A Kvisoft Flipbook Maker-Assisted E-Book to Increase Students' Interest In Elementary Schools

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ABSTRACT

Students' interest in studying science subjects with material on Earth and the Universe in sixth class is still low. It is caused by various factors, one of which is the media of teaching materials that are still conventional. This research aims to develop media in ebooks assisted by Kvisoft Flipbook Maker. This research uses the R&D (Research and Development) method with the ADDIE model. The research subjects consisted of material validators, media validators, language validators, and 62 class VI students. Data collection techniques in this study using observation and tests. The instrument used in this study was a questionnaire given to the validator and a pretest and posttest given to students. Data analysis was carried out in a quantitative descriptive manner. The results of the research are the validation of media experts in a 92% very feasible category, material experts in a 99% very feasible category, and linguists in an 86.15% very feasible category. The results showed that ebook development was very good, so there was an increase in learning outcomes with ebook teaching materials assisted by Kvisoft Flipbook Maker. This research proves that this research contributes to increasing the interest of elementary school students.

1. INTRODUCTION

The education discipline is experiencing significant impacts from the rapid advancement of technology. According to previous study education facilitates individuals in adjusting to the modifications resulting from scientific and technological progress (Aada, 2020). According to other study, educators must facilitate the transfer of innovative subjects by ensuring that learning activities are convenient and conducive to creating a positive learning environment that functions effectively (Roza et al., 2021). Consequently, educators and students must adapt to these new circumstances to avoid being undermined by the swift advancement of technology. Hence, educators have the opportunity to leverage the continuous advancement of digital technology to improve their abilities to create innovative learning materials for use in classroom teaching (Fatimah & Santiana, 2017; Haleem et al., 2022). Inevitably, modifications will occur
in education, specifically in pedagogical approaches that incorporate learning resources and instructional materials with technological advancements.

Learning media is a method or instrument used during teaching and learning activities. Learning media serves as a tool that strengthens the lesson materials to accomplish the intended goals. Meanwhile, teaching materials are an integral component of the learning system; they play a crucial role in assisting students in attaining competency standards, core competencies, or predetermined learning objectives (Fadillah et al., 2021; Putriani & Kristiantari, 2022). Learning media and teaching materials are aspects or components that must be prioritized because they are important components used in the learning process. Previous study state that teachers must develop teaching resources employing appropriate strategies to assist students in achieving the expected competencies (Nurjanah et al., 2017; Rohmah & Bukhori, 2020). On the other hand, educators must learn to use a variety of teaching materials and resources to ensure that the subject material is engaging (Feri & Zulherman, 2021; Haleem et al., 2022). E-Books, also known as electronic books, are one of the appropriate learning media for elementary school students.

Based on observations and interviews with the sixth-grade homeroom teacher at SDN Ujung Menteng 07 Pagi and SDN Margahayu 23 Pagi, it turned out that the school primarily provided students with Theme books. Still, the material presented in the Theme books was less contextual and less easily understood by students. One of them is in the science subject of earth and space material. In addition, the limitations on media and teaching materials resulted in students not being interested when learning activities took place, so teaching and learning activities in the classroom were said to have been unsuccessful. Therefore, to overcome the above problems, developing a learning media to overcome obstacles during the teaching and learning process is important.

The abbreviated form “E-Book” is commonly used to refer to the electronic book. According to previous study E-Books are digital versions of printed books that can be accessed on electronic devices and contain textual content, visual elements, or a combination of both (Almunawaroh, 2020). Other study posit that interactive e-books are a suitable teaching tool for contemporary education owing to their versatility as digital learning resources (Imansari et al., 2022). Using E-Books as a learning resource can potentially enhance students’ engagement in the learning process. The findings of other study support the notion that E-Book media is highly effective in enhancing elementary school student’s interest in studying history (Rahmaniyah et al., 2023).

Based on research pertinent to the creation of instructional media, researchers are interested in creating instructional resources with the assistance of Kvisoft Flipbook Maker. Therefore, the research aims to develop media in ebooks assisted by Kvisoft Flipbook Maker. The researcher expresses interest in investigating the development of e-books with the assistance of Kvisoft Flipbook Maker to facilitate learning in natural sciences discipline, specifically about the Earth and the universe. This interest is informed by the background and problem formulation presented. The implementation of electronic books utilizing Kvisoft Flipbook Maker is anticipated to enhance students’ engagement in science education and yield captivating and superior electronic publications.

