of Viability Assessment Stage I

Aspect	Indicator	Response
Component Content Eligibility	1	Yes
	2	Yes
	3	Yes
	4	Yes
Component Presentation	1	Yes
	2	Yes
	3	Yes
	4	Yes
Quality Technical	1	Yes
	2	Yes

Based on table 2 the results of the media viability assessment stage I obtained that all indicators received a positive response (yes) with each indicator having a score of one, so for 10 indicators the total score obtained is 10. From the score gained, it is showed that children's stories websites learning media passes the media viability assessment stage I with criteria very viable because it meets the score with a percentage of 100%.

After the media get a positive response from media expert for all aspect component in viability assessment stage I, the next is viability assessment stage II that covers the components of presentation, content, language. Those three components will test by experts in their respective fields based on the assessment instrument has made before. The children's stories websites learning media declared viable to be used if results assessment stage II on every component get

percentage of more than 50% (Widoyoko, 2014). The assessment from every media component includes: media presentation, content viability, and linguistic components. There are four indicators in the assessment of presentation viability component by expert media include the learning media in accordance with learning competences and learning objectives; conformity with the level of students' development; the media is easy to use by students and teacher; interesting visual appearance design. The following is assessment result table of children's stories websites learning media.

Table 3. Recapitulation of Assessment Result of Children's Stories Websites Learning Media

No	Indicator Component Presentation	Score
1.	Learning media in accordance with learning competences and learning objectives	15
2.	Conformity with the level of students' development	12
3.	Learning media is easy to use by students and Teacher	16
4.	Interesting visual appearance design	13
Total score		56
Percentage		87.5%
Criteria		Very viable

Based on table 3, the results of the validation of the assessment by media expert, the total score obtained is 56 with a percentage of 87.5% meaning that for children's stories websites learning media get very viable criteria by media expert. As for the description is the first indicator of conformity with learning competences and learning objectives get a score of 15. The next indicator gets a score of 12 regarding the conformity with the level of students' development. This learning media gets a score of 16 on indicators of easy to use by students and teacher. The indicator of interesting visual appearance design gets a score of 13.

Material expert validate to assess the viability of the contents of children's stories websites learning media. There is four indicators that are evaluated including the material relevant with learning competences and learning objectives; the material in accordance with students' thinking level; suitability of the material with the questions

in the media; suitability of images and videos with the material. Here's a recapitulation result table of material viability assessment.

Table 4. Recapitulation Results of Website Children's Stories Websites Assessment

No	Indicator Component Presentation	Score
1.	Relevant with learning achievement And objective Learning	16
2.	Material in accordance with level think	14
3.	suitability material with question in media	16
4.	suitability pictures and videos with material	15
Amount score		61
Percentage		95.3%
Criteria		Very viable

Based on table 4, the results of the assessment by material experts are known obtained is 61 with the percentage of 95.3%. It means that children's stories websites learning media get very viable criteria by material expert. As for the description of the assessment is the first indicator of relevant with learning competences and objectives gets a score of 16. The next indicator gets a score of 14 regarding the suitability of the material with students' thinking level. This learning media gets a score of 16 on the suitability indicator of the material with questions in the media. Indicator suitability pictures and videos with material get score 15.

Linguist carry out validation to assess the language viability component from the learning media developed, namely children's stories websites learning media. There are four indicators assessed, including the sentences structure used are easily understood by students; using short, compact, and clear sentences; the language used is in accordance with students' thinking level and social-emotional development; using effective sentences. The following is recapitulation results table of language assessment.

Table 5. Recapitulation Results of Language Assessment

No	Indicator Component Presentation	Score
1.	sentences structure used are easily understood by students	14
2.	Using short, compact, and clear sentences	16
3.	The language used is in accordance with students' thinking level and social-emotional development	16
4.	Using effective sentences	15
Total score		61
Percentage		95.3%
Criteria		Very worthy

Based on table 5, the results of the assessment by linguist obtained is 61. The percentage obtained is 95.3%. It means that children's stories websites learning media get very viable criteria by linguist. As for the details, the indicator of sentences structure used are easily understood by students gets a score of 14. Regarding the indicator of using short, compact, and clear stences gets a score of 16. The indicator of the language used is in accordance with students' thinking level and social-emotional development gets a score of 16. Indicator related to the use of effective sentences to gets a score 15. The following table shows recapitulation result of stage II assessment by media expert, material expert, and linguist.

Table 6. Recapitulation Result of Stage II Assessment of Presentation Components, Material Viability, And Language

Expert	Total Score	Percentage	Criteria
Media	56	87.5%	Very viable
Material	61	95.3%	Very viable
Language	61	95.3%	Very viable

Based on table 6 it can be known that the viability assessment by media expert gets a score of 56 with a percentage of 87.5% included in a very viable criteria. Expert material provides score assessment on presentation appropriateness content that is 61 with percentage 95.3% with very viable criteria. Assessment by linguist obtains a score of 61 with a percentage of 95.3% included in very viable criteria. From the recapitulation result of the component assessment carried out by media expert, material expert and linguist it can be concluded that for children's stories websites learning media is viable to be used. Finally, after obtaining validation from several experts, the researcher made one revision of

both the design, materials and language in the product. This revision was made to improve the deficiencies of the product being developed.

CONCLUSION

The children's stories websites learning media was developed based on the theory of Borg and Gall which consists of five stages, including: (1) potential and problems; (2) data collection; (3) product design; (4) design validation; (5) design revision. The results of the viability assessment of the children's story website learning media components obtained a score from media expert on the presentation component of 87.5%, material expert gave a score on the material viability component of 95.3%, and linguist gave a score on the linguistic component of 95.3%. Based on the assessment of all the experts, this product gets percentage scores with very viable criteria. So the for children's stories website learning media is suitable to be used in social studies learning for the grade four elementary school students.

Declaration by Authors

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