Developing Electronic Learning Media Using 3d Pageflip On The Material Of Classification Of Living Things for the 7th Grade Students Of Junior High School

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Abstract. The aim of this research is to develop the electronic learning media using 3D Pageflip on subject matter of Classification of living things for the Seventh Grade of Junior High School. Based on observation in several junior high schools in Jambi district, it is found that the subject matter about Classification of living things is difficult to understand and boring due to many organism in world that must be studied and every organism have the specific characters and it usually uses Latin. One of the solution of the problem is to develop the electronic learning media using 3D Pageflip. The 3D Pageflip is the software that is completed with several learning material like: power point, students worksheet, video, animation, pictures, photos. Research and development was designed by using ADDIE’s model following five steps namely: Analyze, Design, Develop, Implementation and Evaluation. The qualitative data was obtained from validator suggestions, and the quantitative data was collected through the trial test of the seventh grade students of Junior high school. This media was validated by the experts. The result of the design obtained the score of 70 (93%) with very good category. The result of content obtained the score of 41 (82%) with very good category. The suggestions from validators were used to revise the learning media. The trial test was also carried out to the biology teacher of Junior High School 7 Muaro Jambi and obtained the score of 60%, that is categorized to very good. The students conveyed that the media is appropriate to be used for the seventh grade students, in which obtained the score of 3.92. In conclusion, the electronic learning media in the subject of Classification of living things is very good and appropriate to be used for the seventh grade of Junior High School students.

1. Introduction
Science education is growing rapidly in line with the development of science and technology. Information and communication technology has provided ample space for creativity in the field of education to provide convenience both in the presenting the teaching materials for teachers and in absorbing learning material by students. The paradigm shift in education makes students become the subject of learning or known as student-centered learning. Teachers are required to develop their professionalism through improving the quality of learning and developing creativity in designing and using various learning resources to create interesting atmosphere of learning.

The use of electronic media has become a necessity in learning in addition to other conventional media. By using electronic media, learning becomes more effective and efficient, because all teaching
materials can be integrated into one unit, both in the form of text, narration, images, photos, animation, audio, video, and music. In addition, students can use it anywhere and anytime because this electronic media is paperless, so it is not heavy if it is taken anywhere. One software that can accommodate such media is by using 3D Pageflip. This software like a book that can be flipped through the pages. The material can also be presented in an integrated unit: pictures, photos, text, narration, animation, music, audio, singing and video, so that the presentation of material is more alive and students are motivated in learning. The use of 3D pageflip-based electronic media is appropriate to be presented in learning for middle school students who have a high sense of curiosity.

Based on observations in several junior high schools in the city of Jambi, it is found that the material of Classification of living things is boring. Students have lack of varied learning resources on related materials. This material discusses the classification of living things based on the characteristics and characteristics possessed by these living things. Every living creature has distinctive traits and characteristics, so skills in classifying living things are needed to make it easier to learn. Presentation of material on Classification of Living Things on 3D-based electronic learning media is presented contextually. The presentation of pictures or photos will be adjusted to the existing resources in Jambi Province, so that students can connect between subject matter and their environment conditions.

According to Rasiman (2014) Flip book maker is software that can change the appearance of pdf files to be more interesting as a book. 3D PagerFlip Professional is a type of Flipbook software for converting PDF files to pages reversing digital publications. It allows us to include videos (youtube, videos), images, audio, graphics, slides, buttons, flash, hyperlinks, hotspots and other multimedia objects onto the Flipbook. Professional 3D page PageFlip can move hyperlinks, bookmarks, table of contents and text orientation from the original PDF file, enter videos (including Youtube or Flash Professional can move graphics and buttons, and enter JavaScript for multimedia become more interactive. The advantages of this Software can be used so that the material looks become more attractive with music effects that appear with SWF or EXE files, so students can learn in fun way. Basically, this type of software has the same function like convert pdf, image, or video files into SWF or EXE files so that they become interesting book files (Wijiyanto, 2005).

