Development of Web-Based Islamic Religious Education (PAI) Learning Media at Private Elementary School PAB 5 Klumpang

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Abstract

This study aims to determine the results of the development of valid and practical web-based Islamic Religious Education (PAI) learning media. The development model used is the 4-D development model (Four D-Model). This study was conducted at Sd private PAB 5 Klumpang with research subjects of 30 students and 1 PAI teacher. The instruments used were validation sheets, student activities, teacher and student responses. The data collection technique used was the instrument, namely observation sheets and teacher and student response questionnaires. The analysis used was qualitative descriptive statistical analysis. Based on the results of the research and development, it showed that the media developed was declared valid and worthy of trial. The results of the practicality trial showed that web-based learning media was practical because it had met the criteria with the results: 1) student activities in learning were carried out well as expected, 2) teachers gave very good responses and, 3) students gave good responses to learning media. So it can be concluded that in the development of learning media, it meets the criteria of valid and practical use in the learning process, especially in PAI lessons in grade VI.

Keywords: Development, Web Learning Media, Islamic Religious Education

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Introduction

The rapid development of information technology in the current era of globalization cannot be avoided anymore its influence on the world of education, so the role of the government needs to always make adjustments to improve the quality of education. Efforts to improve the quality of education can be done, namely by adjusting the use of Information and Communication Technology (ICT) which will provide great opportunities for improving the quality of learning. In this case, it means that the demands of the learning delivery process are expected to take place effectively, which is marked by the use of relatively small learning tools and resources.

Modern learning activities refer to the paradigm of student-centered learning that provides opportunities for dominant students to play an active role in completing subject assignments and seeking information through learning resources. While teachers act as facilitators, motivators, and evaluators of learning. So that both teachers and students each have certain roles.

The delivery method using learning media will encourage a teacher to shift his position as the main source of information to a facilitator for students both inside and outside the classroom. The use of media in learning is highly prioritized in order to generate interest in learning, motivation to learn, and stimulate students to play an active role in the learning process. Through the use of media, it is expected to make it easier to convey the material given and can improve the quality of learning. According to Edgar Dale (in Azhar Arsyad, 2011) on the cone of experience from the most concrete to the most abstract level, starting from students participating in real experiences, then moving to students as observers of real events, continuing to students as observers of events presented with media, and finally students as observers of events presented with symbols (symbols) so that students can determine their own learning experiences. Therefore, learning media is very important as a means of delivering material in the learning process by teachers to students.

But in reality in the field there are still many teachers in delivering material with conventional methods. Teachers in delivering material using conventional methods do not utilize media and are less innovative so that learning is not optimal. This condition occurs at SMP Unismuh Makassar, especially in the subject of Islamic Religious Education (PAI).

One of the reasons teachers do not utilize media is the lack of knowledge about using media, so teachers deliver learning materials in a classical way using the method lectures. This tends to make students bored and eventually become passive in receiving lessons. When learning activities take place in class, students show their disinterest. When the teacher explains the lesson material, many students are less interested and less motivated to learn so that students do other activities. When students are asked about the use of media in the learning process, they answer that the teacher uses media but it is less interesting. So we (students) are less motivated to learn. In fact, school facilities support the use of learning media such as wifi, projectors, computers/laptops, and others. The complexity of problems in Islamic Religious Education (PAI) subjects has an impact on learning outcomes. PAI learning should not be carried out carelessly. What is meant is that PAI should not be carried out without thorough preparation, does not have a clear learning management concept, is monotonous, boring, or other things that are similar to negative conditions. If this is done, it will have implications for the quality of PAI learning that is carried out, which ultimately affects the achievement of PAI goals itself (Khairan & Verawati, 2017).

Efforts that can be made to improve the quality of learning through the use of web-based learning technology (e-learning). In learning technology, media is a supporting tool for the learning process. According to the Association For Education and Communication / AECT (in Muslim, 2018) media is any form that is programmed for a process of distributing information). The web

is a network of networks that allows access, viewing and storing documents that can include text, data, sound, and video (Sharon E Semaldinho. et al., 2011). Web-based learning media is a learning activity that utilizes site media that can be accessed via the internet network. Online learning is a global network facility for delivering teaching materials and utilizing them to communicate between teachers and students, students and learning resources (Dabbagh & Banna - Ritland, 2005 in Dewi Salma, 2012). The learning media is a system that can facilitate teachers and students to learn independently, in a variety of ways, and enjoyably. The web has the potential to be developed as a learning medium. At least the material on the web can enrich knowledge outside the face-to-face learning process. In addition, through the web, material can be presented more attractively, because the web can be equipped with graphics, illustrations/pictures/photos, videos, and so on.

