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Interactive Weblog as a Source of Social Study of Junior High School Students

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Abstract. Weblogs are the concept of approving the internet today. In the use of blogs, students do not need technical knowledge and equipment, easy use and management. The attractive and functional personal web space in the blog usually has a main menu from the core that allows the blog, based on one page displayed on the main page of the blog on the internet network. The development of the current blog comes to the utilization of learning, with blogs and the internet as a source of learning the level of insight in student material is increasingly widespread. Especially for social science subjects which not only require theory in learning but also practice in the field, in this case the blog is very useful to help in the illustration of the practice. The results of the feasibility analysis based on the material validation of the material produced were 3.64 with the category "Good" on all aspects of the material. The results of the feasibility analysis based on media expert validation of the blog were developed in 4 categories "Good" in all aspects. The results of the feasibility analysis according to the teacher on blog products amounted to 4.45 with the category "Very Good". The results of the trial using learning media according to students amounted to 4.33 with the category "Very Good". This is consistent with research conducted where with the use of blogs, students increasingly have increased learning activeness and ease in accessing learning resources that have an impact on student success in learning

1. Introduction

The development of technology in modern times took place quickly. Every day new discoveries emerge that facilitate human work. For example, technological developments exist in the field of information and communication technology. build violence and get consequences that appear here. The function of cellphones which at the beginning was only for now has been growing. Coupled with the availability of an increasingly extensive internet network and can be obtained at a very large cost, allowing various groups can access the internet.

The study was conducted by UNICEF in collaboration with the Ministry of Communication and Information. The study included residents aged 10 to 19 years with a population of 43.5 million and a total sample of 400 people. At that age it also includes the age of children who are still students at the junior high school level. Based on the results of these studies it was found that 80% of children and adolescents use the internet especially for urban areas.

The internet has a very important role, especially for the world of education. The availability of internet as a learning tool is an obligation that must be provided by educational institutions, both government and private. By using the internet, learning that is done is not only classical but can be an individual learning tool. If classical learning is carried out together in one class, then with individual learning students can learn independently according to their desires and abilities. The use of internet technology by creating a good learning resource will encourage students to be more active, creative, innovative and independent. Besides that, it can also create a pleasant atmosphere in teaching and learning activities. Teaching and learning activities will be more effective and efficient if the teacher uses tools in learning activities. According to Sanaky [13] teachers are advised to be able to use a variety of inexpensive, efficient, school-capable tools, both those made by teachers, and conventional tools that are available and owned by schools so that the learning process becomes more effective and efficient.

The term weblog refers to a personalised web content, unbroken by the author in reverse written account diary type. As a "log on the web", it's unbroken initial and foremost on the online, either on a static web content, or via a database-backed web site, enabled through "blogging" computer code. As a "log of the web", it simply refers to different net locations via hyperlinks [8].

"Blogs, a journal style website that combines text, images, and links to other web pages, are one new technology that has played a large role in reshaping our literate environment". Duffy & Axel informed that a blog is usually made up of the following components[7]:

- Post Date — date and time the post was published
- Category — category the post is labelled with (can be one or more)
- Title — main title of the post
- Body — main content of the post
- Trackback — links back from other sites
- Comments — comments added by readers
- Permalink — the URL of the full, individual article
- Footer — usually at the bottom of the post, often showing post date/time, author, category, and stats such as number of reads, comments or trackbacks.

The options of weblogs together with depository of past weblogs by date-posted, hyper linking to different weblogs, instant business enterprise of website with very little technical ability needed, and ways in which for different to comment/feedback, offer new opportunities for individuals to gift and specific themselves on-line and to speak with different cibernautes [6]. According to Richardson [17], an advantage of blogs is the organization of discussions as personal publications enabling communication and also to Walker [21], "a frequently updated website consisting of dated entries arranged in reverse chronological order". Brownstein & Klein [4] defined that blogs can be used as virtual environments where all students can participate in critical discourse on scientific topics and blogs are frequently updated website consisting of dated entries called posts arranged in reverse chronological order so the most recent entry appears first.

