LIGHTHOUSE

The development of interactive video-based learning model for students in sunday school

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ABSTRACT

Learning in Sunday School is delivered conventionally, which was based on manuals. The delivery of this material requires a more attractive appearance and packaging so that students easily understand it. Along with technology development, the learning process can use media to help achieve learning objectives. Learning media can take advantage of technological products, one of which is in the form of videos. This study aimed to develop interactive video-based learning media on learning materials. So that student learning outcomes are expected to increase. The method used in this research is research and development (R&D). The steps used are 12 steps: researching and testing to create a product that does not yet exist. The subjects in this study were elementary school students and junior high school students totaling 24 students. The data collection technique used observation, namely observation sheets for product validation, special tests (pretest and posttest) for students, and the responses of Sunday school supervisors. The data analysis technique uses paired samples test and normalized gain approach analysis. The results of the assessment of media experts with very decent qualifications. The evaluation of material experts with decent capabilities. The study found that this interactive video-based learning media was declared to have the feasibility to be used and was proven to improve the learning outcomes of Sunday School students on the testing material. Based on these conclusions, educators, especially Sunday school teachers, are expected to use this interactive video as a medium in the learning process.

Introduction

Education in Indonesia aims to provide knowledge, understanding, and teaching. Education is a conscious and planned effort to create a learning atmosphere and learning process. So that students actively develop their potential to have spiritual and spiritual strength, self-control, personality, intelligence, morals, noble character, and the skills needed by themselves, society, nation, and state. Education is a significant investment that determines the future of the country.

The development of technology and information is increasingly advanced and has an essential role in education. Through the development of technology and data, learning is packaged effectively and efficiently by using learning media as a product of the progress of the times. Understanding Media is a tool to stimulate students so that the learning process occurs (Hamiyah, 2014: 260). The word media comes from the Latin medium, which means intermediary or introduction (Sadiman, 2012: 6). Media is a tool in the form of anything that can be used to convey messages or information so that the recipient of the message can receive or know and understand the message said clearly. As did the Buddha in expounding the dharma not only by using the lecture method, but the Buddha repeats his discourse using narration, description, and analysis. Buddha also conveys teachings through stories, poems, and media because the most important thing is the meaning given by the Buddha (Mukti, 2006: 319).

The primary function of learning media is a tool in the teaching and learning process so that students can well receive the material presented by the teacher. Teachers have a responsibility to teach for the benefit of students. "Like Cunda based on love, what a teacher should do is seek happiness for his students. That's what I do, driven by love for you" (M. I, 46). Learning media can fulfill three main functions if the Media is used for individuals, groups, or large groups of listeners, namely 1) motivating interest or action, 2) presenting information, and 3) giving instructions to get the results of the expected motivation with the use of media. Students get interested and stimulation to learn and aim to provide changes in attitudes, values, and emotions (Kurnia: 2017). Learning media must also be able to provide a pleasant experience and meet the needs of students.

Most Buddhist Sunday School (SMB) material is delivered textually or based on manuals. The material seems difficult to understand because it is in the form of a long discourse. The Buddhist Pancasila material consists of various explanatory speeches regarding the meaning of Buddhist Pancasila, the different Buddhist Pancasila, and how to implement them. Based on the information received at the Dharma Citra Buddhist Sunday School (SMB), the learning process has not optimized learning media. The delivery of learning materials is still entirely using books. The method used by the teacher to deliver the material in the lecture method, play, and the material is wholly taken from the textbook. Sunday school teachers also use media in the form of music and Buddhist songs to encourage students to learn. Of course, the media has not helped the teacher to convey the material optimally.

Seeing from the problems that arise, researchers have an innovation to design a learning media for Buddhist Sunday School (SMB) on the Buddhist Pancasila material. In addition, there are studies conducted (Fadhli:2015) entitled Development of Video-Based Learning Media for Class IV Elementary School, which have been proven to have achieved an average learning outcome score of 71.3. So that researchers are interested in conducting research and development with the title "Development of Interactive Video-Based Learning Media on Buddhist Pancasila Materials.

