Learning Media Development Using the Lectora Inspire Application Refers to the 2013 Curriculum for Elementary School Students

Irsan1, Elvi Mailani2, Lala Jelita Ananda3, Friska Lestari Nainggolan4
{rangkuti23@gmail.com}
Faculty of Education, Universitas Negeri Medan-Indonesia

Abstract. The purpose of this study was to determine the feasibility of learning media using Lectora Inspire on the sub-theme of Animal Movement Organs. The subjects in this study were fifth grade of elementary school students. The results showed that the learning media using Lectora Inspire which was developed was classified as "Very Good" learning media criteria based on the results of the assessments of the three validators in the "Very Valid" category with details of the material expert validators obtained a score with an average of 95% very valid categories. In the aspect of media assessment by media experts, a score of 93.75% was obtained in the very valid category. In the aspect of language assessment by linguists, a score of 96.66% was obtained in the very valid category and the teacher response assessment aspect by the second-grade teacher was obtained with an average score of 97.61% in the very valid category. Based on the results of the three validations, the learning media using the Lectora Inspire Application on the sub-theme of Animal Movement Organs is appropriate for fifth grade elementary school students.

Keywords : Learning Media Development, Lectora Inspire, Elementary school students.

1 Introduction

Learning media is a means that can be used in the learning process to increase student motivation and learning outcomes and assist students in achieving learning objectives. Media has a role as an inseparable part of the teaching and learning process for the creation of learning objectives. Utilization of appropriate learning media can foster interest in learning, and even improve student learning outcomes.

Based on the results of interviews conducted by researchers at SD Negeri 066046 Perumnas Helvetia Medan, the teacher said that during learning the teacher had used learning media, but what was often used was pictures. As time goes by, teachers are required to be more creative and innovative in developing learning in the classroom. The teacher also conveyed some of the difficulties experienced, including the very limited availability of digital-based learning media, while at the current online learning period related to the limitations of face-to-face learning, learning media in digital form is very much needed.

Furthermore, the researchers tried to provide alternative solutions to solve the problem by developing learning media in the form of audio-visual learning media based on Lectora Inspire referring to the 2013 curriculum theme 1 sub theme 1 learning 2 for class V SD Negeri 066046 Perumnas Helvetia Medan. Therefore, the researchers compiled development research entitled
Development of Lectora Inspire-Based Learning Media Referring to the Kurikulum 2013 Sub-theme Animal Movement Organs Class V SDN 066046 Perumnas Helvetia Medan Academic Year 2020/2021.

The purpose of this research is to find out:

a. The validity of learning media based on Lectora Inspire Sub-theme of Animal Movement Organs Class V SDN 066046 Academic Year 2020/2021 Perumnas Helvetia Medan?
b. Practicality of learning media based on Lectora Inspire Sub-theme of Animal Movement Organs Class V SDN 066046 Academic Year 2020/2021 Perumnas Helvetia Medan?
c. The effectiveness of learning media based on Lectora Inspire Sub-theme of Animal Movement Organs Class V SDN 066046 Academic Year 2020/2021 Perumnas Helvetia Medan?

2 Research Methods

This research is a type of 4D model Research & Development which consists of four stages, namely: (1) Define, (2) Design, (3) Development, and (4) Disseminate. In this study, what will be developed is learning media in the form of a Lectora Inspire-based Learning Media application in the Sub-Theme of Animal Movement Organs for Class V Elementary School students.

In this study, the researcher also uses a cooperative learning model of Example non Example. The research was conducted at SD Negeri 066046 Jl. Kamboja Raya, Medan Helvetia District, Medan with the research subject being class V Semester II students for the 2020/2021 Academic Year, totaling 30 students, consisting of 14 female students, and 16 male students. The time of the research was carried out in March-May 2021.

The following is the main flowchart of the Thiagarajan development model:

![Fig.1. Thiagarajan Research and Development Steps (Sugiyono, 2017:38)](image)

In this study, the data taken are as follows:

a. The results of research on the feasibility aspect of Lectora Inspire-based learning media obtained from media experts, material experts, and linguists.
b. The results of the questionnaire on the practical aspect obtained from the fifth-grade teacher of SD Negeri 066046 Perumnas Helvetia Medan.
c. In addition, interviews were also conducted with fifth grade teachers regarding the effectiveness of using Lectora Inspire-based learning media in supporting the learning process.

3 Result and Discussion

Development research is research that is used to produce certain products and test the effectiveness of these products (Sugiyono, 2017: 407). The product produced in this study is a Lectora Inspire-based learning media that can help students understand the complex material
for the Sub-theme of Animal Movement Organs. The development of Lectora-based media Inspires learning on the problems found by researchers when collecting information in the field, namely students still find it difficult to understand the material for the sub-theme of the organs of motion in the midst of bold learning that is implemented and the availability of digital learning media in schools. So that researchers need to develop learning media based on Lectora Inspire to help students understand the material for the sub-theme of Animal Movement Organs more easily.