Some results of research on the development of learning media using Flip Fage Professional 3D software have been carried out by Zaharah (2016) who studied about the Development of Electronic modules with a Scientific Approach to the Material of Circulatory Systems in Humans for Class VII at Junior High School Students. Electronic modules are developed using Pageflip Bookmaker 3D software. The results of the validation of material experts and media experts showed that the electronic modules included to very good categories. M. Imaduddin conducts research on The development of Digital LKPD Based on Scientific Approach on Ecosystem material for Grade VII at Junior High School Students. This research also used 3D Pageflip Professional software and after it was validated by material experts, it obtained score >85% with the excellent category and worth testing. Furthermore Hayati, et al., (2015: 13-16) used Flipbook media to improve students' learning process and outcomes. Yelianti, et al., (2017) had conducted research on the development of 3D-based electronic media Pageflip in Plant Physiology courses with photosynthetic material. The results of the validation of design experts and material experts stated that the media was very feasible to use in learning. The learning materials, then, have been used by students of Biology in Faculty Education Universitas Jambi. However, there is no information about developing electronic media based on 3D Pageflip on the material of Classification of Living Things for seventh grade students of Junior High School. Therefore, this research aims to develop the electronic media based in the material of Classification of living things for seventh grade students of Junior high school. Through this research development, is expected to facilitate the teachers in transferring knowledge, so that learning materials, especially an abstract material can be easily understood by students. Based on the background of the problem that described above, it is deemed necessary to carry out development research entitled: "Development of Electronic Learning Media Using 3D Pageflip on the subject matter of Classification of living things for the Seventh grade Students of Junior High School."
2. Methods
This research was development research. The research was conducted by developing electronic media based on 3D Pageflip. According to Sugiono (2011: 407) Research and Development is a research method used to produce certain products and to test the effectiveness of these products.

The development model used in this study is ADDIE model, which consists of A: Analysis, D: Design, D: Development or Production, I: Implementation or Delivery and E: Evaluation. According to these development stage, this research and development model is more rational and more complete than the 4D model. This model can be used for various forms of product development such as models, learning strategies, learning methods, media and teaching materials (Mulyatiningsih, 2008).

2.1 Analysis
The main activity in the analysis phase is the need analyze for developing 3D-based electronic learning media in Pageflip and analyze the feasibility and requirements for developing learning media. The development of electronic learning media begins with the problem of limited learning resources that have been used. Problems can occur because existing learning resources are not in line with the needs of the target, learning environment, technology, student characteristics, etc.

The analysis process is carried out by answering the following questions: (1) can 3D Pageflip-based electronic media overcome the problem at hand?, (2) Does 3D Pageflip-based electronic media have facility support to be implemented, (3) is the teacher able to use electronic media based The 3D Pageflip.

2.2 Design
In designing 3D Pageflip-based electronic learning, the design phase has similarities to designing teaching activities. This activity is a systematic process that starts from setting learning goals, designing learning material and learning outcome evaluation tools. The design of electronic learning media is still conceptual which will underline the next development process.

2.3 Development
Development in the ADDIE model contains the realization of product design activities. In the design phase, a conceptual framework for the application of electronic learning media based on 3D Pageflip has been developed. In the development phase, the conceptual framework is realized to become a product that is ready to be implemented. In the design phase, the designed electronic learning media are still conceptual. So that, at the development stage, the learning media has been prepared or created.

2.4 Implement
In the implementation phase, products that have been feasible according to experts will be tested in the field. Testing at the implementation stage consists of 2 stages. The first stage is the small group test stage, where the subject of the trial is VII grade students of Junior high school, which amounts to 3-6 people. The subject of this study would be taught material about the Classification of Living Things in several meeting. Then, they were given a questionnaire to see their responses about 3D-based 3D electronic media. Students’ responses are a consideration for researchers to revise the product.

The next stage is the large group test phase. At this stage the researchers tested the feasibility of the product for 30–40 students of grade VII at junior high school. The stage is the same as in the small group test. At the end of the lesson, a questionnaire was given to see students’ responses regarding to the Pageflip media.

3. Evaluation
The evaluation stage is the process of showing the product being developed successfully and in accordance with those targeted at each stage of the ADDIE model. Evaluation is carried out not only in the fifth stage, but the evaluation has been carried out at the stage of analysis to evaluation. According to Newmann and Archbald (Palm, 2008: 7), student evaluations include process evaluation and product evaluation in learning.
3.1 Research Instrument

Data collection in this study used instruments including:

1. **Expert validation questionnaire.**
   It is a questionnaire that was given to media experts, material and curriculum by using Likert scale. The suggestion from experts were used to revise the Pageflip media.