Methods

This type of research is research and development (R and D). Research and development (R and D) is a research method used to produce specific products and test their effectiveness of these products (Sugiyono, 2016a: 297). This research is included in the research "Research and Test to Create a Product that Doesn't Exist." This type of research has the understanding that the analysis is carried out to be able to create new products that are creative and original. Tested values (Sugiyono, 2017b:47). These steps of the study with the R and D for researching and testing to create Products that don't exist" adopt the theory developed by Sugiyono (2017b: 48). The steps are illustrated in the following figure.
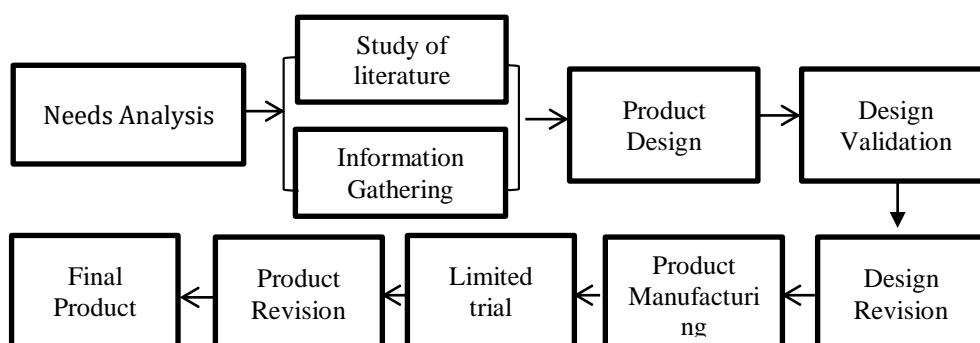

Figure 1. R&D Research Steps (Source: Sugiyono, 2017: 48)

According to Sugiyono (2017b: 455), research and development type "research and test to create new products" is done by testing and analysis. The data obtained from the expert test, using descriptive analysis of the percentage using a percentage interval scale is 16%. The data results are then interpreted as listed in the following table.

Table 1. Kriteria Skala Interval Deskriptif Presentase

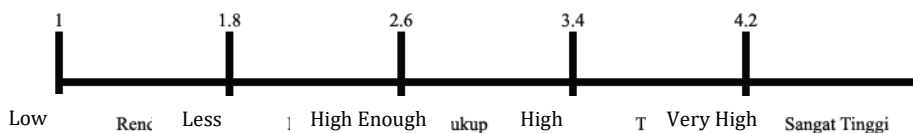| Category	Qualification	Interval
5	84% - 100%	Very Worthy
4	68% - 83,99%	Worthy
3	52% - 67,99%	Decent Enough
2	36% - 51,99%	Less Worthy
1	20% - 35,99%	Not Feasible

Figure 2. Analysis Result Rating Scale

If the results obtained have a percentage value of 20-35.99%, then the learning media is classified as an inappropriate qualification. Analysis of the data obtained from the trial will be calculated using quantitative analysis. In this calculation, the researcher uses the formula for comparing experimental results, which is as follows.

$$(O_1 >< O \qquad (2)$$

Information:
O1 : Pretests Result
>< : Treat (learning with learning media)
O2 : Posttest Result

From the pretest-posttest value data obtained, it can also be seen that there is an increase in learning outcomes (N-Gain) or that the media has usefulness values to support learning outcomes. According to Niarti (2017: 97), the normalized gain formula calculates the increased amount.

$$g = \frac{Posttest\ score - pretest\ score}{Maximum\ possible\ score - pretest\ score} \qquad (3)$$

The calculation results are interpreted using the gain index (g) and are shown in the following table.

