DEVELOPMENT OF INTERACTIVE MULTIMEDIA ARTICULATE STORYLINE 3 BASED APPROACH (CTL) ON INTEGRATED THEMATIC LEARNING IN GRADE IV ELEMENTARY SCHOOL

Gio Afrianda¹, Reinita²
Elementary School Teacher Education Study Program¹, Padang State University²
Email : Gioafiranda144@gmail.com, reinita.rei04@gmail.com

Abstract: Interactive Multimedia is a presenter of content by utilizing the incorporation of content from several media in the form of text, sound, images, animation, and video. So that multimedia is presented in a computer-based program that facilitates interactive communication. With interactive multimedia can increase the interest and motivation of learning learners. The aim of this Research is to develop a Multimedia Interactive Articulate Storyline 3 Contextual Based teaching learning (CTL) approach on integrated thematic learning in Class IV elementary school that is valid and practical. This research uses the ADDDIE model with 5 stages including, Analisys (Analysis), Design (Design), Development (Development), Implementation (Implementation), and Evaluation (Evaluation). Data obtained based on validation questionnaires, teacher and student response questionnaires. The subject of this study trial was a class IV student of SDN 56 Children of Water which amounted to 23 people. Based on the material validation questionnaire obtained results of 93.75% with very valid categories, language validation obtained results of 93.75% with very valid categories, media validation obtained results of 94.59% with very valid categories. The results of the teacher practicality test in SDN 56 Anak Air obtained a result of 91.66% with a very practical category and the results of the student's practicality test obtained a result of 95.47% with a very valid category. Thus it can be concluded that articulate storyline 3 interactive multimedia has been valid and practically used to increase the interest and motivation of learning learners.

Keywords: Interactive Multimedia, Articulate Storyline 3, Addie Model


Kata Kunci: Multimedia Interaktif, Articulate Storyline 3, Model Addie
INTRODUCTION
The Industrial Revolution 4.0 had an impact on information and communication technology on various aspects, especially education. According to (Surani, 2019) the industrial revolution 4.0 has affected education that can be seen from the use of digital technology in the learning process. The application of distance learning that is not limited to space and time allows it to be applied along with the use of such technology. How to learn, mindset, and how to act learners become challenges in the world of education to be developed more creatively in various fields.

In today's evolving and advanced times, and the world of education is also growing. Many reforms and innovations are carried out to achieve good quality education. For this reason, various ways are carried out in curriculum development, improvement of educational facilities and infrastructure and innovation in learning. The teacher is the most important component of learning. In improving the quality of learning, therefore teachers are required to make learning more creative and innovative.

The curriculum used in elementary school is a 2013 curriculum that began to be gradually applied by the government from 2013. This 2013 curriculum is applied using integrated thematic learning. Integrated thematic learning is learning that connects several lesson contents in one theme so that the boundaries between the contents of one lesson with the other are not so pronounced. scientific principles in a holistic, meaningful, and authentic manner

According to (Efendi and Reinita 2019) "The application of curriculum learning 2013 is carried out through thematic learning approach, namely learning oriented to mapping learning themes. Each is the integration of several subjects connected to one another."

Integrated thematic learning has the following characteristics: 1) student-centered, 2) provides hands-on experience to learners, 3) bulkheads between the contents of invisible subjects, 4) material concepts are presented from various lesson contents, 5) are flexible and flexible, 6) learning is developed with the interests and needs of learners, and 7) fun learning (Rusman, 2015; Majid, 2014). In line with the development of technology, the learning media used is also increasingly varied. Learning media that was originally in the form of visual images, graphics, or other real objects, has now grown more sophisticated with hardware in the form of computers, laptops, and notebooks that can produce audio visual media. Not only can images be displayed, but they can also vary using video as well as other visuals. One of the innovations in learning media is interactive multimedia.

According to Arifin, et al (2015) multimedia consists of 2 words, namely multi and media. Multi is more than one and the media is a means to present allocating various information in the form of text, images, sounds, and others. Multimedia is an amalgamation of various means to present information in various forms through digital devices. One of the interactive multimedia used is articulate storyline three.

Articulate storyline 3 is one of the software compiled with simple smart brainware that has interactive procedures both online and offline. This can make it easier for users to publish into online sites (Rohmah and Bukhori, 2020). Articulate Storyline 3 software
has a *Microsoft Power Point* like look that can be used to create presentations. However, the software has interactive features that *Microsoft Powerpoint* does not have, including *timelines, movies, pictures,* and *triggers* (Kristiningrum, 2018; Mayub, 2019). Although the slide display looks similar to *Microsoft Power Point*, kemendikbud (2016) mentions that there are several advantages contained in this software that can produce creative and comprehensive learning media presentations.

These advantages are supported by features such as timeline, movie, picture, character and others that are easy to use. Articulate Storyline three also has 5 advantages as mentioned by Jannah (in Mayub, 2019).

