

Animation-Based Learning Media for Thematic Learning of Elementary School Students

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Abstract – This study aims to determine the feasibility of learning media products based on animation for fourth grade elementary school students, namely thematic learning with the theme "The Beauty of Diversity in My Country" (the sub-theme of the diversity of ethnic groups and religions in my country). Using the research and development (R&D) method, the model used refers to Dick & Carey model. The results showed that animation-based learning media in thematic learning with the theme "The beauty of diversity in my country" (the sub-theme of the diversity of ethnic groups and religions in my country) is deemed appropriate and can add to the teaching media used by teachers in the learning process and can increase student interest. This is based on the results of validation tests by: (1) media product experts with a score of 4.1 (good); (2) the thematic expert gave a score of 4.2 (good); and (3) classroom teachers with an average score of 4.9 (very good). At the individual trial stage an average value of 4.0 (good) was obtained, the small group trial obtained an average value of 4.2 (very good), while in large group trial an average value of 4.1 (good) was obtained.

Keywords – Instructional media, thematic learning, animation

I. INTRODUCTION

The learning process has an important role in the student learning process. The success of the learning process is influenced by various things, including the application of appropriate and effective learning strategies (Dunlosky et al., 2013; Stott & Hobden, 2016), or motivational support (Okolo et al., 2016; Topçu & Leana-Taşçılar, 2018), or use of certain multimedia devices as needed (Keogh & Naylor, 1999; Kombartzky et al., 2010; Wuryanti & Kartowagiran, 2016).

Meanwhile, based on Permendikbud Nomor 65 (2013) Chapter I concerning Basic and Secondary Education Process Standards, the learning process in educational units is carried out in an interactive, inspiring, fun, challenging, motivating students to actively participate, and provides sufficient space for initiative, creativity and independence according to students' talent, interests, physical and psychological development (Kemendikbud RI, 2013). From this explanation, questions that then arise can be various, one of which is: *"how to build a pleasant learning atmosphere that can arouse the student interest and motivation, especially students in elementary schools?"*

To answer this question, of course, there are various answers that can be put forward. However, in this research, the answers will focus on how to use multimedia so that it can build a pleasant learning atmosphere, as well as generate motivation and interest in learning elementary school students. (Astuti & Mustadi, 2014; Farindhni, 2018; Risabete & Astuti, 2017; Widiyasanti & Ayriza, 2018). Although multimedia-assisted learning (animation) cannot provide a guarantee of success compared to the use of other media or learning strategies (Bétrancourt & Tversky, 2000; Boucheix & Schneider, 2009; Tversky et al., 2002), multimedia is believed to be very useful because it is able to convey settings, characters, actions in a variety of interesting ways, as well as being able to explain complex things to be simple and easy to understand (Astuti & Mustadi, 2014).

With support of multimedia devices that are full of creativity, teachers will certainly find it easier to deliver material to students (Wardani, 2017; Widjayanti et al., 2019). In the thematic learning (Tema Indahnya Keragaman di Negeriku subtema Keberagaman Suku Bangsa dan Agama di Negeriku), which is the unit of analysis in this study, support for multimedia devices certainly has advantages in filling in deficiencies that may be possessed by text or words, especially primary school students. Therefore, the use of multimedia (animation) devices can be an alternative media in student learning process, especially the thematic learning (Tema Indahnya Keragaman di Negeriku subtema Keberagaman Suku Bangsa dan Agama di Negeriku).

II. METHOD

This research uses the research and development (R&D) method and refers to the model developed by Dick & Carey, consisting of eight (8) stages: analysis and identification of priority need, formulation of product objectives (programs), preparation of tools, preparation of materials or products, writing product script (storyboard), testing and validation, revision and production. The product developed is animation-based learning media in thematic learning, referring to 2013 curriculum for grade IV elementary schools (Tema Indahnya Keragaman di Negeriku subtema Keberagaman Suku Bangsa dan Agama di Negeriku).