2. **Questionnaire for student responses**
   It is a questionnaire that was given to the students as subjects to do trial test. The questionnaire is also utilized Likert scale to study the student responses for revising Pageflip media.

3.2 Data analysis

The data were analyzed both in qualitative and quantitative descriptive. The data of validation obtained from design experts and material experts were processed in a qualitative descriptive, which aimed to know the feasibility of the products. The quantitative data were obtained through closed questionnaires using a Likert scale and then analyzed by using a rating scale. Rating scale is one form of choice in a questionnaire by using that use check list. Thus, respondents just have to choose and tick the check mark as it is desired. Tests are conducted to determine the validity of the products. The validity level can be calculated by considering the number of categories (1-5), the number of descriptor items assessed, and the number of respondents. Furthermore, the researcher provided criteria table for the validation level of material experts and design experts, which is consisting of:

1. The number of statements for design validation is 15, then the calculation is:
   Rating category: 5 and number of validators: 1.
   The lowest score: $1 \times 15 \times 1 = 15$, and the highest score: $5 \times 15 \times 1 = 75$

2. The number of statements for design validation is 15, then the calculation is:
   Rating category: 5 and number of validators: 1.
   The lowest score: $1 \times 15 \times 1 = 15$, and the highest score: $5 \times 15 \times 1 = 75$

   \[
   \frac{\text{Highest score} - \text{lowest score}}{} = \frac{75 - 15}{60} = \frac{60}{60} = 12
   \]

   \[
   \frac{\text{Rating category}}{} = \frac{5}{5} = 1
   \]

Table 3.1 The Validity of Electronic Learning Media by Experts

| No. | Range      | Criteria  |
|-----|------------|-----------|
| 1.  | 61.00 – 50.00 | Very good |
| 2.  | 49.00 – 60.99 | Good     |
| 3.  | 37.00 – 48.99 | Bad      |
| 4.  | 12.00 – 36.99 | Worst    |

3. The number of questions for material validation is 10, then the calculation is as follows:
   Rating category: 5 and number of validators: 1.
   The lowest score: $1 \times 10 \times 1 = 10$, and the highest score: $5 \times 10 \times 1 = 50$

   \[
   \frac{\text{Highest score} - \text{lowest score}}{} = \frac{50 - 10}{40} = \frac{40}{40} = 8
   \]

   \[
   \frac{\text{Rating category}}{} = \frac{5}{5} = 1
   \]

Table 3.2 The Validity of Electronic Learning Media by Material Experts
No. | Range          | Criteria   
--- | -------------- | ---------- 
1.  | 34.00 – 40.00  | Very good  
2.  | 26.00 – 33.99  | Good       
3.  | 18.00 – 25.99  | Bad        
4.  | 10.00 – 17.99  | Very bad   

4. The number of questions for the subject of a small group trial is 12, then the calculation is: 
   Rating Category: 5 and total of the respondents : 40. 
   The lowest score: 1 x 12 x 40 = 480, The highest score: 5 x 12 x 40 = 2400 
   The highest score – The lowest score: 2400 – 480 = 1920 
   Range of the score: ------------------------------------------ : 1920 = 384 
   Rating Category: 5 

Table 3.3 The criteria of students’ respond toward electronic learning media 3D Pagelfip 

| No. | Score Range | Criteria         
--- | ----------- | ----------------- 
1.  | 2016,00 – 2400,00 | Very and Strongly agree 
2.  | 1632,00 – 2015,99 | Strongly agree 
3.  | 1248,00 – 1631,99 | Agree 
4.  | 864,00 – 1247,99 | Disagree 
5.  | 480,00 – 863,99 | Strongly Disagree 

4. **RESULTS AND DISCUSSION**

4.1 **Results**

The research was conducted in accordance with the ADDIE model. The development steps are:

4.1.1 **Analyze**

This activity is the first step that must be done to see the needs of middle school students. The students have difficulty in understanding the material of Living things, especially for material recognition of the nature and characteristics, and giving of the correct name. This material is very complicated, in which several of living things use Latin names. The material discusses the introduction of living things based on the characteristics. The characteristics were grouped according to their differences and similarities. The class discussion of Classification of Living Things has used various media such as power point, video, audio, and relevant images. However, students still felt frustrated. even if it is integrated, but it is not interesting because it only uses hyperlinks and hypertext. Therefore an innovation is needed to develop a learning media. The solution chosen is to use a 3D Pagelfip application, in which the display resembles a book that can be turned back and forth. In addition, the application is able to integrate images, narration, video, audio, and background music (background music), so it is more interesting and easier for students to understand the material in the classification of living things.

