

Development Media Learning Audio Visual Based on Web Blog for Increasing Economy Learning Result

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ABSTRACT

Media is one component that is really needed in learning. Teachers as facilitators in learning are required to be able to provide learning media that is suitable for use in learning. However, based on the results of field observations, it was found that there was still a lack of use of learning media in the learning process. The aim of this research is to develop and implement Web Blog-based audio-visual economics learning media to improve learning outcomes in the Taxation economics subject for class XI IPS students at SMA Negeri 1 Takengon. This research is development research (R&D) using the Four-D (4D) method. This research was conducted at SMA Negeri 1 Takengon, with a population of class XI IPS. The results of this research are based on assessments carried out by validation experts and user responses, an average assessment percentage of 93.70% was obtained in the "very feasible" category, so it was concluded that the Web Blog-based audio-visual learning media developed met the eligibility requirements (valid) to be used as a economics learning media for class XI IPS. The average learning outcome for the experimental class was 85.00 and for the control class 75.00, the results of the independent T-Test were $6.087 > 1.643$ with sig. $0.00 < 0.05$ and media can help students understand the material presented. So, it can be concluded that the Web Blog-based audio-visual economic learning media developed is effectively used to help students improve economic learning outcomes for class XI IPS SMA Negeri 1 Takengon.

KEYWORDS

web blog; media development; learning media; learning outcomes

INTRODUCTION

Education is an important thing in human civilization. Education also influences the development of science and technology which directly influences the learning process and its achievements in motivating students. Achieving student learning motivation is expected to increase human resources in soft-skill abilities. To prepare students' soft-skill abilities that are able to compete in the world of education, ways are needed to increase students' learning motivation in the learning process. This aims to ensure that students can achieve learning goals. On the other hand, success in the teaching and learning process cannot be separated from the role of the teacher, methods and learning media used to foster students' motivation and enthusiasm for learning. Learning media is one of the dynamic elements in learning which is able to create a conducive learning atmosphere. Conduciveness to learning, which is an external factor for students, will influence student motivation in the learning process (Damira, Saragi, & Simbolon, 2023).

The author conducted observations and interviews with the Economics Subject teacher for Class XI IPS at SMA Negeri 1 Takengon, namely Mrs. Selvi, S.Pd. From these

interviews, there were problems that were considered important enough to pay attention to, namely student learning outcomes.

Table 1. Recapitulation of Daily Test Scores for Class XI IPS Students

Class	Student Total	MCC	Failed		Passed	
			Economic Subject	Percentage	Economic Subject	Percentage
XI IPS-1	34	75	24	71%	10	29%
XI IPS-2	37		26	70%	11	30%
XI IPS-3	37		25	68%	12	32%
Total	108		75	69%	33	31%

Source: List of Daily Test Scores for Economics Subject class XI SMA Negeri 1 Takengon 2021/2022 academic year

Based on the results of observations of learning writing at SMA Negeri 1 Takengon class not yet effective and interactive. The teaching and learning process in Economics subjects at SMA Negeri 1 Takengon runs generally, teachers only use learning methods, but do not utilize learning media that is in accordance with current developments, so that the incompatibility of learning media with current developments results in students' disinterest in the learning process and motivation. students decline in following the learning process. This can be seen from the reduced enthusiasm of students in participating in class learning. Apart from that, there are students who are less active and less motivated while participating in learning activities. This is because teachers who teach Economics subjects have not optimized existing facilities at school by utilizing the internet network (wifi) to access web blogs as a learning medium.

According to Sardiman (2014), students' low motivation in learning is influenced by the style and method of delivering material by the teacher. Students who feel bored with monotonous teaching methods, delivery of material that is difficult to understand, lack of involvement in learning media, teachers who enjoy themselves, and so on. If so, students' motivation to continue paying attention to the material will be increasingly weakened if the teacher does not provide a good understanding for their students, in other words.

The existence of such a situation requires improvements in learning. So that the learning carried out by the teacher is not monotonous and boring, the researcher chose a variety of alternative media, namely web blogs. Web-based economic learning media. Blogs are one of the learning media that utilizes current technological developments. This media utilizes internet services. With this media, it is hoped that it can attract and direct students' attention so that they can concentrate on the content of the lesson with the visual meaning displayed or accompanying the text of the lesson material. Apart from that, the advantages of web blogs as learning media include making learning more interesting, making students learn actively and interactively, more flexible, increase interest in learning, direct students to use the internet wisely, enrich the internet with useful content, and cut costs and what blog media provides is also in line with teachers' needs in explaining economic material in a more up-to-date manner.