According to Kennedy [14], blogs have the potential to reinforce writing and attainment skills whereas giving a unambiguously unreal sort of expression. weblogs area unit a wonderful thanks to fuse instructional technology and storytelling within the roomand on the far side faculty walls. as a result of their format is analogous to a private diary, wherever yarn tales and autobiographical events is current, blogs give an arena wherever style and creative thinking is inspired, blogs area unit each individualistic and cooperative and blogs is multidisciplinary as a result of, reading and writing is utilized ina spread of educational contexts, blogs area unit fungible across disciplines [12].

Likewise, Campbell [5] discusses the possibilities of integrating weblogs into educational context, especially in language teaching field and mentioned about three types of blogs that are likely to be beneficial for language learners. The first type is tutor blog through which the class teacher can produce special texts for reading and vocabulary activities by considering the students proficiency levels [5].

According to Fernette and Brock Eide's [9] Brain of a Blogger research that blogs can:

- Promote critical and analytical thinking
- Be a powerful promoter of creative, intuitive, and associational thinking
- Promote analogical thinking
- Be a powerful medium for increasing access and exposure to quality information
- Combine the best of solitary reflection and social interaction.

The idea here is that students can get writing practice, develop a sense of ownership, and get experience with the practical, legal, and ethical issues of creating a hypertext document. In addition, whatever they write can instantly be read by anyone else and, due to the comment features of the software, further exchange of ideas is promoted [11].

2. Methods
The development procedure in this study follows the steps of developing Borg & Gall (p.3), with adjustments to the needs of researchers. These steps include data collection, planning, product development, as well as validation and testing.

The data collection technique used in the development research was in the form of a questionnaire or questionnaire in the form of a checklist ($\sqrt{}$). This questionnaire is used to assess the feasibility of products from development. Product assessment is carried out by material experts, media experts and social studies subject teachers, while students are asked to provide feedback about the product being developed.

The instrument used for material experts is the validator assessment sheet in the form of a questionnaire. This questionnaire is addressed to material experts. Grid of assessment instruments for material experts includes valid / valid, level of importance, usefulness, learnability, and interest. The grid is arranged in the opinion of Rudi Susilana and Cepi Riyana [19].

The research instrument used for media experts is a validator assessment sheet in the form of a questionnaire. Media experts will assess the feasibility of media blogs. The grid of assessment instruments for media experts is arranged based on indicators of learning product (computer-based) assessment which includes the depth of material, organizing, language clarity, clarity of tables and illustrations, and appearance as delivered by Made Wena [15].

The research instrument used for teachers in this study was a validator assessment sheet in the form of a questionnaire. This questionnaire is intended for teachers to obtain data on the feasibility of the media by using assessment indicators which are adjustments from the opinions of Made Wena [15] and Rudi Susilana and Cepi Riyana [19].

The instrument used for testing the use of the product is a questionnaire aimed at students. Through this instrument data will be obtained which is the student's response. The instrument grid is composed of several indicators given to material experts and media experts who adjust from the opinions of Made Wena [15] and Rudi Susilana and Cepi Riyana [19]. Based on these data, the final product improvement process will be carried out so that it is suitable for use in learning.

This study uses descriptive analysis techniques in accordance with the development procedures that have been carried out. The initial stage of development is done by making the initial product of the blog. The next stage is validation by media experts and material experts, followed by revision stage I. The next stage is the assessment by social studies subject teachers of junior high school, then after the responses and suggestions are obtained, phase II revisions are made. The next stage is the field trial stage and input for stage III revision is obtained. From the three revision stages, the final product of the blog is produced which is ready to be used as a social science learning resource. Quantitative data obtained from respondents through a questionnaire with a Likert scale, analyzed descriptively by steps:

a) rough data collection;
b) scoring for quantitative analysis;
c) the score obtained is converted into a value with a scale of

five with urain as follows:

Table 1. Scoring Assessment Guidelines

Qualitative data	scores
Very good	5
Good	4
Enough	3
Less	2
Very Less	1

Source: Widoyoko [10]

The next stage is to find the average total score of each component using the following formula:

$$\overline{x} = \frac{\sum x}{N}$$ (1)

Information:

$\overline{x}$ = average score

$\sum x$ = total score

N = number of assessors

The next step is to change the average score to be a qualitative value with the Eko Putro Widoyoko [10] model with the following criteria:

Table 2. Classification of Total Assessments

Formula	average score	category
$X > \overline{x_i} + 1,8 \times sb_i$	>4,2	Very good
$\overline{x_i} + 0,6 \times sb_i < X \leq \overline{x_i} + 1,8 \times sb_i$	>3,4 – 4,2	good
$\overline{x_i} - 0,6 \times sb_i < X \leq \overline{x_i} + 0,6 \times sb_i$	>2,6 - 3,4	enough
$\overline{x_i} - 1,8 \times sb_i < X \leq \overline{x_i} + 1,8 \times sb_i$	>1,8 – 2,6	less
$X \leq \overline{x_i} - 1,8 \times sb_i$	≤1,8	Very less

Source: Widoyoko [10]

Information:

$\overline{x_i}$ = Ideal average

sb_i = Ideal standard deviation

X   = Actual score

3. Results and Discussion

The product developed in this study is a blog as a class VII social studies social studies learning resource. The product development phase carried out refers to the development model of Borg & Gall [3], which is tailored to the needs of researchers through several stages, namely:

Data collection is done through field observations and literature studies including about the interest of junior high school students on the internet, the use of the internet by junior high school students related to learning, the conditions of learning in schools, the state of the school, the problems and potential of schools, and so on. At this stage, curriculum analysis is also carried out by identifying basic competencies found in Competency Standards and Basic Social Sciences Competencies in Middle School.

3.1 Planning

1. Determining goals.
2. Arrange material.
3. Grid research instrument.
4. Making assessment validation sheet.

3.2 Product Development

1. Identification of the program, identification of programs for the development of this blog include determining the title, purpose, material and objectives. The title of the blog that was developed was "e-Social". Blog development is intended to be one of the learning resources for social studies subjects in junior high school. The intended target is class VII junior high school students.
2. Making a flow chart, Making a flowchart is the stage of the overall description of the program flow made with certain symbols. Flow charts provide a comprehensive picture of the flow of the program that will be developed from the beginning to completion and fully described.
3. Making a storyboard, After a flowchart is arranged, the next step is making a storyboard. The storyboard contents are detailed explanations of each plot contained in the flowchart. Stroyboard provides a more complete explanation of each path in the flowchart. In the process of developing a

blog, storyboarding is very important to help in the programming process so that products are made according to plan.

4. Programming, In the development of a blog after flowcharts and storyboards and materials have been collected, they are all arranged at the programming stage. At this stage the graphic, video, and also text material are arranged according to the flowchart and storyboard. The blog platform used is a CMS (Course Management System) taken from wordpress. The programming steps are done using the steps provided by wordpress.com.

3.3 Validation and Trial

1. Product validation, validated aspects including material aspects, media aspects and validation of finished products. Material validation is carried out by material experts. Aspects that are of concern to material experts include the validity of the material (truth and actuality of the material), the level of material importance, usefulness, ease of material to be studied, and the ability of the material to attract student learning interest. Then for the media aspect, validation is carried out by media experts. To focus on the assessment of media experts including the depth of material, the order of presentation, clarity of language, clarity of tables and illustrations, and appearance. Finally, as a whole or the product as a whole is validated by social studies subject teachers.

2. Field trials, product designs that have passed the validation stage can then be tested. Pemkaian trials are conducted to determine the feasibility of products developed if used in learning activities. The subjects of the trial in this development were junior high school students of class VII C from as many as 32 students.

3. Completion of the final product, product improvement is done referring to the results of tests conducted on students. Weaknesses and weaknesses found in the trial phase are improved so that the products developed are feasible to be mass produced.

3.4 Validation results
Data on Material Validation Results
Validation by material experts is done twice. In the first stage of validation the total score obtained was 65 with an average score of 2.6 included in the less category. While the second stage validation obtained a total score of 91 with an average score of 3.64 included in the good category. Based on the results of the two validations, the material prepared is worthy of testing.

3.5 Data of Media Expert Validation Results
Validation by media experts is done twice. In the first stage of validation it is known that the total score obtained is 75 with an average score of 3.26 included in the sufficient category. While the second stage validation obtained a total score of 92 with an average score of 4 included in the good category. From the results obtained two times the validation, it can be said that the blog product as an IPS learning resource developed has developed good quality and is worthy of being tested.

