Audio Visual-based DOMAR Media to Improve Second-Grade Elementary School Students' Listening Skills

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Abstract

Limited media and classical teaching patterns used in Indonesian language learning. This results in less effective student learning processes in building language skills. Audio-visual-based DOMAR (Picture Fairy Tales) media was developed based on this background. This research aims to analyze the development process, feasibility, and effectiveness of media in improving the listening skills of class II students. The method in this research is the development method or Research and Development (R&D). The subjects in this research were second-grade elementary school students. The development model in this research is the ADDIE model with the following stages: (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation. Data collection consists of observation, interviews, and documentation. Data analysis uses paired sample tests. The results of this development show that the media validation questionnaire is 90% and the material validation questionnaire is 89%, which is included in the very feasible category. In assessing student responses, the average percentage was 89%, and teacher responses were 88% with very good criteria. So, the media developed is very suitable for use in learning Indonesian.

Keywords: Development, Media, Audio Visual, Listening Skill.

1. INTRODUCTION

The use of language will make it easier for humans to communicate, socialize, and ultimately interact well with their environment (Amalia, 2021; Kurniawan et al., 2022). For this reason, language skills are very necessary from an early age. The scope of basic Indonesian language learning includes language and literary skills components, including reading, listening, speaking, and writing skills. Listening is one of the activities that is quite basic in communication and language skills. According to previous research, listening has several goals, including: 1) gaining knowledge; 2) appreciating short material; 3) feeling the beauty; 4) carrying out communication to convey an idea or ideas to other people; 5) distinguishing sound symbols precisely and clearly (Putri et al., 2019; Rina Pratiwi & Zulfadewina, 2022). Media comes from the word medium, which means intermediary or
introduction. Media is a tool that can carry information between the source and recipient of the information (Mashudi et al., 2021; Tafonao, 2018). Learning media are all tools and materials that can be used for educational purposes. There are several types of learning media: audio, visual, and audio-visual. Audio media consists of sound elements to provide information to students (Anjarwati et al., 2023; Darmayanti et al., 2022; van der Meij et al., 2017). Visual media contains image elements that can provide an overview of information to students. Meanwhile, Audio-Visual media combines images accompanied by sound in the video (Kramer et al., 2020; Muhibah, 2021). Alternatively, Audio-Visual media is a tool in the form of a combination of images and sounds that can be seen and heard simultaneously.

Research related to the use of Audio Visual shows that using audio-visual media assisted by PowerPoint can improve the learning outcomes of fourth-grade elementary school students (Widhayanti & Abduh, 2021). It proves that using image media can stimulate students to tell stories and can be a guide in expressing the meaning of the story (Azizah et al., 2021; Hastuti & Budianti, 2014). Other research concludes that audio-visual media improves elementary school students' learning outcomes (Gabriela, 2021). Based on observations and interviews conducted on October 18, 2022, at SD Negeri 2 Purwodadi, Karangkobar District, Banjarnegara Regency, with a second-grade teacher as resource person. It is known that there is a big impact after the occurrence of Covid-19. The government's policy to limit the spread of COVID-19 impacts all areas of life in the world, especially the provision of education in Indonesia (Herliandry et al., 2020; Sofiyanti, 2020). Distance learning results in a lack of attention to the student learning process and decreased motivation. Another finding was that learning still used the lecture method with limited learning media due to limited facilities and infrastructure. It was found that students tend to be bored and less interested in the teaching material presented. The completeness of the mid-semester assessment results in low Indonesian language subjects proves it. Therefore, it is necessary to develop learning media to attract students' interest in learning (Astuti et al., 2021; Minawati, 2020). Audio-visual-based learning media can convey knowledge so that learning is more interesting and students do not feel bored with teaching and learning activities. Based on the problems above, the researcher formulated the problem identification as follows: 1) technological advances that require teachers to be more creative and innovative in implementing learning; 2) the Covid-19 pandemic has had a major impact on the learning process; 3) children's language skills are low, especially in listening skills; 4) low and unsatisfactory student learning outcomes; 5) low student motivation to learn due to almost three years of distance learning; 6) the methods used by teachers are still lacking in diversity; 7) the media used is still limited and less varied; 8) limited facilities and infrastructure available at the school. From the identification above, the researcher limited the problem to developing audio-visual-based DOMAR media to improve the listening skills of second-grade students at SD Negeri 2 Purwodadi, Banjarnegara Regency. This research aims to analyze the development process, feasibility, and effectiveness of media in improving the listening skills of second-grade students.