The use of learning media that is appropriate to current developments can be an innovation for students in understanding every detail of the subject matter so that they are motivated to always follow the learning process and achieve learning goals. On the other hand, the increasingly developed information technology in the era of globalization will certainly have a greater influence on education. One of them is innovation in the use of media to support the learning process in the form of a web blog.

At SMA Negeri 1 Takengon, learning using media is very possible. This is demonstrated by the availability of supporting facilities and infrastructure, namely in the form of a computer laboratory, WiFi network and LCD which can be accessed in every class.

Web blog learning media is a learning media whose activities utilize site or website media. Web blog-based learning is one type of application of electronic learning (E-learning). Web blog learning media is a reference that provides learning material for students that is adapted to school teaching material. Web blog-based learning media has several benefits, namely that it can make learning fun, causing students to remember more learning material, as well as reducing operational costs that students usually incur to take part in learning. With web blog-based learning media, it is hoped that learning activities will be more effective and will be able to improve student learning outcomes.

Abdul (2018) conducted research on Web-Based Learning Multimedia in High School Economics Subjects to Increase Motivation and Learning Outcomes, which concluded that the results of the summative evaluation of the use of Economics web multimedia showed that: (1) there was an increase in student learning outcomes after using Economics web multimedia. in learning activities. The average pretest score was 7.08, while the average posttest score increased to 8.34. There was an increase in student learning outcomes with a percentage of 17.80%. The average gain score for all students from the pretest and posttest results was 0.43 (medium category); (2) There is an increase in students' learning motivation after using Economic web multimedia in learning activities. The average score for learning motivation at the pretest stage was 3.36 (medium category), while the average post test score increased to 3.99 (high category). The average gain score in learning motivation for all students from the pretest and posttest results was 0.38 (medium category).

Based on this background description, it is necessary to develop economic learning media that can change learning patterns so that it makes it easier for students to learn outside of school hours. Web blog learning resources can be used by teachers and students in the learning process. Taxation material is presented on a blog-based website, so that it can make students more interested in learning it.

RESEARCH METHODS

The design used in this research was a pretest and posttest non-equivalent control group design. In order to understand the initial conditions, each group was given a pretest, followed by a posttest to understand the differences obtained after the experimental class was given learning treatment via web blog-based audio-visual learning media and the control class was given learning without web blog-based audio-visual learning media.

The design of the research design used can be described as follows:

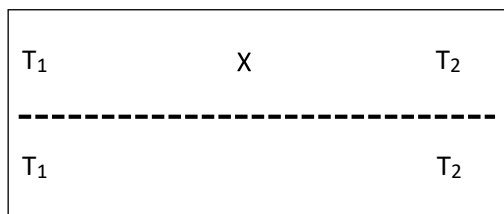


Figure 1. Nonequivalent pretest-posttest

Information:

T₁ : pretest for experimental and control classes

T₂ : posttest for experimental and control classes

X : treatment in the form of application of audio-visual learning media based on web blogs

The method used in this research is a quasi-experimental method. This quasi-experimental method is a research method used to explore certain treatments (Sugiyono, 2016; 2015). In this research, students were divided into two classes, namely the experimental class and the control class. The experimental class is a class that applies learning with audio-visual learning media based on web blogs and the control class is given learning without audio-visual learning media based on web blogs. The success of web blog-based audio-visual learning media which is used as a medium for learning can be observed from the differences in the test scores of the experimental and control groups.

Research variables are variables that influence a part, nature, function, or value of something, be it the form of an object, person, or activity that has a certain value determined by the researcher to be researched, studied, or studied and then draw conclusions (Sugiyono 2016). The independent variable (independent variable) in this research is audio-visual learning media based on web blogs. And the influence variable (dependent variable) is the achievement of student learning outcomes after using web blog-based audio-visual learning media.

Researchers used three types of data collection, namely interviews during the initial survey, questionnaires during feasibility tests and also product trials, and objective questions to test product effectiveness.