From the various opinions above, the web has the potential to be developed as a learning medium because through the web that can be accessed anytime and anywhere, the student learning process is not limited to the effective learning hours available at school. Based on this, this research will develop a Web-based Islamic Religious Education (PAI) learning media as a learning medium for Class VIII students of SMP Unismuh Makassar.

Research Method

This research method is research and development (Research and Development) to produce a web that is applied to the subject of Islamic Religious Education (PAI). The model used in this research and development is a model developed by S. Thiagarajan including the following stages: The first stage of definition (define); The definition stage as a basis for compiling the design of learning media. Activities carried out in this stage are initial-final analysis, student analysis, material analysis, task analysis, and specification of learning objectives. The second stage of design; this stage is to prepare a prototype of web-based media for problem solving. This stage includes the steps of media selection, format selection, and initial design of media development. The third stage of development; this stage is to produce media that has been revised based on input from experts/specialists or after testing. The fourth stage of dissemination (Disseminate) at this stage was not carried out, so this study was only carried out until the development stage. The data collection technique consists of two components, namely observation and questionnaires. The instrument developed in this study is an instrument that has been validated by two validators to assess the suitability of the indicators and the feasibility of its use. In this research and development, descriptive analysis techniques are used to analyze data by describing or depicting data that has been collected from the development results, validator responses, student activities, and teacher and student responses in the trial design to obtain the web-based learning media that was developed.

Student and teacher response data were obtained from a response questionnaire to web-based learning media in the learning process. Furthermore, it was analyzed using percentage analysis. In detail, the following analysis: a) Calculating the number of students who responded, b) Determining the percentage of categories for positive student responses. Analysis of student and teacher responses can be calculated using the formula:

$$Pr = \frac{n}{N} \times 100\%$$

Information:
Pr : Percentage of responses; n : Many students gave positive responses;
N   : Many students filled out the student response questionnaire.

To categorize teacher and student responses, the categories in Table 1 below are used:

Table 1. Score Interpretation Criteria

Percentage (%)	Criteria
X ≤ 25	Not good
25 < X ≤ 50	Not good
50 < X ≤ 75	Good
X > 75	Very good

(Source: Riduwan, 2011)

Result and Discussion

The results of the analysis at the stages of defining initial-final analysis, student analysis, concept analysis, task analysis, and specification of learning objectives through observation activities, discussions with Islamic Religious Education (PAI) subject teachers, it is obtained that the use of learning media is not optimal and learning tends to be dominated by teachers so that students feel bored and passive in learning. Seeing these problems, it can be said that it is necessary to carry out the development of learning media as a need to achieve the learning objectives that have been set.

Next, at this stage, the design aims to design a prototype of web-based learning media for problem solving. The media used in the implementation of learning uses website-based learning media. The initial design of this learning media is a prototype that will be developed, from the results of this design, a prototype of website-based learning media is obtained which will then be developed through the stages of validation, revision and limited trials. The initial design in the form of a prototype of a web-based Islamic Religious Education (PAI) learning media design is temporary (hypothetical) which will be assessed by 2 (two) experts. The initial design of the learning media includes: a learning media guidebook, Islamic Religious Education (PAI) materials, Islamic Religious Education (PAI) learning media, student activity observation sheets, teacher response sheets, Learning Implementation Plans (RPP), and student response sheets. At this development stage, the aim is to produce learning media that has been revised based on input from experts or after conducting limited trials.

The results of expert validation involving two expert validators consisting of one material expert validator and a media expert. The results of expert validation of materials, learning media, teacher response instruments, student activity sheets, student response instruments and Learning Implementation Plans (RPP) for web-based learning media have "strong relevance" with a validity coefficient of more than 75% or V> 75%, so that the measurement results are valid and suitable for use.

Meanwhile, the results of the practicality of the developed learning media can be known based on student activities, teacher responses and student responses: Assessment of student activities, namely: 1) paying attention to teacher explanations, 2) paying attention to the material on the media, 3) providing questions as feedback on the use of media, 4) using web learning media well, 5) discussing materials, and 6) behavior that is not relevant to learning activities shows that the results of observations of student activities in learning activities are in the very active criteria.