2. METHOD

The present study employs the research and development (R&D) method type described by asserts that educators employ research and development methodologies to generate and assess targeted materials for learning (Audia et al., 2021; Zulherman et al., 2021). The research in question aims to produce and validate an educational item that yields outcomes, procedures, and configurations. The researcher implemented the ADDIE development model. The ADDIE model comprises five distinct stages: Analysis, Design, Development, Implementation, and Evaluation. The illustrates the various stages of the ADDIE model development is show in Figure 1.
The participants in this study were sixth graders from SDN Ujung Menteng 07 and SDN Margahayu 23 during the even semester of the 2022/2023 school year. In this particular research project, 62 students made up the sample. The experimental group comprised 32 students from SDN Ujung Menteng 07, while the control group comprised 30 students from SDN Margahayu 23. Data collection techniques used in developing teaching materials for e-books assisted by Kvisoft Flipbook Maker are observation, interviews, and tests using pretest and posttest. In this test, the instrument uses multiple choice with ten questions consisting of 4 item choices a, b, c, and d (Adinda et al., 2022).

This study employs quantitative and qualitative data analysis (Ismail et al., 2018) as its method of data analysis. Data analysis utilized quantitative analysis techniques obtained from the validator during the validation phase and input from material experts, media specialists, and language experts. In order to determine the quality and efficacy of the designed product, the study evaluates based on user feedback (Mardin et al., 2022). Experts use a Likert scale to validate data; the following are the criteria for a Likert scale as show in Table 1.

**Table 1. Scale Criteria of Media Rating Media**

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Good</td>
<td>5</td>
</tr>
<tr>
<td>Good</td>
<td>4</td>
</tr>
<tr>
<td>Enough</td>
<td>3</td>
</tr>
<tr>
<td>Less</td>
<td>2</td>
</tr>
<tr>
<td>Very Less</td>
<td>1</td>
</tr>
</tbody>
</table>

As shown in Table 1, converting the score becomes a requirement for evaluating the effectiveness of measuring interest using the Kvisoft Flipbook Maker-assisted E-Book on earth and universe content. This method is used to determine the usability of the media created by the validator and descriptive percentages of respondents were calculated using formula. Feasibility scale for developing a Kvisoft flipbook maker-assisted e-book is show in Table 2.

**Table 2. Feasibility Scale for Developing a Kvisoft Flipbook Maker-assisted E-Book**

<table>
<thead>
<tr>
<th>Description</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>81%-100%</td>
<td>Sangat Layak</td>
</tr>
<tr>
<td>61%-80%</td>
<td>Layak</td>
</tr>
<tr>
<td>41%-60%</td>
<td>Cukup Layak</td>
</tr>
<tr>
<td>21%-40%</td>
<td>Tidak Layak</td>
</tr>
<tr>
<td>0%-20%</td>
<td>Sangat Tidak Layak</td>
</tr>
</tbody>
</table>

N-Gain analysis was conducted to determine E-Books’ effectiveness in enhancing students’ metacognitive abilities and understanding of the concepts of the Earth and the universe. To demonstrate the significance of the N-Gains scores for the experimental class and the control class, a T-test was conducted using the One Group Pretest and Posttest design using steps of pretest, treatment, and posttest (Siagian et al., 2019). The data analysis was conducted by contrasting the results of the pretest and posttest scores. The students’ test results were evaluated by adjusting the following criteria as show in Table 3.

