



Digital Scrapbook Development To Improve Literacy In Primary School Students

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ABSTRACT: The aim of this research is to determine the increase in elementary school students' literacy through the development of Digital Scrapbook teaching media in B.Indonesia lessons with Explanatory Text material. This research is based on the finding of a problem in elementary school that there is still a lack of use of technology in preparing media amidst increasingly rapid technological developments. The type of research used is Research and Development with the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) development model. The research subjects were fifth grade elementary school students. The feasibility of this teaching material is based on the results of validation tests by material experts, media experts, language experts, and student responses. And N-gain to calculate the effectiveness of reading literacy. The results of this research are the percentage of validation test scores by material experts with a score of 94% in the very feasible category, 91% for media experts in the very feasible category, and 90% for language experts in the very appropriate category. And based on the results of N gain, it was declared effective in increasing the reading literacy of elementary school students. Based on the results, it can be stated that the development of Digital Scrapbook learning media is valid and feasible and effective for increasing the reading literacy of students in elementary schools.

Abstrak: Tujuan penelitian ini untuk mengetahui peningkatan literasi siswa sekolah dasar melalui pengembangan media ajar Scrapbook Digital pada pelajaran B.Indonesia materi Teks Eksplanasi. Penelitian ini didasari pada temuan masalah di SD bahwa masih kurangnya penggunaan teknologi dalam penyusunan media di tengah perkembangan teknologi semakin pesat. Jenis penelitian yang digunakan adalah Research and Development dengan model pengembangan ADDIE (Analysis, Design, Development, Implementation, and Evaluation). Subjek penelitian merupakan peserta didik kelas V sekolah dasar. Kelayakan bahan ajar ini didasari pada hasil uji validasi oleh ahli materi, ahli media, ahli bahasa, respons peserta didik. Dan N-gain untuk menghitung efektifitas literasi membaca. Hasil penelitian ini berupa persentase dari skor uji validasi oleh ahli materi dengan skor 94% yang berada pada kategori sangat layak, ahli media sebesar 91% berada pada kategori sangat layak, dan ahli bahasa sebesar 90% dengan kategori sangat layak. Dan berdasarkan hasil N gain dinyatakan Efektif meningkatkan literasi membaca siswa sekolah dasar Berdasarkan hasil maka dapat dinyatakan bahwa pengembangan media belajar Scrapbook Digital valid dan layak serta efektif untuk meningkatkan literasi membaca siswa di Sekolah Dasar

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INTRODUCTION

Reading is a process carried out by a person in order to obtain information from a writer through written language, also called interaction using language that has been translated into script or written form. Reading is one of the language skills. Language skills are divided into 4 aspects, namely listening skills, speaking skills, reading skills and writing skills (Guntur 2021). Through reading students can gain knowledge in training their reasoning, social and emotional abilities which has a good impact on students' academic grades. The purpose of reading is to obtain information and understand the meaning of reading. (Umami Latifaturrodhita & Linggo Wati, 2023).

Literacy of students and adults in Indonesia is still relatively low. This can be seen from several literacy assessments that have been carried out, both nationally and internationally. The results of the 2018 Program for International Student Assessment (PISA) revealed that Indonesia was ranked 80th out of 85 countries (Permatasari et al., 2022). Apart from that, reading in particular will lead students to understand a message (Hernowo, 2003). The Ministry of Education and Culture (2016) also stated that the importance of reading literacy is that the literacy culture embedded in students also influences the level of success and students' ability to understand information analytically, critically and reflectively. The government has also launched the National Literacy Movement (GLB) program which aims to foster children's character through a culture of literacy (reading and writing) (Arum Nisma Wulanjani & Candradewi Wahyu Anggraeni, 2019)

In reality, currently not all students can read well, they still have many difficulties in understanding reading. Lack of use of learning media in reading can be a teacher's weakness in teaching students to read so that students' reading motivation is low. Low reading motivation can cause problems for teachers when teaching subjects related to reading texts and difficulties for students to understand the content of reading texts. From the analysis of the initial conditions, it can be concluded that efforts are needed to develop reading skills learning media so that reading activities become much more interesting and enjoyable. This is interesting for researchers to develop appropriate learning media for elementary school students, namely scrapbooks.