2. METHODS

The type of research used is research and development. The research products are processed scientifically, researched, designed, produced, and tested for validity (Sugiyono, 2016). Research and development is a method to develop a product and determine its effectiveness. Produce a product that will go through the testing and product revision stages to obtain the quality that meets the standards (Khomarudin & Efriyanti, 2018). The product produced is Audio Visual based DOMAR Media. This product was created to test the feasibility and effectiveness of the product. This research uses observation, interviews, and
documentation. In the initial stage, the researcher made initial observations related to problems at school. Observation is a data collection activity by recording and analyzing data in the field to obtain data (Lestari & Yudhanegara, 2017). Researchers carried out structural observations by taking data on students’ learning activities during the research process. After that, the interview is an activity of giving a series of questions by the researcher to the respondent directly. Interviews are conducted face-to-face and verbally, which can be done in groups or individually, depending on the purpose. Finally, documentation is one of the methods used to search for data in the form of notes, books, meeting minutes, and agendas. In this research, the documents obtained included names, number of students, and student grades. The data collection technique in the form of a questionnaire is a data collection technique by giving written questions or inquiries to respondents to be answered (Sugiyono, 2016). At this stage, media, material, and language expert validators conduct an evaluation or assessment to assess the suitability of the media. Experts carry out analysis using descriptive percentage tests. Data analysis is carried out to determine the effectiveness of the media based on the data taken. At this stage, a t-test is used as a Paired Samples Test and an average increase test (N-Gain) (Zalsalina et al., 2020). The purpose of this test is to prove that there is an average increase before and after using the media.

3. RESULTS AND DISCUSSION

Result

The audio-visual-based DOMAR media developed contains second-grade material related to listening learning and is made in digital form in the form of videos. Audio Visual-based DOMAR media components include cover, foreword, story content, and developer biodata. Audio Visual-based DOMAR media is designed to be attractive, dominated by bright colors, and use simple language. The picture storybook media was considered very suitable for learning Indonesian, especially reading aloud in second grade. The results of the media expert's assessment are shown in Table 1.

<table>
<thead>
<tr>
<th>Rated aspect</th>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Suitability Aspects</td>
<td>100%</td>
<td>Very worthy</td>
</tr>
<tr>
<td>Visual Appearance Design Aspects</td>
<td>88%</td>
<td>Very worthy</td>
</tr>
<tr>
<td>Aspects of Material Usefulness</td>
<td>90%</td>
<td>Very worthy</td>
</tr>
</tbody>
</table>

Based on Table 1 with a percentage score of 90% from media validators and 89% from material and language validators, as well as the results of student response questionnaires in the usage test having an average percentage of 89% and teacher response questionnaire results having a percentage of 88% with very good criteria. Audio Visual-based DOMAR media is effective for use in Indonesian language learning related to listening learning in second grade with a significance value calculation result (2-tailed) of 0.000, so 0.000 < 0.05 and with an average increase test result of 0.43, which includes moderate criteria. One of the Indonesian language education lecturers, Faculty of Languages and Arts, Semarang State University, carried out material and language validation. This validation aims to test the suitability of audio-visual-based DOMAR media's content and linguistic components. The results of the material and language assessment are shown in Table 2.

Based on Table 2, the material expert scored 67 out of a maximum score of 75 with a percentage of 89%, which is included in the appropriate criteria. Regarding material suitability, experts give a score of 100%. In terms of material accuracy, experts gave a score of 90%. In the usefulness aspect of the material and the linguistic aspect, experts gave scores
with percentages of 90% and 80%. Material and language experts provide revision suggestions by using language, changing the story’s title, and adding stories. With the scores obtained by material and language experts, the media developed by researchers follows the assessment criteria and is suitable for testing.

