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Article

# Development of *WebMakah* Website (Marriage Material Website) to Increase Students' Curiosity at SMAN 1 Balong

Saiful Ihwan\*, Moh. Miftakhul Choiri

<sup>1,2</sup>IAIN Ponorogo, Ponorogo

\*Corresponding Address: saiful.ihwan@iainponorogo.ac.id

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# ABSTRACT

This study aims to develop WebMaKah Website learning media to increase curiosity in grade XI A SMAN 1 Balong. This research uses a type of development research or Research and Development (R&D) with ADDIE. Based on the results of the study showed that (1) The analysis stage which includes the collection of initial information data by conducting field studies and literature studies, 2) the design stage, which is carried out Research on making website designs 3) Development stage, at this stage the stage assembles all components, then the product is validated by design experts with the results of design validation showing a very good predicate with got a percentage score of 88.88%. (4) Implementation Stage, at this stage the website learning media that has been completed is tested on the development of the website by means of group evaluation large, limited and wide-scale practicality test results showed a percentage of 82, 57 and 83.73% respectively and the effectiveness test showed results that this product was effective for improving students ' presentation skills 5) Evaluation stage, at this stage website learning media development products feasible and effective use in accordance with validator assessment and trial results .

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# **INTRODUCTION**

Education is a necessity for every human being. Education is an effort made by someone to improve themselves for the better (Suyanto, 2008). In relation to learning, student curiosity becomes important because that's where the level of student interest arises. Learning that is said to be interesting is learning that can foster students' curiosity.

Student interest can arise with fun learning, one of which is by using interesting learning media. These learning media must certainly be supported by the ability of teachers to

maximize existing technology. The technology can later be made into a variety of learning media that are fun and arouse students' curiosity. (Wulansari &; Listiana, 2018)

In the modern era like today, it is very necessary for a teacher who understands technology, because technology will be very supportive in terms of the use of media or facilities to learn and transfer knowledge to students. (Rusman et al., 2011) Technology has become important in today's era, because with technology we are easy to look for something that we may not yet know by us. More than that, in fact, technology makes learning different and more fun than before in classical tendencies, meaning only using lectures. Teachers in this era should understand technology, so that later learning can be more fun.

Not only teachers on general labels must be able to with technology. Teachers who are religiously literate must also be able to use it. Especially for PAI teachers whose subject matter is highly recommended to use technology, such as Hajj material, where teachers can display pictures about Hajj and its harmony, of course it is interesting among students. One of the tasks of an educator is to make students more active in carrying out the learning process (Hapsara, 2020). In accordance with the applicable curriculum where learning activities are centered on students and teachers only as facilitators, therefore teachers must be able to create a more active, conducive and entertaining classroom situation where one way is the use of media in the learning process According to (Arsyad, 2011) media are all physical tools used to convey the content of teaching material.

However, in fact there are still many teachers who have not mastered technology and ignore the importance of learning media. Based on information from the Ministry of Education and Culture, there are 60 percent of teachers still limited to using technology in 2021. Often students sleep because they feel that learning is boring. This is a concern for researchers, if the above is continued, it is feared that it will have an impact on students' curiosity about the lesson to decrease.

This research is supported by several previous studies including, Research entitled Development of Prezi Interactive Learning Media to foster students' curiosity character, which was researched by (Solehudin et al., 2020). Furthermore, Web-worksheets of science learners integrated the local potential of sugar mills to increase the curiosity of learners created by (Fuadati &; Wilujeng, 2019)

Based on the results of interviews with class XI A SMAN 1 Balong students regarding the development of learning media in PAI subjects, the absence of pictures to explain the material being studied from the PAI LKS book makes it difficult for students to find answers to questions, learning media is limited to the use of power points to deliver learning materials. In the observations, researchers found that many students fell asleep during the lesson, namely when the teacher explained the material. Based on the results of preliminary studies, researchers received information that PAI learning that had been going on was not going well. Students find it difficult to answer questions, especially PAI meters because there are no pictures to explain the material being studied, the media used by teachers is not varied and boring.