The results of the assessment of teacher responses after using learning media. which include: 1) aspects of attractiveness, 2) aspects of color, 3) aspects of sound and 4) aspects of images/videos.

The results of the analysis of teacher response data after conducting learning can be seen in table 2 below:

Table 2. Results of Analysis of Teacher Responses to Educational Learning Media Religion Web-Based Islam (PAI)

No.	Aspect	Criteria	Mark	Percentage (%)	Category
1.	Attraction	a. The layout of content on the web attracts attention	4	100	Very Good
		b. The appearance of the web attracts attention	3	75	Good
		c. Complete coverage of material in the tutorial website	4	100	Very Good
		d. The web is relevant to the material being studied	3	75	Good
		e. Using communicative language	4	100	Very Good
2.	Color	Harmony of the color of the text and image with the background color	4	100	Very Good
3.	Voice	a. The sound system in the tutorial website is eye-catching	4	100	Very Good
		b. Audio clarity	4	100	Very Good
4.	Picture	a. Images and videos on the web attract attention	4	100	Very Good
		b. Image clarity	3	75	Good
		c. Accuracy of image size	3	75	Good
	Average		3.57	89	Very Good

Based on the analysis results from table 2, the teacher responses obtained an average value of 3.57 (89%) which is in the very good category.

Meanwhile, the results of the analysis of student responses to web-based Islamic Religious Education (PAI) learning media can be seen in the following table:

Table 3. Results of Analysis of Student Responses to Web-Based Islamic Religious Education (PAI) Learning Media

Category	Frequency	Percentage (%)
Not good	0	0
Not good	3	14
Good	11	53
Very good	7	33
Amount	21	100

Based on table 3, it can be explained that out of 21 aspects asked to students, 7 aspects or 33% meet the criteria for very good, 11 aspects or 53% meet the criteria for good, there are 3

aspects or 14% meet the criteria for less good. So it can be stated that students' responses to web-based Islamic Religious Education (PAI) learning media are in the good category. This can be seen in the following bar chart:
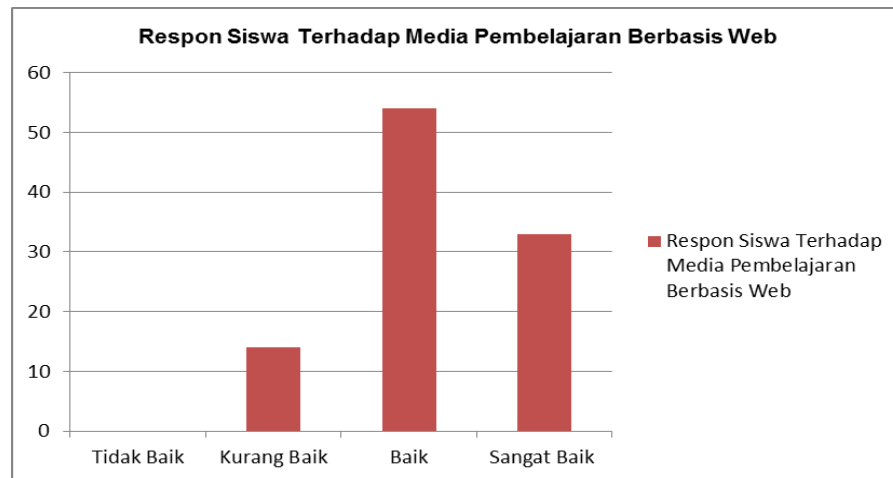

Figure 1. Bar Chart of Student Responses to Islamic Religious Education (PAI) Learning Media

Based on the results of development with philosophical considerations where the media is developed based on the needs in the learning process so that it can provide benefits for schools, teachers and students. Based on the results of the development through the content validation stage carried out by two experts, revising the design results and providing assessments so that the measurement results carried out are valid and suitable for use.

In the limited trial of student activity shows that based on the results of observations of student activity in learning activities are in the very active criteria. The teacher's response shows that after carrying out learning activities, the teacher gave a good response to the media, so that web media can be used and the student's response after participating in learning activities obtained a good category which means that the media developed in Islamic religious education subjects received a good response from students. So it can be said that in the development of learning media activities meets the criteria of valid and practical use in the learning process

Discussion

Learning media developed through a series of namely, expert validation, revision and limited trials of learning media so that valid and practical learning media are produced. The results of the assessment from the validator stated that all components in research namely: a) media validation, b) material validation, c) teacher response questionnaire validation, d) student activity observation validation, e) student response questionnaire validation, and f) validation of the learning implementation plan were declared valid and valid with a revision worthy of field trials with revisions. So that revisions were made based on expert advice which were then tested.