These advantages include: 1) Learning media using *articulate storyline* can be made easily by people who are experts and experienced and amateurish, 2) various files can be imported in power point, flash, video, audio, image, and others formats, 3) Articulate *storyline* display can be in the form of audio and visual, 4) there is a feature of creating *quiz* Which can be used as a matter of practice without importing files from other software, and 5) Interactive content that can involve learners in learning.

Based on preliminary studies conducted through observations and interviews of teachers of grade IV SDN 58 Lubuk Buaya District Koto Tangah on Monday, September 6, 2021, it was explained that the 2013 curriculum at the school has been implemented gradually since 2017.

The learning process in class IV SDN already uses multimedia learning, but in certain learning. Based on media analysis that has been done has several weaknesses, among others (1) The learning media used is classical. (2) The media used is only in the form of learning videos. (3) The learning media used covers writing and pictures only. (4) The learning media used by teachers does not involve many learners.

The results of observations that have been made show that the learning media used to deliver learning materials has not been in accordance with existing standards. 21st century learning teachers must use technology-based learning media to be able to create 4C (Critical Thinking and Problem Solving, Creativity, Collaborative and Communication) competencies in learners, so that the media used by teachers switches from printed image media to technology-based media.

Furthermore, based on observations and interviews conducted on September 8, 2021 with the guardians of class IV of SDN 56 Children of Water, the 2013 Curriculum has begun to be applied to the school since the 2018/2019 school year. The current Covid-19 Pandemic period of learners is not allowed to go to school and is only allowed to deliver and pick up those related to learning. And mostly only parents are asked to deliver student assignments every week. The learning process and assignments are sent by classroom teachers in study groups on the *WhatsApp* App. In student learning there are some who are quite active but mostly they are less interested and passionate in learning. In learning methods used in general still use the method of lectures, questions and answers and discussions.

The characteristics of learners who are quite active in the class make them interested when learning to use image or video media displayed in front of the class. To create a more active and
fun learning atmosphere, there needs to be innovation in the learning media.

Based on the description above, researchers are interested in conducting development research with the title "Development of Interactive Multimedia Articulate Storyline 3 Based Approach (CTL) on Integrated Thematic Learning in Grade IV Elementary School".

METHODS

The type of research used in this research is research and development. According to (Desyandri & Vernanda 2017) development research aims to produce products by paying attention to the level of need so as to produce an effective product.

Development research is a stage in developing a new product or perfecting a previously existing product (Sukmadinata, 2009). ADDIE development model, namely analysis (analysis), design (design), development (development), implementation (application), and evaluation (evaluation).

The research stages include, Needs analysis, curriculum analysis, analysis of characteristics of learners (Preliminary Study), media design in accordance with the needs and characteristics of learners, development stages carried out with validation with material, language and media experts and revised according to the advice and input of experts in the field, the implementation stage is product trials on research subjects, namely IVC classes. SDN 56 Anak Air and the last evaluation stage is carried out by revising the product in accordance with the advice on the practical questionnaire.

The subject of this study was a student of IVC class SDN 56 Children's Water. Researchers chose the subject of this trial because the school has implemented the 2013 Curriculum in grade IV, the environment and supporting facilities and infrastructure, as well as the school's willingness to accept new learning media innovations. This study was conducted according to health protocols by sticking your hands first, keeping your distance and using a mask. The data used in this study is data obtained through the results of validation of learning media by experts and learning media practicality test data through teacher and student response questionnaires.

Data obtained from the validation of learning media will be analyzed using the Likert scale. Riduwan and Sunarto (2015: 21) explained that by using the Likert scale, the variables to be measured are spelled into dimensions, dimensions are spelled into sub-variables and then sub-variables are further described as measurable indicators. Multimedia validity suspension data can be viewed in the table.

<table>
<thead>
<tr>
<th>Score</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Table 1. Interactive Multimedia Validity Suspension on Integrated Thematic Learning

Source: Ridwan and Sunarto
Modifications (2015)

To measure the value of the final result of validity using the formulas of Riduwan and Sunarto (2015) as in table 2 and the following formulas:

\[
\sum_{i=1}^{n} X_i = \frac{x}{n}
\]

Information:
X: Average
\(\sum X_i\): The number of values of each validator
n: Number of validators

Table 2. Categories of Interactive Multimedia Validated on Integrated Thematic Learning

<table>
<thead>
<tr>
<th>Interval</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>86-100%</td>
<td>Very valid</td>
</tr>
<tr>
<td>76-85%</td>
<td>Valid</td>
</tr>
<tr>
<td>60-75%</td>
<td>Valid Enough</td>
</tr>
<tr>
<td>55-59%</td>
<td>Less Valid</td>
</tr>
<tr>
<td>00-54%</td>
<td>Invalid</td>
</tr>
</tbody>
</table>

Source: Modified Purwanto (2013)

Practicality techniques are used to analyze data on the results of teacher responses questionnaires and learners' responses to the learning process using designed interactive multimedia.

