




Learning Model Development: Explainer Video-Based Learning Media for Elementary School Students

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ABSTRACT

The purpose of this research is to develop explainer videos in elementary schools. This research and development were carried out because the learning process in elementary schools was still conventional, namely the lecture method, and was fixated on manuals. The use of media had not been carried out optimally. The delivery of each material requires a more attractive appearance so that students easily understand it. Along with the development of technology in the learning process, media could be used to help achieve learning objectives. One learning medium in the form of technology products is animated video. So those students are expected to understand the material, and learning can be done effectively and more efficiently. This research was conducted at the Bodhisattva Buddhist School in Bandar Lampung. The method used in this research is research and development or research and development level 4. The steps used are 12 steps: researching and testing to create products that do not yet exist. The subjects in this study were students, totaling 17 students. Data collection techniques used observation, namely observation sheets for product validation, special tests (pretest and posttest) for students, data analysis techniques using paired samples test, and normalized gain approach analysis. The overall assessment results were given by validators of media experts, material experts, and linguists in the "very decent" category. The result of this study is that the explainer video-based learning media has the feasibility to be used and is proven to be able to increase the effectiveness of learning in elementary schools

KEYWORDS

Explainer video development; learning model; Learning innovation; school teaching

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Introduction

Education is an essential element in human life. Education is a conscious action and a planned program to create a learning atmosphere and learning process. Students actively develop their potential to have spiritual and spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, and the nation. And the State (Law on National Education System, Chapter I Article I paragraph I). Based on this, religious education is very much needed to transform knowledge, moral values, and behavior that reflects the whole person (Baidi et al., 2020; Suprapti et al., 2021).

Along with current technological developments, learning media have become very varied. Many learning media utilize the development of technology and information, one of which is video. Video media is one part of visual media that conveys messages through a tool that can project various statements in the form of videos, films or a combination as a whole, commonly referred to as multimedia (Rosyid et al., 2019). Videos that can be used in learning have various types, and one type is animated video.

Animation video media can make it easier for students to understand the material so that learning outcomes can increase (Wardoyo, 2015). This can facilitate the delivery of Brahmavihara material with the support of a media projector and sound system as a means for learning. Brahmavihara material was developed by combining multimedia

into interactive learning media so students can understand the material better and more efficiently. Students are expected to grasp the material provided more efficiently.

Based on the results of observations made with educators in Buddhist education at the Bodhisattva Elementary School (SD) Bandar Lampung, the material is delivered chiefly textually. This makes the material seem challenging to understand. As in the Brahmvihara material consisting of various explanatory discourses about the meaning of Brahmvihara, the various Brahmviharas, and how to implement them, the researchers tried to make innovations by developing learning media that could be used during learning (Wicaksono & Utama, 2022).

The media used are still not helping the teacher deliver the material optimally. Meanwhile, animated video as a learning medium is still not used. One of the animated videos that can be used is an explainer video that can be developed into a learning medium. An explainer video is a video that contains animation, graphics, text, and audio to describe an object, product, or phenomenon in a simple way. Seeing the description above, researchers have an innovation to design a learning media on Brahmvihara material. Then the researchers will research and develop video Explainer-Based Learning media in Elementary Schools.

Literature review

This section consists surveys books, scholarly articles, and any other sources relevant to a particular issue, area of research, or theory, and by so doing, provides a description, summary, and critical evaluation of these works in relation to the research problem being investigated.

Methods

This type of research is research and development (R and D). Research and development (R and D) is a method used to produce specific products and test their effectiveness of these products (Sugiyono, 2019). This research is included in the research "Research and Test to Create a Product that Doesn't Exist." This type of research understands that the research carried out can create new products and have creative, original, and tested values (Sugiyono, 2017).

The steps used in this study, especially the type of research R and D at level 4, namely "Research and Test to Create Products that Don't Have It," adopt the theory developed by (Sugiyono, 2019, 48). The steps are described in the following chart.

Based on the picture in chart one above, the description of the explanation is as follows: (1) Potential is anything that, when utilized, will have added value. While the problem is the deviation between expectations and what happened. The potential and the problem are to utilize all the potential that exists and be used as an alternative solution to the deviation or situation that occurs; (2) Literature study and data or information collection is the stage to collect various information that can be used as material for product planning; (3) The product design is made in the form of an Explainer Video-based learning video made using Microsoft Powerpoint, Filmora 10, and a voice recorder; (4) Design validation is an activity to respond to suggestions from experts who have become validators; (5) Product revision is a stage to improve the use of the product if, in a broad scope of application, there are still weaknesses and shortcomings; and (6) Dissemination is carried out by reporting product research results to professional groups and publishing them in scientific and commercial journals.

