DEVELOPMENT OF WEB BLOG-BASED LEARNING MEDIA TO IMPROVE HISTORY LEARNING OUTCOMES OF STUDENTS AT MAN 2 MODEL MEDAN

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Abstract

This study aims to develop and produce learning media, namely the development of Web Blog learning media on students' History learning outcomes at MAN 2 Model Medan. In this study, the type of research used is development research using the Borg and Gall model. The stages are as follows: (1) Research and data collection (research and information collecting), (2) Planning, (3) Development of a preliminary product draft (develop preliminary from of product), (4) Initial field testing, (5) Revising the results of the field test (main field testing), (6) Refinement of the final product of the field test (operational field testing), (7) Field implementation test (operational field testing), (8) refinement of the final product (Final product revision), (9) dissemination and implementation (dissemination and implementation. Experiment with pretest-posttest control group design to determine the effectiveness of Web Blog learning media on students' History learning outcomes at MAN 2 MODEL Medan which were selected by cluster random sampling totaling 45 students as the experimental group and 45 students as the control group and questionnaires to determine the responses of students from the experimental group and the control group to the use of the Web Blog. The value obtained from experts and trial respondents is in the category of "very feasible" with a percentage of 93% and there is a significant difference between the average score of the posttest scores of students in the experimental group and the control group, namely the experimental group score and the control group score. Where the value for group 80> 50 is the control group value, where the value is strengthened by student responses through questionnaires distributed to students regarding the use of Web Blog learning media. Thus it can be proven that the learning media developed is feasible and effective in improving students' History learning outcomes at MAN 2 MODEL Medan.

Keywords: Learning media, Web Blog Development, History Learning Outcome

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INTRODUCTION

Education is a priority of the government in achieving national development, as stipulated in Law No. 20 of 2003 on the National Education System. According to this law (2003), national education aims to develop the capabilities and build the character and civilization of a dignified nation in order to educate the nation's life. It also aims to help learners grow into human beings who believe in and are devoted to the One Almighty God, possess noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens.

According to Hamalik (2018, p. 4), learning is defined as the modification or strengthening of behavior through experience. From this perspective, learning is a process and an activity, not a product or goal. Learning is not merely remembering; it is broader in scope, namely experiencing. The outcome of learning is not the mastery of training results, but rather a change in behavior. This definition by Hamalik is supported by other education experts in Indonesia, particularly those referencing Gagne's view that learning is the result of experience. This definition is considered simpler but more meaningful and significant.

The learning process plays a key role in achieving learning objectives effectively. Sa'dun (2013, p. 112) stated that essential components in the learning process include learning resources and instructional media. With the support of these two elements, the learning process becomes clearer and more directed.

Learning is essentially an effort to create an environment conducive to learning. In other words, learning is the conditioning of the teacher, students, learning resources, instructional media, and subject matter to ensure an effective and comfortable learning environment that can facilitate the achievement of educational objectives. The components involved in the learning process must be thoroughly prepared to ensure that learning activities and outcomes align with the intended goals. The appropriate selection of methods and media also plays a vital role in increasing student motivation and fostering deeper understanding after the learning session.

In the world of education, we recognize various types of learning media. These may include instructional aids or non-instructional tools. Many instructional media in the form of teaching aids fail to attract students' interest and are too complex for teachers to use due to their lack of appeal, monotony, and difficulty in mastery. One current alternative is the development of computer-based instructional media. This is supported by rapid developments in technology and communication, facilitated by internet access, which opens a global window with a single click. The growth of computer technology, particularly software, has become increasingly robust and supports the development of learning media, helping teachers present material more effectively.

The rapid evolution of information and communication technology (ICT) has penetrated all sectors of life and is growing faster than previously estimated. Just four to five years ago, web-based devices like computers and smartphones were expensive and accessible only to a few. Today, these technologies are used by people across all social strata. Many can no longer separate themselves from technology in their daily routines, from morning to night. ICT has rapidly and revolutionarily changed human thought and civilization.

This rapid technological advancement has had a positive impact on the field of education. The government is striving to improve the quality of education by enhancing teacher competence, updating curricula in line with modern developments, improving the quality of educators, and providing educational media ranging from simple to complex. The ultimate goal is to produce graduates who are competent and competitive in knowledge and technology.

Sulasmianti (2018), in her research titled *"The Use of Blogs as Instructional Media"*, found that blogs can address various challenges encountered in the learning process. It is recommended that teachers, especially at the junior and senior high school levels, utilize blogs as a medium for teaching. Through blogs, teachers can not only upload lesson materials and conduct Q&A interactions with students but also perform interactive online learning evaluations.