Table 3. Teacher Questionnaire Assessment Scale

<table>
<thead>
<tr>
<th>Range</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Excellent</td>
</tr>
<tr>
<td>4</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>Keep</td>
</tr>
<tr>
<td>2</td>
<td>Less Good</td>
</tr>
<tr>
<td>1</td>
<td>Very bad</td>
</tr>
</tbody>
</table>

Source: Modified Purwanto (2013)

Table 4. Student Questionnaire Assessment Scale

<table>
<thead>
<tr>
<th>Range</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Excellent</td>
</tr>
<tr>
<td>4</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>Keep</td>
</tr>
<tr>
<td>2</td>
<td>Less Good</td>
</tr>
<tr>
<td>1</td>
<td>Very bad</td>
</tr>
</tbody>
</table>

Source: Riduwan and Sunarto Modifications (2015)

The final value of calculations and questionnaires is analyzed using the formula from Purwanto (2013), namely:

\[
R = \frac{NP \times 100}{BC}
\]

Information:
NP: The percent value sought
R: Raw score obtained
SM: Ideal maximum score

The practical category of learning media based on the calculation of final values can be seen in the following table:

Table 5. of Interactive Multimedia Practicality in Integrated Thematic Learning

<table>
<thead>
<tr>
<th>Interval</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>86-100%</td>
<td>Very practical</td>
</tr>
<tr>
<td>76-85%</td>
<td>Practical</td>
</tr>
<tr>
<td>60-75%</td>
<td>Quite Practical</td>
</tr>
<tr>
<td>55-59%</td>
<td>Less Practical</td>
</tr>
<tr>
<td>00-54%</td>
<td>Impractical</td>
</tr>
</tbody>
</table>

Source: Modified Purwanto (2013)
RESULTS OF RESEARCH AND DISCUSSION

This research was conducted on the material Theme 6 My Ideals Subtema 1 me and My Ideals learning 4 and 5. The analysis phase begins by conducting an analysis of needs, curriculum, and materials. The analysis that has been done is then designed and developed. The trial is conducted at the implementation stage and ends with the evaluation stage.

The subjects of the trial in this study were 23 students consisting of 12 men and 11 women in grade IV of 56 Water Children's Elementary School. The results of the material validity test on the development of interactive multimedia based on Articulate Storyline three obtained a percentage of 93.75% with a very valid category, the results of the language validity test of 93.75% with a very valid category, and the media validity test result of 94.59% with a very valid category. While the results of practicality tests obtained a percentage of 91.66% with a very practical category for teacher response questionnaires and 95.47% for learners' response questionnaires with very practical categories. Thus it can be concluded that interactive multimedia based on Articulate Storyline 3 on integrated thematic learning Theme 6 Citaku Subtema 1 me and My ideals of learning 4 and 5 are valid and practically used to increase the learning interest of learners.

RESULT
An early look to start multimedia learning.

In this view shows the start page, developer profil, entering a name to be able to continue to the main menu view. Written on this display is "Theme 6 My Ideals Subtema 1 Me and My Ideals Learning 4 and 5".

Basic Competency Display (KD) and Indicators

In this display there are Core Competencies (KI), Basic Kompetensi (KD) Indikator and Learning Objectives in accordance with learning materials on themes, subthema, and learning carried out. On this display will appear when clicking KI and KD on the main page. Here is one of the displays in the Multimedia learning section of KI and KD on learning.
View of learning materials

In this display there are learning materials that are carried out in accordance with the theme, subtheme, and learning. In the material there is text, images, animations, and videos. The following are some views of learning materials on multimedia learning.

Quiz question view

In this display there is a quiz question that is in accordance with the discussion of learning materials. The following are some views of quiz questions in accordance with the multimedia learning of each learning.
CONCLUSION

Based on the above description it can be concluded that "Interactive Multimedia Development Articulate Storyline 3 Based on CTL Approach on Integrated Thematic Learning in Grade IV Elementary" has been developed using the ADDIE development model and obtained average results from three expert validators with a percentage of 94.03% which belongs to the category "Very Valid". The results obtained from the practicality test amounted to 93.56% with a very valid category. The results of the teacher response obtained a percentage of 91.66% with the category very practical and the response from learners obtained a percentage of 95.47% with a very practical category. This proves that articulate storyline 3 interactive multimedia is very supportive in the learning process in grade IV elementary school and produces innovations in learning multimedia that are practical to be used in elementary schools so as to improve the results and interest of learners to learn.

REFERENCES


Proceedings of hdpgsdi wilaya national seminar, 163-174.