4.1.2 **Design**

At the stage, the researcher started designing and making product prototypes based on data obtained from the initial observations. The products of 3D Pagelfip-based learning media in the Classification of Living Things material is developed by creating various teaching materials based on Syllabus, lesson plan and assessment.

4.1.3 **Develop**
At the present stage, the product prototype in the form of 3D Pageflip-based learning media had been validated by several experts (media experts, material experts). The product was revised based on input and advice from the experts and it was approved to be tested.

1). The validation of the media are presented in Table 5.1:

Table 4.1 The validation results of 3D Pageflip-based electronic learning media on the material of the Classification of Living Things for seventh grade students of Junior high school by Design Expert on Phase I and II

| No | Statement                                                                 | Score I | Suggestion | Score II | Suggestion |
|----|---------------------------------------------------------------------------|---------|------------|----------|------------|
| 1  | The Completeness of the e-book contents on the materials of the Classification of Living Things | 3       | -          | 5        | -          |
| 2  | The Convenience of using the book                                         | 5       | -          | 5        | -          |
| 3  | The use of language is simple, easy to understand, and using general terms | 4       | 5          | -        |            |
| 4  | The use of e-Book does not depend on other teaching materials              | 5       | -          | 5        | -          |
| 5  | Images, animations, videos, and scientific experiments in the e-book are in accordance with the material and easy to understand | 5       | -          | 4        | -          |
| 6  | Images, animations and videos in the e-Book are focused                    | 3       | Put additional animation and images | 4        | -          |
| 7  | The appropriateness of the size and layout of images, animations, and videos in the e-Book | 3       | The layout of the image should be improved | 5        | -          |
| 8  | The sentence structure and writing format on each page of the e-Book are balanced | 3       | Improve writing format | 4        | -          |
| 9  | The Images, animations and videos displayed in the e-Book are interesting  | 4       | -          | 5        | -          |
| 10 | The cover and background of the e-Book page are interesting               | 3       | The background must be contrasted with the writing format | 5        | -          |
| 11 | The font combination is easy to read and does not hinder the display of the images, animations, and videos in the e-Book | 5       | -          | 4        | -          |
| 12 | The Color compatibility used in e-Book                                    | 3       | -          | 5        | -          |
| 13 | The material, animation, pictures, videos, scientific experiments, problem training, and competency tests in the e- | 5       | -          | 5        | -          |
books guide students in solving problems

| No | Statement                                                                 | Score I | Suggestion                            | Score II | Suggestion |
|----|---------------------------------------------------------------------------|---------|---------------------------------------|----------|------------|
| 1  | The appropriateness of material with the Basic Competence in the 2013 Curriculum | 3       | Adjust to KI and KD in the syllabus   | 5        | -          |
| 2  | The appropriateness of material with the learning purpose                 | 3       | Adjust to the indicator               | 5        | -          |
| 3  | Learning media makes students easy to learn                               | 3       | Complete with the instructions to make it easier to be used. | 4        | -          |
| 4  | The test questions in e-Book can measure the achievement of learning objectives | 2       | Complete the questions to make them more varied | 5        | -          |
| 5  | The material completeness for material of the Classification of Living Things in learning media | 4       | It is complete already but put more examples. | 5        | -          |
| 6  | The ease of understanding the material of living things classification presented in the e-Book | 4       | The use of sentences is quite clear    | 5        | -          |
| 7  | The material of the Classification of Living Things links with everyday life experiences (contextual) | 3       | Give empirical examples.              | 4        | -          |
| 8  | The accuracy of the sample test questions in clarifying the material of living things | 3       | Complete the media with a variety of questions. | 4        | -          |
The Classification of Living Things in the e-Book

| No | Statements                                                                 | Score | Adjust to Bloom's indicators and Taxonomy. | Add animations and images explanations, then give clues to students to allow them to solve problems. | Fix the media as it is recommended. The media is worth to be tested after revision. | Approved to be tested |
|----|------------------------------------------------------------------------------|-------|---------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------|
| 9  | The accuracy and quality of the test questions of the Classification of Living Things in the e-Book | 3     | 4                                           | 5                                                                                                 | 41                                                               | Very good           |
| 10 | The animations, images, videos, and test questions in e-Book guide students in solving problems | 3     |                                              |                                                                                                   | Good                                                             | Good                |