Sigit (2020), in his study titled *"Developing Web-Based E-Learning to Improve Students' Digital Literacy Using the Borg and Gall Model"*, applied three main steps from the Borg and Gall development model: 1) Preliminary study, 2) Model development, and 3) Model testing. His findings suggest that the design of innovative web-based e-learning

is a relevant and viable solution to the challenges of teaching history in the modern era. The development was found to be user-friendly and practical, though it lacked extended learning materials such as videos of historical sites or broader scopes.

Based on the above, it is evident that to improve the quality of the learning process, appropriate and relevant instructional media are needed. This study aims to develop media for the subject of history. History is a subject taught at the senior Islamic high school (Madrasah Aliyah) level and is essential for students as it provides information about past historical events that can help shape the character of today's youth.

However, in practice, history is often one of the least favored subjects among both students and some teachers. This is because history is perceived as difficult, boring, and monotonous. The most commonly used method is lecturing, where the teacher simply narrates historical events, resulting in one-way communication and disengagement—often causing students to become sleepy. Additionally, the complex names of heroes, dates, places, and event sequences make it hard for students to memorize and recall the material. Therefore, innovation is needed in teaching methods and media.

Students' disinterest in history lessons worsened during the COVID-19 pandemic in 2020. The decline in students' interest in history was evident in previous studies. For example, Siregar, Siregar, and Kasmawati (2023, pp. 135–143), in their study titled *"Analysis of High School Students' Interest in History Learning at SMA Negeri 4 Padangsidimpuan,"* found the following:

**Table 1.1. Survey Results on Students' Interest in History Learning
SMA Negeri 4 Padangsidimpuan**

No	Learning Interest Indicator	Online Learning No. of Students	Face-to-Face Learning Percentage
1	Enjoyment in learning history	35	58.33%
2	Attention during history learning	28	46.67%
3	Curiosity/interest in history	39	65.00%
4	Student involvement in learning history	36	60.00%
	Average Interest in Learning	**35**	**57.5%**

The table shows that, on average, 57.5% of students expressed interest in online history learning, while 77.91% were more interested during face-to-face classes. This 20.41% difference highlights a significantly higher student interest in face-to-face learning compared to online learning. Students appeared more enthusiastic about learning history when taught in person.

This study was conducted at Madrasah Aliyah Negeri 2 Model Medan, an educational institution under the Ministry of Religious Affairs, located in Medan, North Sumatra. The author chose this school because it is a top-tier Islamic school accredited A+ by the National Accreditation Board for Schools/Madrasahs (BAN-S/M) and serves as a pilot project for implementing the Credit-Based Learning System (SKS).

According to the author's initial findings, MAN 2 Model Medan began implementing the SKS system around the 2020/2021 academic year and continues through 2023/2024. As a religious-based institution, the school highly values moral integrity (akhlakul karimah), as reflected in its vision: *"Intellectual and Noble in Character."* This vision has guided the institution to become a center of quality and achievement.

Observations reveal that MAN 2 Model Medan excels in both academic and non-academic fields. For instance, on November 28, 2021, a student from the school won 1st place in the national AoV online gaming competition organized by the Indonesian Ministry

of Youth and Sports in Jakarta. Its A+ accreditation further strengthens its reputation, making it a dream school for many parents and students continuing to secondary education.

Based on preliminary observations with history teachers at the school, it was noted that student enthusiasm for history significantly declined during the pandemic. Initial data collected through student questionnaires on interest in history learning at MAN 2 Model Medan is summarized below:

Table 1.2 Student Interest in History Learning
Grade XI – MAN 2 Model Medan

Statistic	VALUE
Mean	116.8
Standard Error	1.05
Median	118
Mode	118
Standard Deviation	7.05
Sample Variance	49.75
Kurtosis	0.17
Skewness	-0.40
Range	33
Minimum	101
Maximum	134
Sum	5256
Count (No. Of Students)	45

Based on the empirical data above, the researcher is motivated to develop history learning media based on Information and Communication Technology (ICT). The goal is to increase student interest and improve learning outcomes in history for Grade XI students at MAN 2 Model Medan.

RESEARCH METHOD

This research is a type of Research and Development (R&D) study. According to Sugiyono (2021), research and development is a research method used to produce a specific product and to test the effectiveness of that product. The study titled "Development of Web Blog-Based History Learning Media to Improve Learning Outcomes of Grade XI Students at MAN 2 Model Medan" was conducted at one of the schools that has implemented the Semester Credit System (SKS), located at Jalan Williem Iskandar No. 7A, Bantan Timur, Medan Tembung District, Medan City, North Sumatra, Postal Code 20222.

This research activity began after the thesis title was approved by the Head of the Department of the Master's Program in Educational Technology at the Graduate School of Universitas Negeri Medan, around July 2023. The subjects of this study included: permanent lecturers in the Educational Technology Program at Universitas Negeri Medan, the Principal of MAN 2 Model Medan, the Vice Principal for Curriculum Affairs, the Grade XI History teacher at MAN 2 Model Medan, and 45 Grade XI students from the same school.