The steps for developing Lectora Inspire-based learning media are based on Thiagarajan's research and development procedure which consists of 4 stages. However, this research was only carried out with 3 stages of development, namely: 1) Define, 2) Design, and 3) Development. The researcher did not carry out the dissemination stage due to the limitation of face-to-face learning due to the Covid-19 pandemic, so that teaching and learning activities are carried out online from home. This causes researchers to not be able to carry out research directly to students.

In the Define stage, the researcher conducted interviews with the fifth-grade teacher at SD Negeri 066046 Perumnas Helvetia Medan, it was found that the teacher really needed the media as a learning aid for students when the learning process took place both in offline learning and even in the midst of online learning that was enforced when this. Furthermore, in the media needs analysis that teachers have difficulty in using learning media due to limited costs, time, and also school facilities that do not support it.

So that teachers use less media during the learning process. Researchers develop learning media based on Lectora inspire which is designed according to the following basic competencies and material indicators:

**Table 1. Basic Competencies and Indicator**

<table>
<thead>
<tr>
<th>No.</th>
<th>Competency</th>
<th>Indicator</th>
</tr>
</thead>
</table>
| 3.1 | Determining the main idea in spoken and written texts. | 3.1.1 Listening to spoken texts read by the teacher.  
3.1.2 Find the main idea based on the text you hear.  
3.1.3 Read the main idea based on the text made.  
3.1.4 Find the main idea based on the text read. |
| 4.1 | Presenting the results of the identification of main ideas in written and oral texts orally, in writing, and visually. | 4.1.1 Summarize the main idea orally  
4.1.2 Describe the main idea in writing.  
4.1.3 Visualize the main idea of the text into pictures. |

**Table 2. Subjects : IPA (Ilmu Pengetahuan Alam)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Competency</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Explain the means of locomotion and their functions in animals and humans as well as how to maintain the health of the human locomotion</td>
<td>3.1.1 State the organs of motion and their functions in animals.</td>
</tr>
</tbody>
</table>
4.1 Make simple models of human and animal locomotion

<table>
<thead>
<tr>
<th>No.</th>
<th>Competency</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Understanding story images</td>
<td>3.1.1 Telling the story contained in the picture story.</td>
</tr>
<tr>
<td>4.1</td>
<td>Create story pictures</td>
<td>4.1.1 Making arrangements and series of story pictures.</td>
</tr>
</tbody>
</table>

The second stage is Design, which is making a defined product design. There are three steps that must be done at this stage, namely media selection, format selection, and initial design.

a. Media Selection
Selecting learning media in accordance with the analysis at the define stage. At this stage the researchers decided to choose to develop a Lectora Inspire-based learning media related to the sub-theme of Animal Movement Organs, namely Lectora Inspire-based learning media.

b. Preliminary Design
In the initial design stage, the initial product design is carried out from pre-selected learning media, namely Lectora Inspire-based learning media.

Researchers made the initial design of the media using the Adobe Photoshop application, which is an application that can be downloaded on a computer. The results of the design of learning media at this stage are the design of instructional media based on expert advice from the validator and suggestions from second grade elementary school teachers who previously had interviews. The third stage is Development. Lectora inspire learning media is made by selecting the display and audio design that will be placed as the background on the media. Lectora inspire-based learning media, which initially was only an application with several features, will then be developed into a unified concept of interesting interactive learning media. This interactive learning media is an inspiration for researchers in developing this media to help students understand the concept of the material for the sub-theme of Animal Movement Organs which is broken down into vertebrate and invertebrate animals.

The results of the form of media development above are the advantages of Lectora Inspire learning media on the sub-theme of Animal Movement Organs in class V at the elementary school level from the previous media. Where the previous media did not have an evaluation of questions and scores, the material has not been presented in depth in accordance with the demands of the curriculum in elementary schools, especially in accordance with learning activities in the curriculum that adapts to the needs of students and the level of student development. And has not provided a menu that is able to relate the connection between one material to another.

The Lectora inspire learning media used will make the thematic learning process for the Animal Movement Organs sub-theme easier to understand and increase students’ enthusiasm for learning. In addition, this Lectora Inspire-based learning media also has several supporting tools, namely a menu of instructions for using Lectora Inspire-based learning media which can make it easier for students to understand the steps for using Lectora Inspire-based learning media.
media. Apart from the advantages of Lectora Inspire-based learning media above, this media also has weaknesses. The weakness of this Lectora Inspire-based media is that it cannot be tested directly on students due to the current Covid-19 pandemic in Indonesia.