**Table 3. N-Gain Level Criteria**

<table>
<thead>
<tr>
<th>Gain Index</th>
<th>Gain Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>g &gt; 0.7</td>
<td>High</td>
</tr>
<tr>
<td>0.3 &lt; g ≤ 0.7</td>
<td>Moderate</td>
</tr>
<tr>
<td>g ≤ 0.3</td>
<td>Low</td>
</tr>
</tbody>
</table>

The present study utilized the Statistical Program for Social Science (SPSS) application for data processing. The ability of SPSS software to deliver reliable statistical information in various formats, such as tables, percentages, and graphs, which makes it easier to analyze this information in research, is the primary reason these applications are used.
3. RESULT AND DISCUSSION

Result

The process of creating E-Books with the assistance of Kvisoft Flipbook Maker is guided by the ADDIE development model, which comprises five distinct stages: Analysis, Design, Development, Implementation, and Evaluation. The present study’s analysis phase was conducted by interviewing teachers in sixth grade. The design phase encompasses creating the E-Book media through drafting. Scholars will strategize themes, titles, materials, and inquiries during this research phase. The selected subject matter pertains to the planet Earth and its natural environment. The E-Book media has been designed utilizing the Kvisoft Flipbook Maker software and the Canva application. Figure 2 displays the outcomes of creating educational materials in E-Books, which were facilitated using Kvisoft Flipbook Maker.

![Figure 2. Results of Developing a Kvisoft Flipbook Maker-assisted E-Book](image)

The development phase involves a qualification test in which the Kvisoft Flipbook Maker-assisted E-Book is submitted to the validator. The validation data were reviewed to establish the level of validity and recommendations from experts. The purpose of validating the media with experts is to determine the viability of learning media and to identify the media’s weaknesses. After being evaluated, revisions will be conducted by following the validator’s recommendations and input. Data analysis summary and expert opinions regarding the Kvisoft Flipbook Maker-assisted E-Book media are shown in Figure 3, and Table 4.

![Figure 3. Result of the Experts’ Validation Recap](image)

Based on the results displayed in Figure 3, three validation experts were used to evaluate the Kvisoft Flipbook Maker-assisted E-Book. The results from the validation of media, material, and language experts are assuredly usable. Result of the experts’ validation recap in table is shown in Table 4.

<table>
<thead>
<tr>
<th>Validator</th>
<th>Skor Diperoleh</th>
<th>Skor Maksimal</th>
<th>Rata-Rata Presentase</th>
<th>Presentase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>69</td>
<td>75</td>
<td>92%</td>
<td>92%</td>
</tr>
<tr>
<td>Material</td>
<td>99</td>
<td>100</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Language</td>
<td>56</td>
<td>65</td>
<td>86.15%</td>
<td>86.15%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>65</td>
<td>93%</td>
<td></td>
</tr>
</tbody>
</table>

Kualifikasi: Sangat Layak

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Base on Table 4 show the average score of a media expert is 92%, the average score of a material expert is 99%, and the average score of a language expert is 86.15%. Therefore, the average percentage of three experts in validation is 93%, with exceedingly high criteria. Later, *Kvisoft* Flipbook Maker-assisted E-Book media will be revised and deficiency-corrected, conforming to the validation experts’ recommendations and input. The implementation phase is the stage in which the design of the teaching medium is implemented in the real world of learning. At this stage, product validation evaluations were conducted with validation experts and respondents (students). The evaluation phase includes the pretest and posttest of sixth-grade students. Pretest, treatment, and posttest are administered using a One Group Pretest, Posttest Design. The researcher applies the N-Gain score formula to determine the significance of an effect. The analysis results are shown in Table 5.

**Table 5. N-Gain Average Score for Experiment and Control Class**

<table>
<thead>
<tr>
<th></th>
<th>Experiment Class N-Gain Score</th>
<th>Control Class N-Gain Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>65.37</td>
<td>17.44</td>
</tr>
<tr>
<td>Minimum</td>
<td>33.33</td>
<td>0</td>
</tr>
<tr>
<td>Maximum</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

According to Table 5 show the N-Gain score test calculation, the average N-Gain score for the experimental class (provided with the *Kvisoft* Flipbook Maker-assisted e-book media) is 65.4%, which falls within the "Somewhat Effective" category—a minimum N-Gain score of 33.33 percent and a maximal score of 100 percent. The average N-Gain score for the control group (those not given the *Kvisoft* Flipbook Maker-assisted e-book media) was 17.44%, placing them in the "Ineffective" category. The minimum N-Gain score is 0%; the greatest N-Gain score is 50%.