This research was carried out in class XI Economics at SMA Negeri 1 Takengon, JL. Lebe Kader No.13 Takengon, Blang Kolak 1, Bebesen District, Kab. Central Aceh, Aceh Province in the even semester of the 2023/2024 academic year.

At this stage the researcher determines the subject and research object to obtain and collect data.

Table 2. Number of Class Xi Ips Students at SMA Negeri 1 Takengon

Class	Total
XI IPS 1	34
XI IPS 2	37
XI IPS 3	37
3 Class	108 Students

The subjects in this research were all class XI IPS students. Meanwhile, the object of the research is the development of web blog-based learning media. Researchers also classified test subjects into two, namely validity expert test subjects and usage test subjects. Validity expert trial subjects can be seen in the following table.

Table 3. Validity Expert Test Subjects

Validator	Criteria	Skill
Material Validator	Have ability in the field of learning materials, minimum academic level of Master's degree, have experience in learning.	Material Expert
Validator Media	Have skills in the field of learning media, minimum academic level of Master's degree, have experience in learning.	Ahli Media
Learning Design Validator	Have experience in learning, minimum academic level S-1, Class XI high school teacher	Learning Design Expert

Table 4. Usage Trial Subjects

Tial	Criteria	Expert
Limited Trial	10 students of class XI IPS 2	Respondent
Extensive testing	30 students of class XI IPS 1	Respondent

This research is research and development using the Four-D model developed by Triagarajan and Semmel (1974). This model consists of 4 main stages, namely: define, design, develop and disseminate.

The following flow diagram for the development of Web blog-based economic learning media which has been described above can be described as follows:

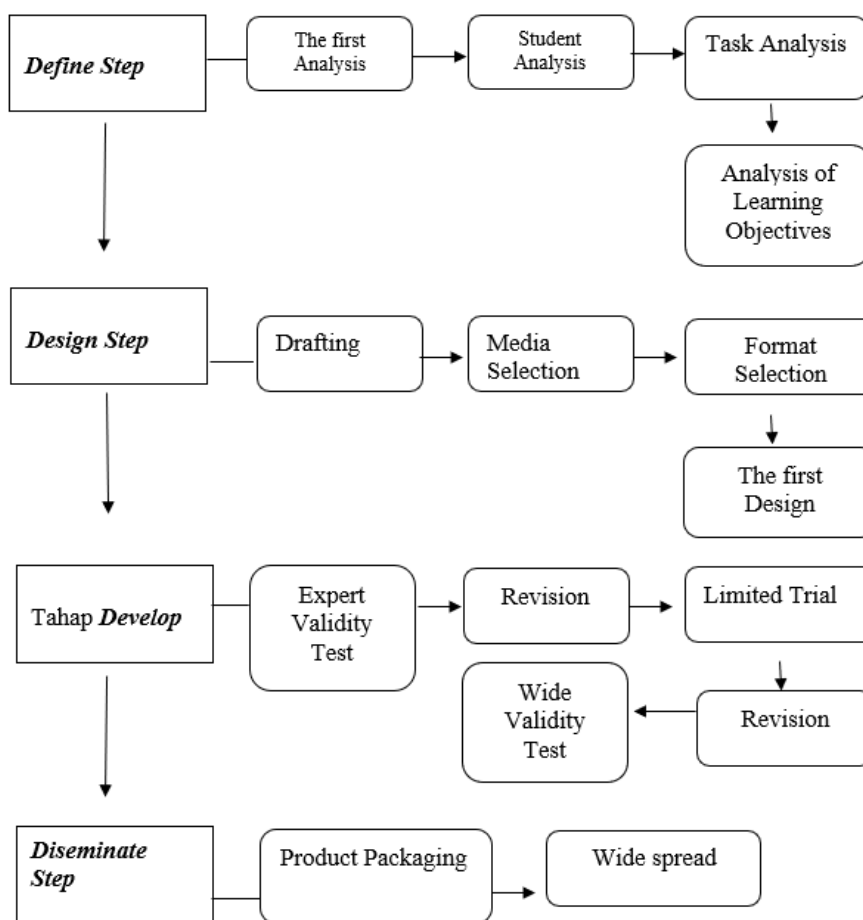


Figure 2. Thiagarajan 4D Development Design

RESULTS AND DISCUSSION

Based on the description and data processing which is adjusted to the formulation and objectives of previous research, the findings in this research are as follows:

1. To optimize the learning carried out, it is necessary to use appropriate learning media by the teacher. The appropriateness of the media used can be seen from the ease and practicality of use by students. Apart from that, it can help teachers in delivering economic learning material. The use of Web Blog-based economic learning media developed in this research is suitable for economic learning for class XI IPS students at SMA Negeri 1 Takengon. Based on the validation expert assessment scores and user test response scores, Web Blog-based economic learning media is practical to

use, helps students understand Taxation material, and makes it easy to facilitate the delivery of material by teachers to students.