John Poole (Ulhaq, 2017) states that a scrapbook or what is known as a scrapbook is a collection of memorabilia, photos, notes, stories, narratives, poetry, quotes, clippings, tickets, payment receipts, etc. that are assembled and arranged in an album. or hand-made books. Scrapbook learning media can be a learning media to help teach students reading skills. The use of learning media as a tool to convey information can already be done by teachers. Scrapbook media has been used before, but it is different from the learning media used by researchers. This scrapbook media is in the form of a book in which there are pictures decorated with attention to elements of beauty. The developments carried out by previous researchers focused more on beauty, while the media created by researchers contained questions that were packaged in an interesting way. Currently, teachers only focus on using package books in teaching in the classroom. Without the sophistication of technology that is not combined with teaching media, it will form students who do not show enthusiasm and do not have character in the learning process. Therefore, researchers are interested in making android-based scrapbooks. (Syafira & Saleh, n.d.)

Apart from that, in scrapbook learning media, researchers will use a contextual approach to apply scrapbook learning media. Therefore, to increase learning motivation in students, an innovative learning media is needed which is expected to improve student learning outcomes. For this reason, in an effort to improve the quality of learning by creating innovative, interesting learning media that involves students and improves student learning outcomes, the author developed learning media in the form of digital scrapbooks. (Murjainah, 2013). Based on previous research, it shows that the use of attractive scrapbook media can increase reading motivation for students in elementary schools. According to Asih et al (2020) that scrapbook learning media with a contextual approach can improve reading skills.

The advantage of scrapbooks in the learning process is that it can make students interested in the learning process. It can make students interested in the learning process and the class atmosphere is also fun. This is the reason for researchers to use scrapbook media. Scrapbook media has several advantages, namely, (a) it is attractive, scrapbooks made from various photos, drawings, simple sentences and decorations look beautiful (b) it is realistic when presenting what will be read

because it can present real objects through drawings or photos so that it provides details in the form of a picture as it is, we can more easily understand it well (c) make it easy

RESEARCH METHOD

The method used by researchers in developing Digital Scrapbook learning media to improve elementary school students' reading literacy in Indonesian Language subjects with Explanatory Text Material is a research and development method or Research and Development (R&D). This research is a research in the field of Education using the R&D (Research and Development) method with the ADDIE model (Analyse, Design, Development, Implementation and Evaluation). The selection of this development model is based on the reason that the stages of ADDIE development are simple and easy to practice in developing learning media. The research and development (R&D) method is a research method used to produce a particular product through product effectiveness testing, and aims to be able to produce a useful product so that a needs analysis is needed. The product developed in this study is a teaching media in the form of a Digital Scrapbook applied to the Explanatory Text material. The research on the development of learning media began with a preliminary study to determine the development of reading literacy of elementary school students, then continued by analyzing the process of learning activities in schools, starting from the learning model used and the media and teaching materials and also to find out whether teachers are trying to improve reading literacy in students. This research was conducted at SD Negeri Sindangrasa which is East Bogor District, Bogor City. With research time in the Even Semester of the 2023/2024 Academic Year. In this study, the object of the research was Digital Scrapbook. Eaching materials for class V elementary school students. The development model used in this research is ADDIE. The ADDIE model is an abbreviation (Analiza, Design, Development, Implementation, and Evaluation) (Legina (2022)). The test subjects in this research were 25 class V students. The instruments used in this research were interviews with class teachers, validation questionnaires by material experts, teaching materials experts, student response questionnaires and students were given pretest-posttest questions to see the level of effectiveness of the Scrapbook digital teaching materials developed. In the development of this Scrapbook Digital learning media, validity is intended to test the feasibility of the learning media to be developed. . The measurement scale uses a Likert scale with 5 level criteria, each of which is presented in the numbers 1-5, each indicating (1) very lacking, (2) lacking, (3) sufficient, (4) good, (5) very good. In determining the percentage of the questionnaire results, you can use the formula:

$$P = \frac{\sum x}{\sum x_1} \times 100$$

Description:

P : Percentage of eligibility

$\sum x$: Total number of validator answer scores (real value)

$\sum x_1$: Total number of highest answer scores (expected value)

Measuring the Effectiveness of Digital Scrapbook to determine the effectiveness of using Digital Scrapbook Media in Indonesian Language Subjects in Explanatory Text material can be known using the N-Gain formula as follows:

$$N \text{ Gain} = \frac{Skor \text{ Posttest} - Skor \text{ Pretest}}{Skor \text{ Ideal} - Skor \text{ Pretest}}$$

FINDINGS AND DISCUSSION

The method used by researchers in developing Digital Scrapbook learning media to improve elementary school students' reading literacy in Indonesian Language subjects with Explanatory Text Material is a research and development method or Research and Development (R&D). This research is a research in the field of Education using the R&D (Research and Development) method with the ADDIE model (Analyse, Design, Development, Implementation and Evaluation). The selection of this development model is based on the reason that the stages of ADDIE development are simple and easy to practice in developing learning media. The research and development (R&D) method is a research method used to produce a particular product through product effectiveness testing, and

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The development of this Digital Scrapbook learning media uses the ADDIE model which consists of 5 stages, namely Analysis, Design, Development, Implementation, Evaluation. The following is a description of the stages of the ADDIE model.

1. Analysis Stage (Analysis)

Analysis is the initial stage in the development process using the ADDIE model. The researcher conducted observations and interviews with grade V teachers of Sindangrasa State Elementary School to obtain information related to the problems that occurred. Observations and interviews include the following stages:

a. Analysis of Learning Material Needs

Analysis of learning material needs is carried out to identify problems that arise in the learning process. The researcher analyzes the need for teaching materials in learning at Sindangrasa State Elementary School to conduct observations and interviews. At the observation and interview stage, it was found that there was a need for material in the use of teaching materials in the school, especially in class V. Teachers are accustomed to using textbooks as learning materials used in class, this causes students' reading literacy to be low, besides that the use of teaching book media used by teachers in class is considered insufficient to achieve learning objectives in the classroom. Based on these problems, researchers are interested in developing interesting learning media and using technology in order to improve elementary school students' reading literacy.

b. Curriculum Analysis

Sindangrasa Elementary School has been using the Independent Curriculum gradually since 2023 with learning resources, namely student books and teacher books. In the Independent Curriculum, teachers are given the freedom to develop appropriate learning resources for students in class. The use of the Merdeka curriculum also provides space for teachers to use technology or digitalization, for that teachers can use Digital Scrapbook as one of the learning media that can improve reading literacy for students in elementary schools.

c. Student Analysis

The researcher conducted a limited trial in class V A of Sindangrasa State Elementary School with 25 students. The results of the trial in class V A were suitable for use. The benefits of using this Digital Scrapbook learning media make students more enthusiastic and motivated

2. Design Stage

The design that will be displayed in this teaching material is in the form of a presentation slide, where each slide contains lesson material with interesting animations. The following are the steps for designing the Digital Scrapbook media. The design displayed in this Digital Scrapbook media is in the form of interactive slides, on each slide page there are images, animations and interesting materials. The design of the Digital Scrapbook learning media per page is as follows:

contains the title of the Digital Scrapbook material Explanatory Text Material "Natural Disasters", contains the author's foreword, contains instructions for using the Digital Scrapbook, contains a mapping of learning achievements, and the flow of learning objectives, contains student learning activities using the Digital Scrapbook, Learning Objectives, Explanatory Text with landslide material, continuation of the Explanatory Text with landslide material, contains things related to the Explanatory Text that must be understood by students, Definition of Explanatory Text, Elements in the Explanatory Text, Purpose of reading the Text Explanatory, Characteristics of Explanatory Text, Summary of material about explanatory text, References or Bibliography, contains Practice questions that must be answered by students based on the results of reading the Digital Scrapbook through the Kahoot application, where students only need to click on the link Digital Scrapbook and it will go directly to Kahoot