Based on the results, it can be inferred that utilizing E-Book media yields a "somewhat effective" to improve learning outcomes in science subjects, specifically those pertaining to the Earth and the universe, among sixth-grade students. The study found that the results of those who did not use E-Book media were "Not Effective" in improving learning outcomes for science subjects related to Earth and the universe among sixth-grade students. The subsequent step involves conducting an Independent T-Test to evaluate the N-Gain score. The outcomes are observable in Table 6.

**Table 6. Independent T-Test for N-Gain Score**

<table>
<thead>
<tr>
<th>NGain_Persen</th>
<th>Equal Variances Assumed</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>0.651</td>
<td>0.423</td>
<td>10.346</td>
<td>60</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Base on Table 6 show the statistical analysis reveals that the significance level of Levene’s Test for Equality of Variances is 0.423 > 0.05. The homogeneity of the N-Gain (%) data variation between the experimental and control classes can be inferred. The statistical analysis of the N-Gain Score involves conducting an independent t-test, which is informed by the significance value presented in the table of assumed equal variances. The table indicates that the Sig. (2-tailed) value is 0.00 < 0.05. It can be inferred that a notable distinction exists between classes that utilize *Kvisoft* Flipbook Maker-assisted E-Book media and those that are not provided with such resources. The utilization of e-book books has been observed to positively impact the engagement and enthusiasm of sixth-grade elementary school students toward science subjects about the Earth and the universe.

**Discussion**

By utilizing sophisticated technological developments, as per the findings of previous study it is imperative for the teacher, in the role of a facilitator, to create optimal learning materials that align with the specific attributes of the subject material, thereby enabling students to assimilate knowledge readily (S. Y. Sari et al., 2022). In the 4.0 era, the learning process no longer employs traditional teaching materials but rather digital learning, which requires technological assistance. One of the non-printed teaching materials is the E-Book. According to previous study the implementation of interactive e-books can positively influence the level of interest exhibited by students (Bee Choo & Zainuddin, 2018). E-books assist and motivate students to improve their reading comprehension and performance to cultivate positive learning attitudes. Thus, creating an e-book requires utilizing a software program capable of transforming conventional printed materials into digital formats. *Kvisoft* Flipbook Maker is a software application utilized to create electronic books (Fitriani et al., 2019; N. E. Sari & Surayana, 2019). Using *Kvisoft* Flipbook Maker to create E-Books can potentially enhance student engagement for various reasons. According to other study the *Kvisoft* Flipbook Maker software is user-friendly and offers a variety of engaging functionalities.
(Triwahyuningtyas et al., 2020). The Kvisoft Flipbook Maker software offers a wide range of features. According to previous study Kvisoft Flipbook Maker is a multimedia software that enables the insertion of various file formats, including PDFs, images, videos, and animations (Nufus et al., 2020). Additionally, the software offers a range of visually appealing template designs, including backgrounds, control buttons, navigation bars, hyperlinks, and back voice. Other study reported that Kvisoft Flipbook Maker is accessible through various devices such as smartphones, laptops, and tablets (Darmaji et al., 2019). This phenomenon is intriguing due to its easy accessibility from any location and at any time.

Based on the research findings, the resulting product is an E-Book teaching media assisted by Kvisoft Flipbook Maker for sixth-grade science subjects at SDN Ujung Menteng 07 and SDN Margahayu 23. The Kvisoft Flipbook Maker was utilized to create an E-Book instructional resource to address challenges encountered in science disciplines, specifically those about the Earth and the universe, as covered in the 9th theme of the Exploring Outer Space course for 6th-grade students. Other study asserts that E-Books are an attractive form of multimedia for learning purposes, as they offer concepts, data, and educational resources suitable for students’ cognitive abilities (Suparno, 2018). The content utilized to create educational resources in this electronic publication aligns with the fundamental competencies (KD), performance indicators, and learning outcomes. The trial results indicate that students attain favorable qualifications. For this reason, the product is deemed appropriate for utilization in the educational context. According to expert reviews, the e-book teaching material generated by Kvisoft Flipbook Maker has received a high level of favorable reviews achieving a 93% rating. The findings are consistent with the study conducted by other study which suggests that the utilization of teaching resources founded on Kvisoft Flipbook Maker yields favorable outcomes, specifically an 85.82% success rate, and has the potential to enhance students’ motivation to learn, thereby facilitating an effective learning process (Triwahyuningtyas et al., 2020).

