Development of Thematic Multi Media-Based Learning Model to Increase Clean Life Skills

Yufiarti, Wuryani, Fitri L Issom, Gumgum Gumelar

Abstract: This study aims to develop multi-media based products on thematic learning sub themes “cleanliness at home”. This research was applied in class II of elementary school. Multimedia products produced are short animations with the theme of hand washing. This research method uses Research and Development (R & D) with the Borg and Gall model. Three stages of development research are: first, preliminary research into the two development models and third the model dissemination. The results of the preliminary study concluded that multi-media based applications are needed for thematic learning in elementary schools. The development of multi-media animation by giving a message of six steps of hand washing was developed through the stages of product development. The first stage of expert judgment is carried out by media, material and language experts. The second stage is one to one and small group. This study produced a valid multi-media assisted thematic learning model applied to elementary school students.

Keywords: Thematic learning, Multi-media animation, Hand washing skills.

I. INTRODUCTION

The success of the learning process is primarily determined by the way the teacher carries out learning innovations. Integrative thematic learning is a learning model applied by teachers in elementary schools. This learning can improve religiosity, intellectuality, motivation. These aspects could shape the personality of elementary school students and leadership and healthy behavior. Therefore the teacher needs to arrange various activities in the classroom, learning, physical structure, and other activities to manage time effectively, and create a productive and enjoyable learning environment.

Multi-media learning can support thematic learning. The characteristics of the elementary school are concrete holistic, and pre-operational thinking [1]. The use of multimedia can increase students' learning motivation. Through images that are displayed and behavioral models exemplified in animation will improve correct behavior such as hand washing[2].

Multimedia consists of a variety of media developed, such as audio and visual.

Primary school students, which live in Z era would be matched with multi-media animation. The use of animation in learning is very suitable for children because it gives the expected images, music, and behavior. Healthy living behavior needs to prepare from the beginning of elementary school [3].

Thematic learning that improves healthy living skills could be found in the theme of the second class of four sub-themes, namely "cleanliness at home.”

The importance of Health Life Skill Education research is as follows:

1. Healthy life skills is a dynamic process where the determination/selection of decisions about the content of a healthy life skills program requires the involvement of all parties, starting from the educator itself, students, parents, and the local community.

2. Efforts to instill healthy living behaviors have been carried out, among others, through Physical and Health Education and extracurricular activities such as School Health Unit for Student, Red cross, and Scouts. However, the teacher’s ability to deliver messages on healthy behavior is minimal, so various efforts must be made in this case directed at efforts to increase knowledge and understanding, regardless of whether the students have the ability or not and even this has never been reported. The success of programs that are integrated into education.

3. The education of healthy life skills in education is intended to increase the knowledge and skills of teachers both from the substance, methodology and teaching techniques, so that the presence of healthy life, both physically and mentally becomes an integral part in the development of the education system.

Health Life Skill Learning (HLSL) is a skill-oriented learning method in addition to knowledge material students can also implement their knowledge into a skill for healthy living behavior, both physically and mentally / psychologically healthy. The skills in question are someone’s psychosocial abilities to meet needs and deal with problems in their daily lives effectively is a part of Health life skill learning [4].

HLSL have 3 stages, first; Core components of psychosocial competencies. Oriented learning in the practice of related matters in daily life. Second; Application of skills. After learning is more focused on topics that are relevant to the facts of health problems that arise. And the last is Implementation of more specific life skills. Education is precise, namely to specific risk conditions that can cause health problems.
II. METHODOLOGY

Gall at all [3] Developed Instructional development model. He mentioned that the research development model includes ten-step, namely: a) Research and information collecting, b) Planning, c) Develop preliminary from of product, d) Preliminary field testing, e) Main product revision, f) Operational product revision, h) Operational field testing, i) Final product revision, and j) Dissemination and implementation.

Instructional development model Borg and Gall if simplified, there are four stages with seven necessary steps implementing R & D [3]. Four stages and seven of these activities can be seen in figure 1 below.

![Syntax Model Borg and Gall Simplified (2018)](image)

Fig. 1. Syntax Model Borg and Gall Simplified (2018)

Based on the chart above, the procedures for implementing the research and development, known as Research and Development [3].

a. Phase 1. Bring up the ideas early and carry out a preliminary study. The first activity in the early stages is to determine an idea or ideas that will be developed. The second activity at an early stage is to carry out a preliminary survey that analyzes the needs, aims to understand the needs of what is needed to address the problems encountered in education or learning. There are two things to be done in this activity, namely: (1) field survey, (2) survey of literature [11].

b. Phase II of Product Development. After the initial planning has been completed, the next major step in the R & D cycle is to build a preliminary form of the educational product that can be field tested. The product development process to form a cycle that consist of four basic steps, namely the step of the customers or other companies to be invited to work together.