2. Research conducted in classes that used Web Blog learning media obtained higher learning outcomes compared to classes that used conventional media. So the use of Web Blog-based learning media can be used as a medium to improve the economic learning outcomes of class XI IPS students at SMA Negeri 1 Takengon.

Feasibility of Web Blog-Based Media

The development of Web Blog-based economic learning media uses the Four-D model development design developed by Triagarajan and Semmel (1974). Consists of four stages, namely defining, designing, developing and disseminating. The process of developing and making learning products is carried out in stages to produce a product that is feasible and can answer and fulfill learning needs. The development carried out by the researchers was by adding animated videos, to differentiate the media developed in this research from other existing Web Blog media. To find out whether the learning media being developed is appropriate or not, it is necessary to carry out an analysis based on an assessment questionnaire, consisting of expert validators, teachers and students themselves. Next, the assessment questionnaire and responses were analyzed using statistical techniques. Qualitative data in the form of very good, good, fair, poor and very poor statements were converted into quantitative data on a scale of 1 to 5 with a score interval of 0-100%.

Web Blog-based learning media is suitable for application in the learning process because the media developed is in accordance with the material to be taught. Very feasible criteria were obtained based on the assessment of material experts in this study after being revised 89% with very feasible criteria. The coverage of the material is appropriate, the assessment aspects are very good, and the material in the media is interesting and clear. Furthermore, the assessment obtained from learning tool experts (syllabus and lesson plans), after revision, was 84% with very feasible criteria. The coverage of the material content is complete, the learning design aspects using Web Blog media are clear, and the usefulness in learning is appropriate. The results of the feasibility assessment by media experts obtained after revision were 88% with very feasible criteria for each aspect validated by learning media experts. The results of the validation assessment by field of study teachers were obtained with a total percentage of 92.8% in the very appropriate category. So that the results of the feasibility assessment according to the validator of the Web Blog economic learning media developed in this research were declared very feasible.

Next, student assessments and responses are carried out by users. Individual trials, small group trials and limited trials were carried out which were then revised according to suggestions given by students. Where the total student response score was 92% with the category very suitable for individual trials. The total student response value was 94.4% with the category very suitable for small group trials. The results of the assessment were then carried out in a limited trial where a total response was obtained, namely 92.11% in the very feasible category.

Based on the assessment carried out by a team of experts and user responses which averaged 93.70% in the "very feasible" category, it can be concluded that the Web Blog-based economic learning media developed has met the eligibility requirements to be utilized and used in economic learning for class XI IPS SMA students. Negeri 1 Takengon.

This media was declared suitable because it had gone through an assessment from 4 experts in the field (material experts, learning tools, media and teachers) who provided criticism and suggestions to become a reference for improving the media to make it better, more appropriate and competent as a media that would be used as teaching material in

economic learning. Apart from that, the media has also been tested directly on users (students), because students are the ones who will use this media in learning, so it is necessary for researchers to find out students' suggestions, responses and comments regarding this media. After going through 3 user trials and making improvements according to student responses, a suitable and valid media was obtained for use in class XI economics learning.

In line with the learning media theory pioneered by Allan Paivio in his research, he found the fact that people remember images more easily than words. Another interesting theory is from Richard Meyer who put forward the cognitive multimedia learning theory. This theory explains the process of absorbing information, with the correct multimedia framework it will simplify and maximize learning outcomes. Apart from that, based on previous research by Tris Sutrisno in 2013, it shows that the use of online presentation media, Web Blog, can improve student learning outcomes, where there is a significant difference between the learning outcomes of students who use online presentation media, Web Blog, and students who use Power Point media. The selection and suitability of material with KI, KD, and indicators in the media being developed is very important in order to avoid errors or inappropriate presentation of material as well as making it easier for students to receive and understand lesson material accurately (Mustofa et al. 2019).