The results of the limited trial for the practicality criteria have met the criteria, the practicality components of the web-based Islamic Religious Education (PAI) learning media according to the results of observations of student activities that have been analyzed to determine the frequency of each category of student activities observed during learning, namely: paying attention to teacher explanations, paying attention to material on the media, giving questions as feedback on the use

of media, using web-based learning media well, discussing material, and behavior that is not relevant to learning activities show that the results of observations of student activities in learning activities are in the very active criteria so that by using web-based learning media students can learn actively. This can certainly encourage teachers to always pay attention to strategies in delivering learning. As stated by (Eva & Iffah, 2019) in their research, learning strategies may be good for certain topics or certain situations and certain conditions, but may not be appropriate for other topics and situations. Likewise, a learning strategy is considered appropriate for students with certain characteristics, conversely a learning strategy is not appropriate for other student characteristics. Here, teachers are required to be able to adjust to the school environment, student characteristics, and subject matter in order to be able to apply good and appropriate strategies for each class according to the characteristics of their students. Other factors that can influence students' interest in learning are external factors such as school atmosphere, home atmosphere, learning design, teacher strategies in delivering learning and school facilities and infrastructure can also make students' interest in learning low. Thus, the media developed is practically used in learning because it can have a positive impact on students. So it can be concluded that the media has provided stimulation to students.

Meanwhile, from the results of the analysis, all aspects stated in the implementation of learning using web-based Islamic Religious Education (PAI) learning media received positive responses from students and teachers. The criteria for practicality based on student responses from 21 aspects asked to students, 7 aspects or 33% met the criteria for very good, 11 aspects or 53% met the criteria for good, there were 3 aspects or 14% met the criteria for less good. The criteria for web media based on teacher responses were the same as practicality criteria based on student responses. The results of the analysis of teacher responses to the use of web-based learning media stated that they received positive/very good responses from teachers.

The criteria for web media based on teacher responses are the same as the criteria for practicality based on student responses. The results of the analysis of teacher responses to the use of web-based learning media were stated to have received positive/very good responses from teachers. So it can be said that web-based learning media can help teachers and direct students to learn in achieving the desired goals. Learning innovations that utilize internet/web media so that learning can be of interest to students, teachers are expected to be able to use internet technology because it can be an alternative in designing more interesting, interactive, and varied learning (Agustin and Samsudin, 2015).

From the results of the development trial, it was obtained that the value of the implementation of the learning media can be said to be practical because all components that were assessed in the observation of student activities, teacher and student responses received good responses so that the media met the criteria of practicality. This shows that the learning media that has been developed can be used in Islamic Religious Education (PAI) learning according to the specified material.

Some findings obtained by researchers during the implementation of the trial of the development of web-based learning media can be described as follows: 1) At the stage of implementing the limited trial of learning media, there were still some students who could not use the media, this was probably because they were not used to using electronic devices. 2) The level of student activity in the implementation of learning was very high. This was because students paid attention to the teacher's explanation and the material on the web-based learning media, so that students did not do things that were not relevant to learning activities. 3) Can increase student learning motivation to follow the learning process.

Conclusion

The results obtained in the field regarding the implementation of Islamic Religious Education (PAI) learning, show that it is very important to develop learning media in overcoming problems, the media developed in overcoming problems is Islamic Religious Education (PAI) learning media in the form of a website. The results of the development through the validation stages carried out by two experts revised the design results and provided an assessment so that the measurement results carried out were valid and suitable for use with slight revisions. In a limited trial of student activities, it showed that student activities in learning activities is in the very active criteria. The teacher's response shows that after carrying out learning activities, the teacher gave a very good response to the media developed and the student's response was in the good category. So it can be said that the results of the development of learning media meet the valid and practical criteria for use in the Islamic Religious Education (PAI) learning process.

Suggestion

Based on the results of the study, discussion and conclusions, the author suggests that: 1) the results of this study are only at the stage of limited trial development. Therefore, it is suggested that further research can be implemented more widely in other schools through the disseminate stage so as to obtain better and deeper results. 2) Islamic Religious Education (PAI) teachers are expected to be able to apply learning media not only in the material of the Hajj and Umrah but also in other materials that are appropriate in learning so that students can be motivated to study the material being studied more deeply. 3) For schools to better prepare facilities and infrastructure so that the learning process is more effective by using web-based learning media

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