In Indonesia, the curriculum used is thematic [5]. The thematic curriculum is integrated learning that uses themes to link (integrate and integrate) several subjects so that it creates a valuable experience for students ". For this research, we used a thematic curriculum for second-grade elementary school students.

This curriculum is analyzed based on thematic themes in each of the thematic sub-themes in each chapter, for this matter specifically for the topic of cleanliness (HLSL)[5][10]. Thematic analysis in second grade can be seen in the following table:

<table>
<thead>
<tr>
<th>Grade II</th>
<th>Sub Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean and Health</td>
<td>Cleanliness at home</td>
</tr>
<tr>
<td>Cleanliness at school</td>
<td></td>
</tr>
<tr>
<td>Cleanliness in the environment</td>
<td></td>
</tr>
</tbody>
</table>

For the scenario in multimedia, we make a few step for the clean and health. The steps to hand washing can be developed as follows:
1. Rub both hands
2. Clean the fingers by connecting each other
3. Rub the back of your hand using your palm
4. Rub and turn your thumb with the other hand’s palm
5. Clean between fingers
6. Rub the fingernails in the palm of the other hand until clean[8][10].

III. RESULT AND DISCUSSION

The process of developing multimedia-based applications on thematic learning is conducting feasibility tests. The test is carried out through the stages of expert review, one to one evaluation, and small group evaluation. The expert review involved consisted of material experts, linguists and media experts, and grade III teachers. This stage uses a Likert scale assessment with assessment information, namely: a) 4.0 - 3.6 = Excellent, b) 3.5 - 2.6 = Good, c) 2.5 - 2.0 = Sufficient, d) 1.9 - 1.0 = Insufficient, e) 0.9 - 0 = Fail.

<table>
<thead>
<tr>
<th>No.</th>
<th>Aspect</th>
<th>Point (Scale 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Appearance</td>
<td>3.67</td>
</tr>
<tr>
<td>2</td>
<td>Media Quality</td>
<td>3.67</td>
</tr>
<tr>
<td>3</td>
<td>Integration</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Programming</td>
<td>3.8</td>
</tr>
</tbody>
</table>

The results of the media's assessment by experts show that the aspects of appearance, multimedia quality, integration between content, visual, audio, images, and video as well as issues of programming are expressed very well in the assessment of media experts. However, there are several suggestions, namely: 1) paying attention to equality of gender, 2) the use of cartoon characters that vary from women, men, children to adults in multimedia developed. The suggestion is a reference for revising and rechecking the product before the assessment is carried out in the next stage.
The results of the assessment by elementary school experts showed that the suitability of the material with instructional objectives and characteristics of students was considered very good, while the material renewal in multimedia learning, the accuracy of the material with instructional objectives, features and concepts, complete presentation of material with visual and audio, learning aspects between educators, multimedia and students are considered good. Overall multimedia-based thematic learning materials are excellent and feasible to be applied in Elementary Schools with several improvements, namely: 1) Paying attention to the sound quality in multimedia developed, 2) Using primary colors that do not cause attention problems to students during learning activities and 3) pay attention to the use of letters in the developed media.

### Tabel-III : Assessment by elementary school experts

<table>
<thead>
<tr>
<th>No.</th>
<th>Aspect</th>
<th>Point (Scale 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Suitability</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>renewal</td>
<td>3.5</td>
</tr>
<tr>
<td>3</td>
<td>Accuracy</td>
<td>3.2</td>
</tr>
<tr>
<td>4</td>
<td>Completeness</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Learning aspect</td>
<td>3.4</td>
</tr>
</tbody>
</table>

The results of the above assessment indicate that language suitability with the development of elementary school-age children and linguistic aspects including the use of words, sentences, and paragraphs are considered very good in developing multimedia-based applications on thematic learning and are very feasible to apply in the field. There are several suggestions and improvements, namely: 1) looking at each spelling of each word in multimedia developed, 2) Adapting to the enhanced spelling, 3) Reviewing the politeness of the second-person pronoun "Kamu"(english: "you") used in the national and multimedia curriculum module books used.

### Tabel-IV : Assessment From Language Expert

<table>
<thead>
<tr>
<th>No.</th>
<th>Aspect</th>
<th>Point (Scale 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Suitability</td>
<td>3.75</td>
</tr>
<tr>
<td>2</td>
<td>Linguistic</td>
<td>3.67</td>
</tr>
</tbody>
</table>

### IV. CONCLUSION

The study produced multimedia assisted thematic learning model that is feasible to apply to elementary school students. In the preliminary research, a description of multimedia needs was created in the form of animation to help understand handwashing skills. Then a conceptual model is developed supported by literature review. Multimedia development products include animations that have created contain six steps of handwashing.

### REFERENCES


### AUTHORS PROFILE

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