Digital Scrapbook was chosen because it is interesting to be used as an interactive learning media for elementary school students and is also suitable for use because SD Negeri Sindangraa has facilities that support digital learning. Based on this, it is expected that the Digital Scrapbook media can be

used to improve students' reading literacy practically and flexibly.

3. Development Stage

The development stage is the realization of the Digital Scrapbook media design plan that has been made previously. After the realization process is complete, the product will be tested for validity by material experts, material experts and language experts to determine the feasibility of the product to be developed. Validation is an activity of collecting data from expert validators according to their fields to determine whether or not the product that has been developed is valid. This activity is carried out to find out feasibility of Digital Scrapbook to improve reading literacy of elementary school students. This validation was carried out by 3 experts, namely material experts, media experts, and language experts. The material expert is a lecturer from Pakuan University, the media expert is a lecturer in the MIPA Study Program at Pakuan University, and the language expert is a language lecturer from Pakuan University.

Validation data was obtained from the validator assessment questionnaire as well as suggestions and comments on the development product. Validation was carried out twice until the product was declared suitable for use without revision. After obtaining expert assessment, the data obtained from the average value of validity will be converted to obtain a conclusion regarding the validity of the Digital Scrapbook based on the ideal conversion guidelines based on the following table Validator

Table Recapitulation of Exfert Validation Questionnaire Results

Validator	Average Total Validity
Material Expert	94 %
Media Expert	91 %
Language Expert	90 %
Literacy test validation	92 %
Average Total	92 %

4. Implementation Stage

After passing the validation stage by experts, the researcher conducted an implementation stage in the form of a limited trial on 25 fifth grade students of Sindangrasa State Elementary School to determine students' reading literacy skills.

Reading literacy questions were tested to determine the extent to which the Digital Scrapbook could improve students' reading literacy.

5. Evaluation Stage

The fifth stage of the ADDIE development model is the evaluation or assessment stage. After the implementation stage is carried out, the next stage is the assessment of the learning module. At this stage, the assessment of Scrapbook digital teaching materials that is looked at is the effectiveness aspect of Scrapbook-based digital teaching materials. The effectiveness aspect can be seen from the results of the post-test scores. The implementation of the post-test and filling out the student response questionnaire will be carried out on April 2024.

The development of learning outcomes from pretest to posttest using Scrapbook based digital teaching materials can be presented through graphs that depict consistent and significant

FINDINGS AND DISCUSSION

The response from 25 students to the Digital Scrapbook received a very good response. This can be seen from the large average percentage given by students, namely with a score of 92%. This number is between 80% - 100% so that the use of Digital Scrapbook is declared "very feasible" for use by students in the learning process, especially Indonesian Language Lessons for explanatory text material.

This number is between 80% - 100% so that the use of the Digital Scrapbook is declared "very feasible" for use by students in the learning process, especially the Indonesian Language Lesson for explanatory text material. The Digital Scrapbook that was developed went through several stages starting from the needs analysis stage to product development and implementation.