This research was conducted at SDIT Al-Istiqomah (Tangerang City), took place from December 2019 to October 2020. The subject of this study were fourth grade students of SDIT Al-Istiqomah which consisted of four classes. Data collection techniques using observation, interviews, documentation, and questionnaires. The measuring instrument used was a questionnaire using a Likert scale.

At the analysis stage, data analysis techniques used were qualitative data analysis and quantitative data analysis. Qualitative descriptive analysis was conducted to process the results of interview and data obtained from questionnaires from material experts and media experts. Quantitative data analysis is used to analyze data collected from questionnaire in the form of values given by the validator and respondent. Meanwhile, animation-based learning media is said to be valid if numbers obtained are closer to 100%.

III. RESULT & DISCUSSIONS

The animation-based instructional media products examined in this study were validated by media and content experts, including classroom teachers. If there are suggestions for revision, the product will be revised according to the suggestions given by media expert and content expert. After the validation stage has been passed, learning media products are tried out on potential users (fourth grade students of SDIT Al-Istiqomah).

Validation Test Results

The validation test by media product experts is carried out through questionnaire, includes an assessment of the media. Media experts then analyze and also provide suggestions and comments on product. Based on the validation of media experts, the product got a total score of 81 and an average score of 4.1 (good).

Table 1. Media Expert Assessment Data

No	Component	Aspect	Score
1	Product Criteria	Physical condition	9
		Media Quality	9
2	Visual Design	Clarity of Cover	8
		Image clarity	9
		Audio Clarity	8
		Use of Animation	12
		Font Size Accuracy	10
3	Technical Quality	Good Animation	9
		Ease of Use	7
		Total Score	
		Average Score	4,05

The validation test by content experts is carried out to assess the aspects of the content on subject matter of material presented, especially whether the material is in accordance with the students and has been well presented. Based on validation of the thematic material expert, the score obtained was 63 with an average score of 4.2 (good).

Table 2. Content Expert Assessment Data

No	Component	Aspect	Score
1	Content	Content Accuracy	29
		Content conformity with KI and KD	10
2	Language	Use Good Language	13
3	Presentation	Usefulness of Media	11
Total Score			63
Average Score			4,2

The media validation was also carried out by grade IV SDIT Al-Istiqomah teachers, whose results obtained a score of 98 and an average score of 4.9 (very good).

Table 3. Teacher Assessment Data

No	Component	Aspect	Score
1	Display	Interesting Opening	15
2	Content of the Material	Interesting Content	18
3	Visual Communication	Creativity	5
		Sound / Audio	15
		Animated View	15
		Writing and Language	10
4	Implementation	Use	20
Total Score			98
Average Score			4,9

Test Results

The trial was carried out in three stages: (1) one-to-one trying out; (2) small group tryouts; and (3) field tryouts. From the results of the one to one trying out trial, an average score of 4.0 (good) was obtained.

Table 4. One-to-One Trying Out Results

No	Indicator	High	Ability Medium	Low	Average	Criteria
1	<i>Opening Screen of Animated Media</i>	5	4	4	4,3	Very Good
2	Writing and Audio can be Read and Listened	5	4	3	4	Good
3	Color on Animation Appropriate	5	4	3	4	Good
4	Media Design is Attractive	5	4	4	4,3	Very Good
5	Interesting Animations	5	4	3	4	Good
6	Content Easier to Understand	5	4	2	3,7	Good
7	Easy to Understand Words and Sentences	5	4	3	4	Good
8	Content is made simple and easy to understand	5	4	3	4	Good
9	Animation Makes Learning Comprehension Easy	5	4	2	3,7	Good
10	Learning Objectives Achieved	5	4	3	4	Good

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11	Animations Run Well when Used	5	4	4	4,3	Very Good
12	Interesting Animation Display	5	4	3	4	Good
13	Learning is more Fun	5	4	3	4	Good
14	Animation Enhances Students' Learning Ability	5	4	2	3,7	Good
15	Animations Increase Student Interest in Learning	5	4	3	4	Good
Total Score		75	60	45	60	
Average Score					4,0	Good

The next stage is small group tryout. From questionnaire distributed to students, the average score was 4.2 (very good).