According to Sugiyono (2019), research and development of the type of "research and test to create new products" are carried out by testing and analysis.

a. Product Validation Data Analysis

Highest percentage score : $(4:4) \times 100\% = 100\%$
 Lowest percentage score : $(1:4) \times 100\% = 25\%$
 Range of percentage values : $\text{highest percentage} - \text{lowest percentage value} = 100\% - 25\% = 75\%$ The class interval is determined using the following formula.

Source: (Hadi, 2012)

Notes :

I = Interval
 R = Distance Interval
 I = $R / (\text{Classes Number of Interval})$
 I = $(75\%) / 4$
 I = 18,75 %

Table 1. Eligibility Percentage Scale Criteria

Interval	Information
81,25% - 100%	Very worth it
62,50% - 81,24%	Worthy
43,75% - 62,49%	Not feasible
25% - 43,74%	Very Inappropriate

Source: (Hadi, 2012)

Notes:

- a) If the results obtained have a percentage value of 81.25% - 100%, then the teaching materials are classified as feasible qualifications.
- b) If the results obtained have a percentage value of 62.50% - 81.24%, then the teaching materials are classified as eligible qualifications.
- c) If the results obtained are 34.75% - 62.49%, then the teaching materials are classified as inappropriate.
- d) If the results obtained have a percentage value of 25% - 43.74%, then the teaching materials are classified as very inappropriate qualifications.

Analysis of the data obtained from the trial will be calculated using a simple quantitative analysis. The calculation is as follows. In this calculation, the researcher uses the formula for comparing experimental results, which is as follows.

$(O1 >< O2)$

Notes:

O1: Pretest Results

>< : Treatment (learning with media)

O2 : Posttest Results

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 a practical value to support learning outcomes. According to Niarti (2017:97), the amount of increase is calculated by the normalized gain formula.

$$g = \frac{\text{posttest score} - \text{pretest score}}{\text{maximum possible score} - \text{pretest score}}$$

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	Calcification
$(g) > 0,70$	High
$0,30 < (g) > 0,70$	Currently
$(g) < 0,30$	Low

Source: Niarti, 2017: 97

Notes:

Based on these classifications, it can be explained:

- 1) If the normalized gain value is highly classified, then the learning media has a high effectiveness value.
- 2) If the normalized gain value is in the medium classification, the learning media used has a moderate effectiveness value.
- 3) If the normalized gain value is in a low classification, then the learning media used has a low effectiveness value.

Results & Discussion

This stage is the stage of discussing the research and development results of the media that has been created. This discussion includes the study and validation of media experts, material experts, and linguists, and media effectiveness tests carried out by conducting a limited test (research place). In the trial, the analysis described and studied results from a particular test description for students in the form of pretest and posttest. This test is also used to measure the effectiveness of the media that has been created.

The results of this study support the researchers' expectations that the results of media development have a feasibility value to help the educational process. Based on the results of product design validation by media expert validators, obtaining an assessment result of 3.6 with a percentage (90%) is a very feasible qualification. On the other hand, the results of the material expert validator get an assessment of 3.7 with a percentage (92.5%). They are of very decent qualifications, and then the linguist validator receives a score of 3.6 with a rate (of 90%) in worthy and excellent capabilities. The overall summary of the product validation assessment is based on the total count of the recapitulation of the value of the product validation results, which is described as follows.

Table 3. Product Validation Recapitulation

Product Validation Recapitulation			
No.	Expert	Mean	Category
1	Media	3,6	Very Worthy
2	Theory	3,7	Very Worthy
3	language	3,6	Very Worthy
Total		10,9	-
Total of Average		3,6	-

Source: Calculation Results Researchers with Ms. Exel, 2021

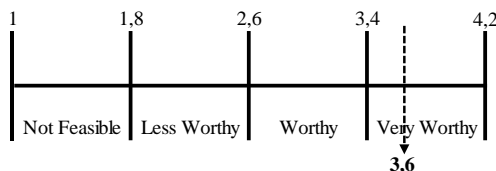


Figure 1. Indicator Recapitulation Rating Scale in Language Validation

The product validation recapitulation test results in the form of explainer video-based learning media on Brahma vihara. The material shows the calculation that the average value of the three experts is 3.6 with a percentage of 90% in the very feasible category so that it has high feasibility to be applied as a tool or support for the learning process Buddhism education grade IV elementary school.