**Table 2. Material and Language Expert Assessment Results**

<table>
<thead>
<tr>
<th>Rated aspect</th>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspects of Material Suitability</td>
<td>100%</td>
<td>Very Worth It</td>
</tr>
<tr>
<td>Aspects of Material Accuracy</td>
<td>90%</td>
<td>Very Worth It</td>
</tr>
<tr>
<td>Aspects of Material Usefulness</td>
<td>90%</td>
<td>Very Worth It</td>
</tr>
<tr>
<td>Language Aspects</td>
<td>80%</td>
<td>Worthy</td>
</tr>
</tbody>
</table>

Assessment of student and teacher responses to DOMAR media influences the suitability of the developed media. Student responses from 6 samples had an average percentage of 89% with very good criteria. The teacher response results have a percentage of 88% with very good criteria. The effectiveness of audio-visual-based DOMAR media is known by analyzing data from the assessment of students' listening skills from pre-test and post-test scores. The pre-test score is the score obtained from learning to listen to fairy tales without using audio-visual-based DOMAR, and the post-test score is the score obtained from learning to listen using audio-visual-based DOMAR media. The normality test is carried out as a first step to determine whether the existing data is normally or abnormally distributed so that the data analysis technique used can be determined. The normality test results are shown in Table 3.

**Table 3. Normality Test Results**

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov^a</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>df</td>
<td>Sig.</td>
</tr>
<tr>
<td>Pre Test</td>
<td>0.151</td>
<td>22</td>
</tr>
<tr>
<td>Post Test</td>
<td>0.204</td>
<td>22</td>
</tr>
</tbody>
</table>

Based on Table 3, if the significance is > 0.05, then the data is normally distributed, whereas if the significance is < 0.05, then the data is not normally distributed. This study’s pre-test normality test result was 0.312, which means 0.312 > 0.05, and the post-test normality test result was 0.169, which means 0.169 > 0.05. So, this study's pre-test and post-test data are normally distributed. After the data was declared normally distributed, a test of the difference in average pre-test and post-test scores was carried out using the t-test formula with the help of SPSS 26. The t-test used was the Paired Samples test. The t-test results are shown in Table 4.

**Table 4. T-test Results**

<table>
<thead>
<tr>
<th>Pair</th>
<th>Mean Pre-Test</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-12.864</td>
<td>4.051</td>
<td>0.864</td>
<td>-14.660, -11.068</td>
<td>-14.895</td>
<td>21</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on Table 4, if the significance is <0.05, there is a significant difference between the pre-test and post-test learning outcomes. In contrast, if the significance is >0.05, there is
no significant difference between the pre-test and post-test scores (Sugiyono, 2016). Audio Visual-based DOMAR media in Indonesian language learning related to listening is effective if there is a significant average difference between the pre-test and post-test. The pre-test and post-test average difference test results stated that the significance value (2-tailed) was 0.000 so that 0.000 < 0.05. Therefore, it is concluded that Ha is accepted, proving a significant average difference between the pre-test and post-test. The n-gain test results are shown in Table 5.

Table 4. T-test Results

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test Average</td>
<td>70</td>
</tr>
<tr>
<td>Post-test Average</td>
<td>83</td>
</tr>
<tr>
<td>Average difference</td>
<td>13</td>
</tr>
<tr>
<td>N-Gain</td>
<td>0.43</td>
</tr>
<tr>
<td>N-Gain index criteria</td>
<td>Sedang</td>
</tr>
</tbody>
</table>