Table 5. Small Group Tryout Results

No	Indicator	Ability						Average	Criteria
		High		Medium		Low			
1	Opening Screen of Animated Media	5	5	4	5	5	4	4,7	Very Good
2	Writing and Audio can be Read and Listened	5	5	4	4	3	4	4,2	Very Good
3	Color on Animation Appropriate	5	4	4	3	4	5	4,2	Very Good
4	Media Design is Attractive	5	4	4	3	4	5	4,2	Very Good
5	Interesting Animations	4	5	4	4	3	5	4,2	Very Good
6	Content Easier to Understand	4	4	3	4	3	3	3,5	Good
7	Easy to Understand Words and Sentences	4	5	5	5	3	5	4,5	Very Good
8	Content is made simple and easy to understand	5	4	4	4	4	5	4,3	Very Good
9	Animation Makes Learning Comprehension Easy	4	5	4	4	3	4	4,0	Good
10	Learning Objectives Achieved	4	4	3	4	3	3	3,5	Good
11	Animations Run Well when Used	5	5	4	5	5	5	4,8	Very Good
12	Interesting Animation Display	5	5	5	4	4	4	4,5	Very Good
13	Learning is more Fun	4	5	4	3	4	4	4,0	Good
14	Animation Enhances Students' Learning Ability	4	5	4	4	4	3	4,0	Good
15	Animations Increase Student Interest in Learning	4	5	4	4	3	4	4,0	Good
Total Score		67	70	60	60	55	63	62,5	
Average Score								4,2	Sangat Baik

In the last stage of the trial (field tryout), from questionnaires distributed to student, average score was 4.1 (good).

Table 6. Field Tryout Results

No	Indicator	Total	Average	Criteria
1	Opening Screen of Animated Media	165	5	Very Good
2	Writing and Audio can be Read and Listened	146	4,4	Very Good
3	Color on Animation Appropriate	148	4,4	Very Good
4	Media Design is Attractive	147	4,4	Very Good
5	Interesting Animations	142	4,3	Very Good
6	Content Easier to Understand	131	4	Good

7	Easy to Understand Words and Sentences	132	4	Good
8	Content is made simple and easy to understand	123	3,8	Good
9	Animation Makes Learning Comprehension Easy	125	3,8	Good
10	Learning Objectives Achieved	114	3,5	Good
11	Animations Run Well when Used	139	4,2	Very Good
12	Interesting Animation Display	134	4,1	Good
13	Learning is more Fun	131	4	Good
14	Animation Enhances Students' Learning Ability	132	4	Good
15	Animations Increase Student Interest in Learning	130	4	Good
Total Score		2039	61,79	
Average Score			4,1	Good

Product Revisions

Product revisions were carried out based on the advice of media product experts (Boy Dorahman) and thematic material experts (Yeni Nuraeni). The advice given is to move the words "Gaya Listreik" to the top positions so that it is more clearly legible. In addition, it is recommended that the color of the writing be changed so that it can be more clearly read.

Before the Revision



After the Revision



Figure 1. Views Before and After Revision

IV. CONCLUSION

Based on the results of the study, animation-based learning media in thematic learning (Tema Indahnya Keragaman di Negeriku Subtema Keberagaman Suku Bangsa dan Agama di Negeriku) are appropriate and can add to the teaching media used by teachers in the learning process and can increase the learning interest of fourth grade students of SDIT Al-Istiqomah. This is based on the results of the validation test by: (1) media product expert with score of 4.1 (good); (2) the thematic expert gave a score of 4.2 (good); (3) teachers with an average value of 4.9 (very good). Meanwhile, at the individual trial stage an average value of 4.0 was obtained (good), the small group trial obtained an average value of 4.2 (very good) and in the large group trial obtained an average value of 4.1 (good).

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