Referring to the above issues, researchers try to raise the development of interesting and varied learning media to be applied to students in high school. The product offered is WebMakah-based learning media to foster students' curiosity. WebMaKah is a website created through google sites containing Marriage material in accordance with Islamic teachings. Inside there are various kinds of menus to maximize the existing material. WebMakah-based media is very important because WebMaKah contains material that is more concise and compiled using language that is easy for students to understand then included with images and links that can be selected which will appear material discussions and learning videos related to the material presented so that students have curiosity and can help teachers and students during the learning process in class, especially in marriage material.

So that the research objectives in the development of WebMaKah are: first, to determine the feasibility level of WebMakah-based learning media in PAI learning in class XI A SMAN 1 Balong. Second, to determine the effectiveness of WebMakah-based learning media in PAI learning in class XI A SMAN 1 Balong.

# **METHODS**

This research was carried out using research and development methods (Research and Development). Research and development methods are research methods used to produce certain products, test certain products, and test the effectiveness of certain products. This research was conducted in XI A SMAN 1 Balong with 26 respondents who were members of class XIIA. Researchers conduct research in the development of website-based learning media.

Researchers chose the ADDIE learning development model (Rusdi, 2014) (Analysis – Design – Development – Implement – Evaluate). The development of WebMakah learning media is carried out in several stages. According to (Rusdi, 2014) Stages that must be passed 1) Analysis stage The analysis stage is a process of defining what students will learn, namely conducting need assessment, and conducting task analysis. Therefore, the output to be produced is in the form of characteristics or profiles of prospective students, identification of needs, and detailed task analysis based on needs. 2) Design Stage This stage is also known as making a website design 3) Development Stage is a process to realize the design made into reality. 4) The Implementation Phase is a real step to implement the learning system created. 5) Evaluation Phase is a process to see whether the learning system being built is successful, in accordance with initial expectations or not.

The author can conclude that there are 5 stages in the ADDIE development model in media research, namely: 1) The analysis stage includes needs analysis and curriculum analysis 2) The design stage includes the preparation of teaching material needs maps, making website designs, making research instruments, validating research instruments. 3) The development stage includes the preparation of teaching materials, validation of teaching materials. 4) The Implementation Phase includes testing teaching materials carried out, namely large group trials involving 26 students. 5) The evaluation stage includes assessment with validation sheets of teaching materials by material experts / teachers and media experts as well as questionnaires on the response of class XI A SMAN 1 Balong students to the development of WebMakah-*based* learning media.

# **RESULTS AND DISCUSSION**

# Steps to Development of Web-Based Learning MediaMakah

*Analysis Stage*, in the analysis stage, the things analyzed include the needs of grade XII students and the curriculum, it can be concluded that in teaching and learning activities in the classroom, teachers only use package books, learning media in class only use teacher books and student books, there is no delivery of interesting material that makes it easier for students to better understand the material, especially marriage material.

**Design Stage**, at the design stage there are several things that are done at the product design stage of developing website-based learning media, namely first, making designs on paper in the form of images and patterns that will later be inserted into the website, then looking for logos and themes that match the material to be taught, determining parts of the website and making menus and inserting marriage materials into the website.

**Development Stage**, at this stage of product manufacturing is by assembling all components, then the product is validated by design experts, after getting criticism and

suggestions. This stage is carried out by checking expert validation tests, namely Design and Feature validation. After product development is successfully carried out, the finished product is further developed to be tested for validation or feasibility by involving expert validation as many as three validators. The design and feature validation involved three expert validators who were expert lecturers of PAI Technology Development Postgraduate at the State Islamic Institute of Ponorogo and also PAI subject teachers at SMAN 1 Balong. Here is the design on the home page of the website.



Figure 1. The home page of the website.

In the feature and design validation test, there are seven indicators that are used as assessment, namely the selection of font size in the slide, the selection of font type/font, the display of images in the slide, the systematics of presentation, the display of video in the slide, ease of use, and language (Ramadhani, 2023). To test the validity of the product, researchers use the validator assessment percentage (PPV) formula and determine the interpretation of the assessment using interval length values based on predetermined PPV values.