Effectiveness of Web Blog Media

To find out the effectiveness of the Web Blog-based economic learning media developed by the researchers, they conducted a trial using an experimental method by comparing the learning outcomes of 2 classes, where one class used Web Blog-based economic learning media and the second class used economic learning with conventional media. Learning in the experimental class and control class experienced an increase which can be seen from the comparison of the pretest and posttest results that have been given, therefore the researcher looked for differences in the improvement experienced by the two classes by using quantitative analysis to determine the significant increase in the learning outcomes of the two classes.

Before analyzing student learning outcomes, an analysis of the prerequisites for homogeneity and normality is first carried out. The significance values obtained for the pretest and posttest data for the experimental class were 0.200 (pretest) and 0.200 (posttest), then the significance values obtained for the control class were 0.052 (pretest) and 0.058 (posttest). Based on the data obtained with significance > 0.05 , the data is normally distributed. Then a homogeneity test was carried out, where the significance value obtained for the pretest for both classes was $0.225 > 0.05$ and the posttest for both classes was $0.925 > 0.05$, so it can be concluded that the variance of the data from the pretest and posttest results for the experimental class and control class was declared homogeneous.

The results of the research carried out showed that the average student learning outcome for class 00, and the control class pretest result was 42.16. The results obtained from the independent t-test were obtained where $T_{count} > T_{table}$, namely $6.087 > 1.643$ with $Sig (\alpha) < 0.05$ ($0.00 < 0.05$), then H_0 was rejected and H_a was accepted. Therefore, it can be concluded that there is a difference between the average learning outcomes of students in the experimental class who were taught with Web Blog-based learning media and students in the control class who were taught with conventional media.

Media is stated to be effective for use in learning. Apart from seeing student learning outcomes, it is by receiving student responses after learning. Descriptively, the researcher explained that the Web Blog media has the advantage that when learning the media is easily accessible, the material is broader and more abundant, and is very interesting for students.

In line with students' responses after learning with this media, students found it easier to access the material, had more reading sources, and understood the Taxation material more easily. Because there are examples and explanations presented in the media, there are images, animations and material packaged in language that is easier to understand. In line with constructivist learning theory which states that media is really needed in learning, so that it can help students construct the information given in their minds.

Constructivism theory emphasizes teachers' role as facilitators who will create an independent learning atmosphere for students. So, with the existence of media, it is hoped that it can explore students' understanding of the concepts being studied, develop students' curiosity and be able to better construct various concepts into new knowledge (Nurlina, N et al., 2021). The sound of this theory is in line with the learning outcomes of the experimental class which are higher than the control class, as well as improvements in students' understanding through the pretest and posttest.

CONCLUSION

Based on the results of research data analysis regarding the development of Web Blog-based audio visual learning media and the discussion that has been described, several conclusions can be obtained, namely, analysis of the feasibility of the Web Blog-based audio visual learning media developed was carried out by experts and trials on students obtained an average assessment of 93.70% are in the "very feasible" category so that the Web Blog-based economic learning media developed is very suitable for use in economic learning and the results of data analysis that have been carried out show that student learning outcomes using the Independent T-Test test show significant differences between experimental class learning outcomes. and control class. Apart from that, the N-Gain results showed that the increase in learning outcomes in the experimental class was higher than in the control class. So, it can be concluded that the Web Blog-based economic learning media developed is effectively used to improve student learning outcomes in class XI IPS economics subjects at SMA Negeri 1 Takengon.

Suggestion

Based on the conclusions stated above, in accordance with the research results obtained, the researcher provides the following suggestions, namely, the Web Blog-based economic learning media that has been developed is feasible and effective. It is recommended that relevant institutions carry out education or training as well as research on the development of the media used. in learning.

It is recommended that teachers master computer programs, at least operate computers and simple programs better. Economics teachers should try to teach students by utilizing more varied learning media, especially those that utilize technology.

Schools should provide training to teachers regularly to be able to create more innovative and interesting learning media in the teaching and learning process.

For other researchers, based on the limitations experienced by researchers, it is recommended that they test the Web Blog media more widely and combine it with other media to make it more interesting and better for use as a learning medium in schools.

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