The R&D procedure used follows the ten steps proposed by Borg & Gall as cited in Nana Syaodih Sukmadinata (2009), which are: Research and information collecting, Planning, Develop preliminary form of product, Preliminary field testing, Main product revision, Main field testing, Operational product revision, Operational field testing, Final product revision, Dissemination and implementation Meanwhile, the research design

consisted of the following stages: data collection, planning, product development, validation, and testing.

Data collection techniques used in this research included observation, interviews, documentation, and questionnaires. According to Miles & Huberman in Sugiyono (2021, p. 117), data analysis techniques consist of three main steps: Data reduction, Data display Conclusion drawing/verification. To ensure the validity of the data, this study used four criteria as stated by Sugiyono (2009: pp. 269–277), namely: Credibility, Transferability, Dependability, Confirmability (Salim, 2018a: p. 118)

RESEARCH RESULTS AND DISCUSSION
Research Results
Discussion of Product Development Results

The development stages of the instructional media using a web blog have been carried out in accordance with the established method. After completing the development process, the next step was a feasibility review conducted by designated experts. The results of this validation process indicated that the instructional media developed using a web blog met the predetermined criteria and was deemed feasible for field testing. It can be concluded that the developed media aligns with the standards for instructional media development as well as the standards for instructional content.

This study aimed to produce instructional media using a web blog, specifically designed for Grade XI students at MAN 2 Model Medan. The media was developed with the goal of improving student learning outcomes in history subjects. The development process involved stages of revision and refinement based on data, trials, and input from subject matter experts, instructional design experts, and media specialists. The evaluation of this media was conducted across several variables, including content validity, presentation, language use, and visual elements.

The responses from instructional media experts, gathered via a questionnaire assessing the web blog-based learning media, indicated that the media was well-designed and met the established design standards. The average expert response score was 98%, showing that the media is considered feasible for use. Similarly, subject matter experts rated the media with an average score of 96%, as it fulfilled the required content and usability criteria for a history subject. According to Kokasih, E. (2014), blogs serve as modern media that support creative and independent learning, as they allow students to explore material beyond class hours.

The advantages of web blog-based instructional media can be summarized as follows:
1. Easy access – The blog can be accessed anytime and anywhere.
2. Flexibility – Materials can be presented in various formats (text, images, videos, interactive links), making it easier for students to absorb content.
3. Interactivity – Teachers and students can engage in comments and discussions.
4. Learning records – All activities and materials are well-documented and archived.
5. Supports independent learning – Students can review the material according to their individual needs.

Nurhayati and Fitri (2017) also stated that "the use of blogs has a significant effect on the learning outcomes of Grade VIII students in social studies subjects." This is supported by statistical tests showing a significant difference between the experimental and control groups. Therefore, it can be concluded that the use of weblogs in history/social studies learning can improve student motivation and engagement, and result in better learning outcomes compared to traditional methods used in control classes.

Instructional media experts gave a feasibility rating of 96%, with very good activity observed. Based on this, the developed web blog is considered valid.

Discussion of Product Feasibility Test Results

The research findings show that web blog-based media can improve student achievement. This is consistent with a study conducted by Abadi & Hanif (2015), who found that "the use of web blog media had a significant impact on students' history learning outcomes in social studies." This was proven with a T-count value of 2.930, which was greater than the T-table value of 1.68595 at a 5% significance level. Furthermore, the study indicated that for teachers, using blog-based history learning media provides ease in teaching activities and increases the efficiency of the learning process, thereby improving students' academic achievement.

Ajat, Sudrajat & Zulkarnain (2013) reported that "student achievement improved significantly when using blog media, from an average of 78.57 to 93.71," indicating a high level of effectiveness.

This study began with a preliminary investigation involving material data collection, instructional design planning, development of the weblog, evaluation, and trials. The media product was then validated by subject and media experts. After validation, the research moved on to further stages, including product revisions, individual trials, small-scale trials, and field evaluations, along with assessments from users. The entire series of steps aimed to produce a high-quality, beneficial product to support the implementation of the teaching and learning process

CONCLUSION

After completing a series of processes and stages in developing a web blog aimed at improving history learning outcomes for Grade XI students at MAN 2 Model Medan, several conclusions can be drawn as follows:

1. The web blog-based instructional media on the topic of the Indonesian National Movement was found to be highly suitable for use by Grade XI students at MAN 2 Model Medan.
2. The web blog-based instructional media on the topic of the Indonesian National Movement was found to be very practical for use by Grade XI students at MAN 2 Model Medan.
3. *The web blog-based instructional media on the topic of the Indonesian National Movement was found to be more effective in improving student learning outcomes compared to the use of image-based media.*

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