3.6 Data on Results of Social Studies Teacher Validation
Assessment by social studies teachers focuses on the aspects of the media and the material aspects which are elaborated in more detailed criteria which include organizing, displaying blogs, conforming material, presenting material, using examples, and using language. Based on the validation conducted by the teacher obtained a total score of 89 with a mean score of 4.45. These results indicate that blog-based learning resources are arranged into very good categories. Learning resources developed are feasible to be used as one of the learning resources for social studies subjects for seventh grade students of junior high school.

3.7 Test Results Data Used by Students
Data on field trial results were obtained from the assessment carried out by VII grade students of junior high school. The assessment was carried out by 32 students from class VII C. The assessment was carried out by students by filling out the questionnaire prepared beforehand. Based on the results of the assessment conducted by students, a total score of 60.63 was obtained with a mean score of

4.33. These results fall into the very good category. Students argue that blog-based learning resources that have been developed are interesting and easy to use.

Based on the description above, it is known that the average score of media validation by material experts is 3.64 with good categories, the results of media validation by media experts are 4 in good categories, validation of blog products by teachers is 4.45 with very good categories, results students' trials amounted to 4.43 with a very good category. Overall, the results showed that the learning resources in the form of blogs developed in the development research were declared feasible to be used with good media quality.

3.8 Product Revision Results

Previously developed blogs have flaws and weaknesses and cannot be tested. So from that the blog that was developed experienced several revisions to improve the shortcomings and weaknesses that exist. Revisions are carried out in accordance with the advice given by experts and teachers of social studies subjects. There are two revisions made in this research and development, more clearly it will be presented as follows:

3.9 Revision I

The first revision refers to suggestions and comments submitted by expert lecturers. The revisions made at the first revision stage are:
1. Actuality and accuracy of the material must be improved. Suggestions from material experts are to compile material using valid books.
2. Completeness of SK and KD and objectives have not been included in the preparation of the material. Suggestions from material experts to add SK and KD to be included in the material texts that will be displayed.
3. The initial appearance of the blog in the header section is too dominant illustration. As per the expert's advice, the media header is replaced by the appearance of images that are more representative of the IPS.
4. On the material menu, if selected, directly display SK and KD which become one page with the material. Suggestions from media experts so that on the material menu a sub menu for SK and KD and material is made.
5. When choosing the material menu, it opens all the material directly on one page so it is less attractive to blog users. Advice from media experts to compile sub-material in links that can be chosen by the user.

3.10 Revision II

At the second stage of the development revision, the illustrations in the material show are considered to be lacking. By media experts it is recommended that the illumination of the material display be added. The goal is that the appearance of the material section is more interesting and students are not easily bored when reading the text.

4. Conclusion

This research and development produces a product in the form of an interactive blog that is used as a learning resource for class VII junior high school students. In the blog there is a home menu, material, practice, and profile. The steps taken to develop a blog are 1) a needs analysis conducted to determine the type of learning resources needed; 2) program identification, carried out to determine the title, objectives, material and objectives; 3) making flow charts as a comprehensive picture of the program flow that will be developed from the beginning to completion; 4) storyboarding as a detailed explanation of each plot in the flow chart; 5) collection of materials to be compiled in a blog; 6) programming is done to compile all the material collected into the blog; and 7) finishing.\

Based on the data obtained from the stages of validation and trial, an interactive blog that was developed as a VII grade IPS learning resource was declared good and feasible to use in the teaching and learning process after going through several revisions. Revisions are based on suggestions, input, comments, and criticism obtained from material experts, media experts, teachers and students. The results obtained are as follows:
1. The results of the feasibility analysis according to material expert validation of the material

displayed amounted to 3.64 with the category "Good" on all aspects of the material.

2. The results of the feasibility analysis according to the media expert's validation of the blog were developed by 4 with the category "Good" in all aspects.
3. The results of the teacher's feasibility analysis of blog products amounted to 4.45 with the category "Very Good".
4. The results of the trial using learning media according to students amounted to 4.33 with the category "Very Good".
5. Based on the results of the experts' validation and product trials, it shows that the learning multimedia can be said to be good and feasible to be used as one of the learning resources especially for social studies subjects in grade VII of junior high school.

Acknowledgments

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