Table 1. Product Design & Features Validation Test Results

No. Indicators	Σ
A. Font Size Selection in WebMaKah	
1. The font size used is in accordance with the shape of WebMakah	
B. Type/Font Selection	14
1. The typeface used is very clear and easy to read by users	
C. Image Display in WebMaKah	14
1. The clarity of the display of images on the website is very good	
2. The placement of images on the website is understandable intent and	14
The purpose is in accordance with the material	
D. Systematics of Presentation	12
1. The order of website presentation is adjusted to the order of the sub-material in the	
Marriage Provisionsmaterial	
E. Video Display in WebMaKah	14
1. Videos loaded on the website have good and clear image quality	
2. Videos loaded on the website have good and clear sound quality	13
F. Ease of Use	13
1. The product can be executed properly	
G. Language	14
1. The use of Indonesian language is in accordance with language rules	
Number of Validator Answers ( $\sum$ JTV)	12
Highest Total Score Obtainable ( $\sum$ ST)	120
(Number of Validators x Highest Score x Number of Questions)	
Validator Assessment Percentage (PPV) (%)	135

Based on Table 1, the results of the product validity test that have been made there are seven aspects that are taken into consideration for the validity or feasibility of the product for use in teaching. After calculation and data processing it was found that the Assessment Percentage from three media expert validators showed a score of 88.88% which stated that the product had a very high validity score in design and feature aspects because it was included in the range Interpretation score 84-100. From the results of the validation test, it shows that the quality of website-based learning media products is included in the feasible / valid category and suitable for use in the next stage.

**Implementation Stage**, at this stage of implementation, products that have been tested for validity and practicality are then applied to students. In this study, researchers used 26 students who were members of one class. Please note, previously researchers had pre-tested the class, without telling which answers were correct and which answers were wrong. Then the researcher gave treatment by providing a *WebMaKah* website (Website of Marriage Materials). At this stage researchers will focus on the practicality and effectiveness of website products that have been created.

The stage after post-validation revision is a limited product practicality trial involving PAI subject teachers and 10 students in the same class. PAI teachers and 10 students involved will be asked to try using the product independently.

After going through this stage, PAI teachers will be asked to argue about the product that has been tested and provide written comments about the practicality of the product in order to find out the shortcomings and feasibility of the product if used directly in class. Meanwhile, students will be asked to fill out a practicality sheet to find out the shortcomings and feasibility of the product if used directly in the classroom.

A positive response was shown by PAI teachers after carrying out the product installation process and product operation in their devices. According to the science teacher, products can be made and run easily on HP devices and laptops. The material contained is also very good and already contains the material or topic you want to convey. PAI teachers suggest that the product should be added with a running animation that can make the product more attractive.

After getting comments from PAI teachers, the product was also tested on 10 selected students. Students are also involved in practicality tests because later the product will also be distributed to students. The following are the results of practicality tests conducted by students during limited product trials using practicality sheets.

No.	Indicators	Σ			
Tool	efficiency				
1.	Products can be used easily	34			
2.	Product runnibility easily				
3.	The material in the product can be well understood				
Lear	ning				
1.	The materials contained in the product correspond to Intended learning	41			
2.	Products can improve Insights and knowledge	44			
3.	Products can create a sense of pleasure in students	44			
4.	The material contained in the product can help in understanding the concept Marriage materials	46			
Number of Student Answers ( $\sum$ JJS)		289			
Highest Total Score Obtainable(∑ST)					
Percentage of PracticalityAssessment by Students (PPS) (%)					

Table 2. Limited Product Trial Results Through Practicality Questionnaire

Based on Table 5, it can be seen that in each aspect shows different answer results . However, if you look at the final calculation, it can be seen that the percentage of practicality assessment by students is at 82.57 %. If it is based on interpretation criteria that have already been made, the value is in the practical category, so it is worth using with some revision notes.