Based on the results of the SPSS 25.0 calculation, it was found that there was a comparison between the time before and after using the learning media. The results can show increased learning outcomes for the special tests given. This result can be seen from the mean value, which compares and increases; the posttest (9.59) is greater than the pretest (6.00). The test results show the correlations value of 0.053 or $0.053 \times 100\% = 5.3\%$. While the significance value of 0.000 means $0.000 < 0.05$, then H_0 is rejected. Meanwhile, judging from the t-count value of -9.343, it means $-t\text{-count} (-9.343) < -t\text{ table} (-2.120)$ then H_0 is rejected. The qualification of the effectiveness of learning media is based on the calculation (N-gain) of the special test of 0.39. The value of 0.39 lies in the normalized gain index value of $0.30 > (g) < 0.70$ and in the medium classification.

Based on the calculation of the paired sample test and the calculation (N-gain), it can be concluded that this explainer video-based learning media has met the effectiveness value to be applied as a tool or support for the learning process of Buddhist education for elementary schools.

Conclusion, Limitations & Recommendation

The conclusion of the research is based on a review of research and development on explainer video-based learning media for Elementary School. The findings of this research and development results are formulated as follows.

1. Stages in the development of the media carried out—the development of explainer video-based learning media on Brahmavihara material for Elementary School which was carried out in the stages of research activities which included; a) technical and administrative preparations; b) collection of preliminary study data; c) analysis of data findings in the preliminary study. The next stage carried out by researchers is the implementation and results of developing interactive multimedia designs, which include; a) analysis of development needs, including hardware requirements, software requirements, and media design creation; b) media design includes making an outline of media content (mapping the subject matter, analyzing core competencies and essential competencies), selecting the media to be displayed, making flowcharts, writing storyboards; c) making media designs including compiling background displays, making explainer video-based learning media. The next stage is the explainer video learning media validation stage, which includes internal media testing and improvements based on input and suggestions from media experts, material experts, and linguists. Furthermore, the overall assessment given by the validator averages 3.6, with a percentage of 90% in the "very decent" category. Thus, the general Explainer of video-based learning media on brahmaviahara material has met the "very feasible." This criterion is because it has completed the requirements, including software engineering, technical quality, learning design, overall function, straightforwardness, and indicators of conformity with the rules. Language, so that the media is declared very feasible to be applied to the learning process.
2. Research and field test results—The results of the research and field tests at this stage were carried out to determine the influence of the developed explainer video learning media and the value of effectiveness, namely by distributing unique trials in the form of pretest and posttest to fourth-grade students. Based on the results of field tests in the form of special tests, information was obtained that student learning outcomes had different values from before and after using the developed media. The results of the SPSS 25.0 calculation show an increase in learning scores from special tests seen in the mean value in table 4.10, and judging from the significant value and t-count value in table 4.12, it can be concluded that H_0 is rejected. While the qualification of the effectiveness of learning media comes from the calculation (N-gain) from a particular test, the normalized gain index value of 0.39, and the medium classification. The explainer video-based learning media has met the effectiveness value.

It is based on the calculation of the paired sample test and the calculation (N-gain), so the explainer video media is feasible to be applied as a tool, or it means supporting the learning process for elementary schools.

References

- Baidi, Pembangunan, H. R. P., & Junaidah. (2020). The effect of leadership style and work motivation on work productivity for teachers in all state junior high schools of surakarta. *Universal Journal of Educational Research*, 8(3D), 67-72. <https://doi.org/10.13189/ujer.2020.081710>
- Hadi. (2012). *Statistik*. Andi Offset.
- Rosyid, Zaiful, M., Mustajab, & Aminol. (2019). *Prestasi Belajar*. CV Literasi Nusantara Abadi.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: CV. Alfabeta.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabet.
- Suprpti, S., Nugroho, A., & Pembangunan, H. R. P. (2021). Flipped Learning Instruction to Enhance University Students' Higher Order Thinking Skills. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 7(2), 261. <https://doi.org/10.33394/jk.v7i2.3320>
- Wardoyo, T. C. T. (2015). *Pengembangan media pembelajaran berbasis video animasi pada mata pelajaran mekanika teknik di SMK Negeri 1 Purworejo*. Universitas Negeri Yogyakarta.
- Wicaksono, L., & Utama, D. D. P. (2022). Pemanfaatan media pembelajaran berbasis information and communication technology selama pandemi covid-19 oleh guru pendidikan jasmani, olahraga dan kesehatan. *Multilateral: Jurnal Pendidikan Jasmani Dan Olahraga*, 21(1), 16. <https://doi.org/10.20527/multilateral.v21i1.12226>