The Material was validated twice which obtained score of 31 (62%) in phase I that was considered in good category. After being revised according to the suggestion, the second validation obtained score of 41 (82%) with a very good category and feasible to be tested on the subject. The subjects are a biology teacher and seventh grade students of junior high school. The trials are conducted at Junior High School 7 Muaro Jambi and the results of the tests are presented in the following table.

Table 4.3 The responses of biology teacher toward electronic learning media using 3D Pageflip on the material of the classification of living things at Junior High School 7 Muaro Jambi

| No | Statements                                                                 | Score |
|----|------------------------------------------------------------------------------|-------|
| 1  | Material of the Classification of Living Things presented in electronic media is in accordance with the learning objectives to be achieved | 3     |
| 2  | This 3D pageflip-based electronic media can clarify and facilitate students to understand the material of the Classification of Living Things | 4     |
| 3  | The images, animations and videos contained in 3D Pageflip-based electronic media are in accordance with the material to be delivered | 4     |
| 4  | The language used in 3D Pageflip-based electronic media on the material of the Classification of Living Things is simple and easy to understand | 4     |
| 5  | Animations and demonstrations presented in 3D Pageflip-based electronic media are clear and on the target | 3     |
| 6  | The look of 3D Pageflip-based electronic media can attract students to join the lessons | 5     |
| 7  | The appropriateness of font colour and page background on this 3D Pageflip-based electronic media | 4     |
| 8  | The format, font type, and text size on 3D Pageflip-based electronic media are suitable | 4     |
| 9  | The component of metacognition (action planning, action monitoring, action evaluation) is clearly illustrated in this 3D Pageflip-based electronic media. | 3     |
| 10 | The ease of using 3D media-based electronic media on the material of the Classification of Living Things | 5     |
The developed media is very appropriate to be used in the learning process for class VII of Junior High School. Then, 3D Pageflip-based electronic media was tested to 40 students of Junior High School Muaro Jambi to see the students' responses toward the developed media.

| Suggestion | Criteria | Percentage (%) | Total |
|------------|----------|----------------|-------|
| This 3D Pageflip-based electronic media can be used by students to learn independently | Very Good | (80%) | 60 |
| This 3D Pageflip-based electronic media helps students in problem solving | | | |
| This 3D Pageflip-based electronic media helps students in decision making | | | |
| This 3D Pageflip-based electronic media guides students to think critically | | | |
| This 3D Pageflip-based electronic media guides students to think creatively | | | |

The response of the biology teacher at Junior High School 7 Muaro Jambi was very good. Based on the questionnaire given to the teacher, it obtained score of 60 (80%) with very good criteria. It can be concluded that the developed media is very appropriate to be used in the learning process for class VII of Junior High School. Then, 3D Pageflip-based electronic media was tested to 40 students of Junior High School Muaro Jambi to see the students' responses toward the developed media.

### Table 4.4 The Students’ responses toward 3D Pageflip-based learning media on the material of the Classification of Living Things