After limited trials were carried out, there was a major obstacle faced by students, namely difficulties in opening products. This is caused by many factors, including because the signal network is difficult when used simultaneously, plus the lack of clear writing because it uses HP devices so that students have to zoom to get maximum results.

After seeing the results of practicality and consideration of product revisions after limited trials, researchers decided to proceed to the next stage, namely Extensive product practicality testing. At this stage, researchers conduct practicality tests such as in limited trials to determine the success of product application with large-scale respondents. The following are the results of wide-scale product practicality testing involving 26 students.

Table 3. Results of Extensive Product Trials	Using Practicality	Questionnaires
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No.	Indicators	Σ			
Tool	efficiency				
1.	Products can be used easily				
2.	Product runnibility easily				
3.	The material in the product can be well understood				
Lear	ning				
1.	The materials contained in the product correspond to Intended learning	116			
2.	Products can improve Insights and knowledge	112			
3.	Products can create a sense of pleasure in students	111			
4.	The material contained in the product can help in understanding the concept Marriage				
	materials	108			
Number of Student Answers ( $\sum$ JJS)					
Highest Total Score Obtainable( $\sum$ ST)					
Percentage of PracticalityAssessment by Students (PPS) (%)					
		(Practical)			

Looking at the percentage of practicality assessment in wide-scale trials, it was found that the practicality of the product reached 83.73% which if interpreted in the interpretation criteria that had been made, the figure showed practical results and there was an increase in percentage value than when Limited scale trials.

This result was obtained also not without reason seeing from the various designs and features and materials provided were quite complete and the assessment of students was relatively good. This material that is complete with a contextual approach that involves daily life in the form of images and videos will greatly help students to connect existing learning with actual life so that it will make it easier for students to understand the existing problems. This is supported by Hayati et al who stated that an audio-visual learning media can provide an experience for students to be able to clarify the concept of material that is still abstract and can enrich the absorption of students while learning (Hayati et al., 2017)

# Website Product Effectiveness MaKah

To test the effectiveness of the product, researchers used descriptive statistical analysis with statistical tests of pree test and post test with paired Sample T test assisted by the SPSS application. The following are the results of product effectiveness tests that have been carried out.

Table. 4 Paired Sample Analysis t Test									
	Paired Differences				Т	Df	Sig. (2-		
		Mean	Std.	Std. Error	95% Confidence				tailed)
			Deviation	Mean	Interval of the				
					Diffe				
					Lower	Upper			
Pair	PRE TEST -	-13.34615	13.58217	2.66368	-18.83211	-7.86020	-5.010	25	.000
1	POST TEST								

The following are the results of the statistical test of the pree test and post test with paired Sample T test assisted by the SPSS application:

Basis for decision making: based on the GIS (2 tailed) values of 0.00 < 0.05, there is a significant influence before the learning model is carried out using website media. So from the results of the research conducted, it can be seen that the learning media of the *WebMakah* website has a significant effect on the curiosity of grade XI A SMAN 1 Balong students.

*Evaluation Stage*, This process focuses on seeing whether the learning system being built is successful, in accordance with initial expectations or not. From the results of existing research, it is proven that *WebMaKah* website products are feasible and effective to be used in accordance with the results of the validitor assessment and test results.

# CONCLUSION

The website-based learning media developed by this researcher uses *the Research and Development* (R&D) method. The steps taken by researchers in this study are: 1) The analysis stage which includes collecting initial information data by conducting field studies and literature studies;, 2) Design stage, which is carried out research to design a board story using student book references. 3) Development stage, at this stage of product manufacturing is by assembling all components, then the product is validated by design experts and material experts, after obtaining criticism and suggestions then 4) Implementation Stage, at this stage the website learning media that has been completed is developed and validated by experts then tested towards the development of website media by means of large group evaluations. 5) The evaluation stage, at this stage the website learning media development product is feasible and effective to use in accordance with the validator assessment and trial results. Based on the results and discussion above, it can be concluded that the results of expert validation analysis in terms of design and features received a percentage score of 88.88%. The results of the effectiveness analysis show the results that this product is effective for increasing the curiosity of students.

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