Based on Table 5, the results of learning listening skills for second-grade students in the trial use obtained a pre-test score with an average score of 70, with the highest score being 87, the lowest score being 56, and a post-test score with an average score of 83, the highest score being 100, the lowest score being 69. Based on this data, the N-Gain is obtained at 0.43. If N-Gain ≤ 0.3, the increase is included in the low criteria. If the N-Gain value is 0.3 < N-Gain < 0.7, the increase is included in the medium criteria, and if the N-Gain value is ≥ 0.7, it is included in the high criteria. So, it can be concluded that there is an increase in the average pre-test and post-test with moderate criteria. Based on the description above, it can be concluded that Audio Visual-based DOMAR media is effective for use in Indonesian language learning related to listening learning, as evidenced by the significant difference between the pre-test and post-test, and there is an increase in the average pre-test and post-test with moderate criteria. Audio Visual-based DOMAR media was developed about listening learning in second-grade Indonesian language material for the 2013 curriculum for second grade about animal tales. Listening to audio-based DOMAR media can create interesting and unforgettable learning situations. The images and text in audio-based DOMAR media can stimulate students' imagination and curiosity so that students' listening skills improve. Audio Visual-based DOMAR media can help improve students' listening skills, so it is very suitable to be implemented in elementary schools according to the student's level of development.

Discussions

Researchers developed audio-visual-based DOMAR media to overcome the problems in the second grade at SD Negeri 2 Purwodadi. Researchers discovered problems from initial observations, teacher interviews, and students' mid-semester assessment scores. It was found that the use of media still needs to be more optimal. Teachers tend to use teacher and student books more often as learning guides. Due to the lack of media use, students' interest in learning Indonesian is still low, and students need more focus because they feel bored (Rahmi & Alfurqan, 2021; Wahiddah et al., 2022). So, learning media is needed to clarify the message and information conveyed to facilitate and improve learning outcomes. Media procurement is very important for teachers in the learning process to achieve goals (Darmayanti et al., 2022; Sugianto et al., 2022). Learning media can be a series of tools, materials, or environments to facilitate learning (Fauza et al., 2022; Ghozali et al., 2019). Before carrying out media development, researchers conducted a needs analysis of teachers and students to learn more about existing problems. Needs analysis is carried out using a
questionnaire. It was found that students' interest in learning Indonesian was still low, and students' language skills were low, especially in listening skills. Based on this problem, researchers developed audio-visual-based DOMAR media to improve the listening skills of second-grade students at SD Negeri 2 Purwodadi. Audio-visual media is interesting to understand because students can see and hear simultaneously. So, it can help maintain and maintain student interest (Bagila et al., 2019; Purba, 2018).

The development of audio-visual-based DOMAR media begins with determining the design and concept. Designs and concepts are made in outline prototype form. Prototypes are made to outline the media that will be created. The components in the prototype are the cover, foreword, story content, and developer biodata. After the concept design is complete, continue writing the story's contents. Researchers wrote fairy tales to suit needs by using sentences appropriate to the understanding of second-grade students. Next, the researcher carried out the media feasibility validation stage with media expert validators and language material expert validators. Media validation was carried out by experts who are lecturers from the Department of Educational Technology, Faculty of Education and Psychology, Semarang State University. This validation aims to test the suitability of the content and components in audio-visual-based DOMAR media. Media experts scored 90 out of a maximum score of 100 with a percentage of 90%, which is included in the very worthy criteria. In the aspect of material suitability, the expert gave a score with a percentage of 100%. In the visual appearance design aspect, experts scored 88%. Experts gave a score of 90% on the usefulness aspect of the material. At the end of the assessment, the media expert provided revision suggestions to add a quiz. The scores obtained from media experts show that the audio-visual-based DOMAR media developed by researchers follows the assessment criteria and is suitable for testing.

4. CONCLUSION

The audio-visual-based DOMAR media developed contains second-grade material related to listening learning and is made in digital form in the form of videos. Audio Visual-based DOMAR media components include cover, foreword, story content, and developer biodata. Audio Visual-based DOMAR media is designed to be attractive, dominated by bright colors, and use simple language. The media was declared very suitable for use in learning Indonesian, especially in learning to read aloud in second grade: media validator, material and language validator, and teacher response questionnaire results with very good criteria. Audio Visual-based DOMAR media is effective for use in Indonesian language learning related to listening learning in second grade with the results of calculating significance values including medium criteria.

5. REFERENCES