| No | Students | The score for each of the statements | Total | Average |
|----|----------|-------------------------------------|-------|---------|
|    |          | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 1 | 1 | 0 | 1 | 2 |
| 1  | A        | 4 | 4 | 4 | 4 | 5 | 3 | 4 | 3 | 3 | 3 | 4 | 45 | 3,75 |
| 2  | B        | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 49 | 4,08 |
| 3  | C        | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 48 | 4,00 |
| 4  | D        | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 43 | 3,58 |
| 5  | E        | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 43 | 3,58 |
| 6  | F        | 3 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 3 | 4 | 5 | 47 | 3,92 |
| 7  | G        | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 44 | 3,67 |
| 8  | H        | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 5 | 46 | 3,83 |
| 9  | I        | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 3 | 3 | 48 | 4,00 |
| 10 | J        | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 3 | 3 | 5 | 48 | 4,00 |
| 11 | K        | 3 | 3 | 3 | 4 | 5 | 3 | 4 | 4 | 5 | 5 | 4 | 3 | 46 | 3,83 |
| 12 | L        | 4 | 3 | 3 | 4 | 5 | 5 | 4 | 3 | 3 | 3 | 4 | 44 | 3,67 |
| 13 | M        | 4 | 3 | 4 | 4 | 5 | 3 | 4 | 3 | 4 | 4 | 3 | 45 | 3,75 |
| 14 | N        | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 5 | 48 | 4,00 |
| 15 | O        | 4 | 3 | 3 | 4 | 5 | 5 | 3 | 3 | 3 | 3 | 4 | 43 | 3,58 |
| 16 | P        | 4 | 3 | 3 | 3 | 5 | 5 | 4 | 3 | 4 | 3 | 4 | 44 | 3,67 |
| 17 | Q        | 4 | 4 | 3 | 3 | 5 | 3 | 5 | 5 | 4 | 3 | 3 | 43 | 3,58 |
| 18 | R        | 4 | 3 | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 4 | 3 | 45 | 3,75 |
| 19 | S        | 3 | 3 | 4 | 5 | 4 | 5 | 3 | 5 | 3 | 4 | 3 | 45 | 3,75 |
| 20 | T        | 4 | 5 | 4 | 5 | 5 | 5 | 3 | 3 | 4 | 3 | 2 | 45 | 3,75 |
| 21 | U        | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 48 | 4,00 |
| 22 | V        | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 41 | 3,42 |
| 23 | W        | 4 | 4 | 5 | 3 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 52 | 4,33 |
| 24 | X        | 4 | 3 | 4 | 4 | 4 | 5 | 3 | 4 | 3 | 4 | 4 | 45 | 3,75 |
Table 5.4 show the responses of the students at SMP N 7 Muaro Jambi toward the 3D Pageflip-based electronic learning media on the material of the Classification of Living Things which obtained very positive response. It can be known from the average score that obtained 3.92, with the category of strongly agree. Thus, 3D pageflip-based electronic learning media in the Material of Classification of Living Things is appropriate to be used as learning media. The media is interesting, colorful and completed by contextual images. In addition, the language used is understandable. It is expected that the media can be used as alternative teaching materials that facilitate teachers in teaching so that the learning outcomes also increase.

4.2 Evaluate
The evaluation phase is the final stage after testing the product. Suggestions and responses from the seventh grade students are taken into consideration to make revisions to the product so that it is feasible to be used. The evaluation phase was also carried out at each stage in this study.

5. Conclusion

5.1 The revised product
Based on the results of the research on developing 3D Pageflip-based Electronic learning media on the Material of Classification of Living Things for Seventh Grade students of junior high school, the researchers conclude some important points:

1. The development of 3D Pageflip-based Electronic media on the material of Classification of Living Things for Seventh grade students of Junior High School was carried out in several stages, namely: (1) analyzing the obstacles and problems of the students on biology subjects and compiling the materials used to design the media, (2) designing media and its instruction, (3) validating the design and material of the learning media, (4) revise the product based on the results of validation and suggestion from the validator team, and (5) testing the product in small and large groups.
2. The validation result about the design of the 3D Pageflip-based electronic media on the Material of the Classification of Living Things of is very good to be used in the learning. Likewise, the validation by material experts is also very good to be used in learning.

3. The responses of the teacher and students to 3D Pageflip-based electronic media on the Material of the Classification of Living Things are appropriate and very feasible to be used as a learning media for teaching biology for seventh grade students of Junior High School.

1. 3D Pageflip-based electronic learning media on the Material of the Classification of Living Things can be used to help teachers in teaching the materials.

2. Furthermore, we can test the effectiveness of 3D Pageflip-based electronic media to other junior high schools so that the researcher may obtained more input to perfect to product.

3. 3D Pageflip-based Electronic learning Media on the material of the Classification of Living Things can be used as an alternative media to require students learn independently, anywhere and anytime.

4. Furthermore, it is expected to develop the media on the other materials with various interesting animation, images and videos.

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