The N-Gain gain for the experimental class is 65.4% based on the pretest and posttest results and the N-Gain calculations. This outcome falls within the somewhat effective category. Regarding the other group, the mean N-Gain Score of the control group (which did not receive the E-book) was 17.44%. This percentage falls under the ineffective category. A t-test was conducted to determine the statistical significance of enhancing the metacognitive skills of students provided with an e-book. The statistical analysis conducted indicates that the Sig. (2-tailed) the value obtained from the t-test is 0.00 <0.05. This finding suggests that a significant difference exists between the classes that were provided with E-books and those that were not in terms of enhancing students’ metacognitive abilities. The experimental group of students who received the e-book demonstrated superior cognitive abilities compared to the control group who did not receive the e-book. E-books assist students in the learning process both inside and outside the classroom (Hardiyansyah et al., 2019; Mardin et al., 2022). Using electronic books among students is anticipated to enhance their comprehension and proficiency in the subjects taught in class. This can be attributed to the ease and effectiveness of comprehending the material. According to previous study a series of studies consistently demonstrated that using digital flipbook-based learning materials is beneficial for learning, enhancing academic achievement, and boosting students’ motivation to learn (Yuyun et al., 2022). The phenomenon mentioned above is supported by the findings of the N-Gain examination analysis, which yielded a score of 0.68 in the moderate range and a corresponding elevation in educational achievements, as indicated by an 84.12% index value that falls within the excellent range.

The utilization of E-Books during the 4.0 era has the potential to enhance the learning process by responding to students’ unique characteristics. The statement, as mentioned earlier, aligns with the findings of a recent study conducted which suggests that the integration of technology in education can facilitate students’ access to cyberspace and provide them with the autonomy to tailor their learning experience to their preferred style (Haleem et al., 2022). Utilizing electronic books (E-Books) can offer students the advantages of convenience, effectiveness, and efficiency in their pursuit of knowledge. According to other study, electronic books have been shown to enhance students’ academic performance (Nurgaliyeva et al., 2019). On the other hand, other study demonstrated that using e-books did not yield favorable outcomes, as there was no notable enhancement in students’ e-book consumption frequency (Musawi, 2017). According to previous research the results indicate that conventional books are more effective than e-books as students encounter challenges in utilizing the features offered by e-books owing to their limited technological proficiency (Akbar et al., 2015).

According to a recent literature review conducted electronic books (E-Books) offer several advantages, including their portability and ability to enhance interactivity in learning environments (S. Y. Sari et al., 2022). The utilization of the Kvisoft Flipbook Maker software facilitates the creation of engaging and interactive E-Book teaching materials. Additionally, the software enables the preservation of these resources by downloading documents in various formats such as HTML, EXE, ZIP (app), and ScreenSaver. According to Kvisoft Flipbook Maker is a software tool for creating electronic books, modules, papers, and magazines (Triwahyuningtyas et al., 2020). Other study assert that using Kvisoft Flipbook Maker in creating...
E-Books offers various benefits, including incorporating multimedia elements such as videos, images, animations, and audio (Fadillah et al., 2021). The researcher has discovered that using the Kvisoft Flipbook Maker software can alleviate students' boredom due to its interesting features, book views, and offline accessibility, rendering it user-friendly. Moreover, the Kvisoft Flipbook Maker software is limited because it necessitates supplementary devices such as laptops or mobile phones. However, if accessed through a mobile phone, certain functionalities may be lost owing to converting the ZIP file into an application. Utilizing a laptop for accessing the E-Book assisted with Kvisoft Flipbook Maker is recommended.

4. CONCLUSION

The e-books created with the assistance of Kvisoft Flipbook Maker underwent research and product development and were evaluated by experts and students through testing and trials. The product received a commendable rating based on the results of these evaluations. The data suggests a rise in students' inclination towards e-book teaching materials facilitated by Kvisoft Flipbook Maker, as it effectively captures their attention.

5. REFERENCES