Table 2. Normalized Gain Index Value

Normalized Gain Index	Classification
(g) >0,70	Tall
0,30 < (g) 0,70	Currently
(g) <0,30	Low

(Source: Niarti, 2017: 97)

Information:

Based on this classification, it can be explained.

1. If the normalized gain value is highly classified, then the learning media has a high usefulness value.
2. If the normalized gain value is in the medium classification, the learning media used has a moderate usefulness value.
3. If the normalized gain value is in the low classification, then the learning media used has a low usefulness value.
4. Students' responses to learning media are calculated and analyzed by simple quantitative calculations using percentages. The calculation formula is as follows.

$$Score\ \frac{\sum score}{\sum total\ score} \times 100\%$$

The data results are then interpreted as listed in the following table.

Table 3. Percentage Scale Criteria

Category	Percentage	Qualification	Classification of Ease
4	86-100%	Very interesting	Very easy
3	76-85%	Interesting	Make it easy
2	56-75%	Quite interesting	Easy enough
1	<56%	Not attractive	Not easy

(Source: Sugiyono, 2011)

Findings and Discussion

The results of this research and development are in the form of interactive video-based learning media products for Buddhist Pancasila. Based on internal tests by media and material experts, it was found that the analysis of 4 assessment indicators revealed that the developed media had been declared to meet the eligibility standards. So

overall, the media has passed the validation test with an average rating of excellent or high qualification. The stage to determine the effect of interactive video learning media that has been developed is to conduct field testing. This is done to determine the value of usefulness or effectiveness by giving students special tests, namely pretest and posttest, and attractiveness tests by providing a Sunday school supervisor response sheet.

Based on a special test, information was obtained that student learning outcomes differed before and after using the media. The results of the SPSS 17.0 calculation, the results obtained indicate an increase in learning outcomes for the special tests given. These results can be seen from the mean value, which has differences and increases; the posttest (8.30) is greater than the pretest (5.78). The test results show the correlations value of 0.579 or 0.579x100% = 57.9%. While the significance value of 0.000 means 0.000 <0.05. Meanwhile, judging from the t-count value of -7.465, it means -t-count (-7.465) < -t table (-2.074).

The qualification of the usefulness of learning media based on the calculation (N-gain) of the special test is 0.59. The value of 0.59 is in the normalized gain index value of 0.30 > (g) < 0.70 and in the medium classification. Furthermore, based on the Sunday school supervisor's response, the results showed that the attractiveness value was 91.25% and was in the category four value with desirable qualifications. So it can be concluded that this interactive video-based learning media is interested in motivating Sunday school students to participate in learning.

The next stage is the application of learning media at the research site, namely at the Buddhist Sunday School (SMB) Vihara Dharma Citra Bandar Lampung. In the operational test, special tests were also carried out in the form of Pretest and Posttest. The special test scores showed increased student learning outcomes before and after using interactive video learning media. Based on the calculation results of SPSS 17.0, it can be seen that the mean value has differences and increases; namely, the posttest (8.54) is greater than the pretest (6.46). The test results show the correlations value of 0.569 or 0.569x100% = 56.9%. While the significance value of 0.000 means 0.000 <0.05. Meanwhile, judging from the t-count value of -10.991, it means -t-count (-10.911) < -t table (-2.069).

The qualification of the usefulness of learning media based on the calculation (N-gain) of the special test is 0.52. The value of 0.52 is in the normalized gain index value of 0.30 > (g) < 0.70 and in the medium classification. While the attractiveness test by the Sunday school builder can be seen that the learning media that has been made has an attractiveness value of 93.75% and is in the category four value with exciting qualifications. So it can be concluded that this interactive video-based learning media is interested in motivating Sunday school students to participate in learning.

Conclusion, Limitation, & Recommendation

Based on the results of research and development discussions on interactive video-based learning media on Buddhist Pancasila material based on special tests, information was obtained that student learning outcomes had differences between before and after using learning media. So it can be concluded that this interactive video-based learning media can be stated to have benefits in motivating students in learning.

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