The next step taken at this stage is product validation by media experts, material experts, linguists and teacher responses to several aspects of media assessment. Material validation is carried out with the aim of obtaining material that is in accordance with the developed media. The results of material validation obtained an average value of 95% with the "very good" category. It can be concluded that the material on the Lectora Inspire-based learning media component is very feasible to use. Media validation is carried out with the aim of obtaining media that is suitable for use.

The results of media validation obtained an average value of 93.75% with the criteria of "very good". It can be concluded that the Lectora Inspire-based learning media is feasible to use. Language validation is carried out with the aim of obtaining appropriate linguistic rules on the media so that they are suitable for use. The results of language validation obtained an average value of 96.66% with the criteria of "very good". It can be concluded that Lectora inspire-based learning media is feasible to use. The validation of the teacher's response was carried out with the aim of obtaining appropriate media and in accordance with the learning process. The results of the validation of the teacher's response obtained an average value of 97.61% with the criteria of "very good". It can be concluded that the Lectora Inspire-based learning media is feasible to use.

The following is presented in the form of a diagram of the results of the assessment by media experts, material experts, and teacher responses.

![Assessment Result Chart](attachment:image.png)

The results of the validation of the experts obtained an average value of 95.75% with the criteria of "very good". It can be concluded that the Lectora Inspire-based learning media is feasible to use. Because all aspects of the assessment of the media are in the very valid category, the media that has been developed can be used at a later stage and the media can be used both at school and outside of school as learning media on the sub-theme material Animal Movement Organs in class V SD.
There is an error in making the logo contained in the opening page of the media where the logo is the Universitas Negeri Medan logo. The media validator directs that the logo be changed to a more specific logo, namely the Fakultas Ilmu Pendidikan Universitas Negeri Medan Logo.

The logo has been changed to a more specific logo in accordance with the advice given by a media expert validator, namely the Fakultas Ilmu Pendidikan Universitas Negeri Medan logo.

There is no back button to the previous view on each page of the media.

On each page there is a back button icon in the form of a rabbit image to make it easier for users to operate.

<table>
<thead>
<tr>
<th>Table 4. Product Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before Revision</strong></td>
</tr>
<tr>
<td>There is an error in making the logo contained in the opening page of the media where the logo is the Universitas Negeri Medan logo. The media validator directs that the logo be changed to a more specific logo, namely the Fakultas Ilmu Pendidikan Universitas Negeri Medan Logo.</td>
</tr>
<tr>
<td>There is no back button to the previous view on each page of the media.</td>
</tr>
<tr>
<td>The menu arrangement on the media is not appropriate in every stage of its function.</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>There is no image source for every image displayed on the media.</td>
</tr>
<tr>
<td>In the material for locomotion in animals, the material is still too abstract, which is only in the form of images.</td>
</tr>
<tr>
<td>In the formulation of indicators for Indonesian subjects, it is still too ambiguous and has not fulfilled significantly the achievement of basic competencies.</td>
</tr>
</tbody>
</table>
There are several difficulties that researchers experience when conducting research during the current Covid-19 pandemic, such as:

1) The limitations of doing activities outside the home and the limitations of students who do not have many Android-based smartphones that have high storage capacity.
2) Students do not come directly to school and the school directs assignments to be collected by parents.
3) Researchers have a pause when they will carry out research directly to students.

4 Conclusion

Based on the formulation of the problem that has been described by previous researchers, namely the Development of Lectora Inspire-based learning media that was developed was Valid and In accordance with the Characteristics of Class V Students at SD Negeri 066046 Perumnas Helvetia Medan T.A 2020/2021 in mastering the material for the sub-theme of Animal Movement Organs. Based on the validity test data, the Lectora Inspire-based learning media on the Animal Movement Organs sub-theme meets the valid category with the feasibility of being used in learning the Animal Movement Organs sub-theme material, this feasibility is based on:

a. Eligibility test of media experts who get a score of 93.75% (Very decent),
b. Feasibility test of material experts who get a score of 95%, (very feasible),
c. Feasibility test of linguists who got a score of 96.66%, (Very decent),
d. The feasibility test of the effectiveness of the use of instructional media on the fifth grade teacher respondents at SDN 066046 Perumnas Helvetia Medan 97.61% (very feasible).

From the four expert validation scores obtained an average value of 95.75% with the criteria of "very good". So that the Lectora Inspire-based learning media is feasible to use. Research and development of Lectora inspire-based media for fifth grade elementary school students which has been carried out in accordance with the research and development procedures from Thiagarajan which have been simplified due to the limited circumstances that occur in the midst of the current conditions, namely the Covid-19 pandemic.

Acknowledgement

The author would like to thank all those who supported the implementation of this research. The author also thanks the Directorate of Education and Culture for providing funding for the implementation of this research. Hopefully the results of this study will be of benefit to us.
References