Researchers used the ADDIE model as a step in developing learning media. The reason for using the ADDIE model is because this model has simple and systematic steps. Magdalena (2024) stated that the ADDIE model has five systematically interrelated steps, where in its implementation

it must be systematic and the five steps are very easy/simple when compared to other models. In addition, the ADDIE model is also easy to learn. Nurhikmah (2023) stated that the ADDIE model is simple and systematically structured, so it is easy for educators to learn. Developing media has many components that must be considered. In addition to adjusting the material to the characteristics of students, something that is no less important is the adjustment of images and animations that must be considered. This study produced a final product in the form of a Digital Scrapbook which is used as a tool to facilitate learning activities for teachers and students in the classroom. In addition, it can facilitate the delivery of material to students. The advantage of this product is that it can not only be used in the classroom but can also be accessed at home, making it easier for students to be able to learn anywhere. Seeing the results of expert validation of the feasibility of the product carried out by material, media, and language experts. The input given by the experts is used as a consideration

to improve the Digital Scrapbook. The assessment of the feasibility of the Digital Scrapbook based on the results of the validation of the material test is in the very feasible criteria with a percentage of 94%, the results of the media validation by experts also obtained very feasible criteria with a percentage of 91% and language experts with a percentage of 90%. The questionnaire for the feasibility of the literacy material test also got a percentage of 92%, and the response of students was also in the very feasible category, namely 92%. And the results of the calculation of the effectiveness of the Digital Scrapbook to improve reading literacy got a percentage of 71% which means that this Digital Scrapbook is quite effective in improving the reading literacy of students in elementary schools. 49 C. Research Limitations This study has limitations in the trial stage which is carried out on a small scale in one school in one experimental class, where the testing process is not carried out on a large scale to obtain maximum results. The Digital Scrapbook is only used in schools that have good computer access and internet networks.

CONCLUSION

Research and development of Digital Scrapbook Media to improve reading literacy of elementary school students in Indonesian Language Lessons with Explanatory Text material in grade V obtained several conclusions that:

The development of this Digital Scrapbook was carried out in several stages. At the analysis stage, it was found that the learning media used by teachers so far were already available but had not used digital media only through textbooks. At the design stage, the researcher chose the learning media to be developed in the form of a Digital Scrapbook based on the results of observations and interviews in the previous stage. At the development stage, expert validators provided an assessment of the teaching materials to be developed. At the implementation stage, the teaching materials were tested on 25 grade V A students, an initial test and a final test were carried out, then a response questionnaire was filled out regarding the use of learning media. Studied by students and adapt to the characteristics of students in the class. Digital Scrapbook Media is one media that can be used, to improve students' reading literacy in elementary schools.

Recommendations Based on the findings of the research results, discussions, conclusions, and implications that have been presented in the previous section, it is known that Digital Scrapbook media is feasible and quite effective to be used to improve students' reading literacy in elementary schools. The recommendations from this study are as follows:

For Teachers This Digital Scrapbook Media does not make the media the main source used in the learning process. For School This Digital Scrapbook Media is an alternative choice for delivering material, but in its application it needs to be supported with supporting facilities such as computer devices, internet network, projection layer and projector. So it is expected that in the utilization of Digital Scrapbook it is supported by supporting facilities. For further researchers, a more in-depth study of Digital Scrapbook is needed in the development of learning media. So it is hoped that further research can further perfect this Digital Scrapbook media. At the evaluation stage, the data obtained from the results of the post-test and pre-test, and the questionnaires that had been filled out by students were processed to produce an interpretation of the effectiveness of the Digital Scrapbook and students' responses to the Digital Scrapbook media.

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REFERENCES

- Amalina, A. F. (2020). Pengembangan Media Scrapbook Dengan Penerapan Pendekatan Kontekstual Pada Muatan Pelajaran Ipa Kelas V Sekolah Dasar. *Jurnal Health Sains*, 1(5), 468–478. <https://doi.org/10.46799/jsa.v1i5.90>
- Ameliasari, P., & Dj, L. (2022). Developmen Of Digital Scrapbook Learning Media On Human System Excretion For Grade 8th Junior High School. *Universe*, 3(1), 34–45. <https://doi.org/10.24036/universe.v3i1.154>
- Arum Nisma Wulanjani, & Candradewi Wahyu Anggraeni. (2019). Meningkatkan Minat Membaca melalui Gerakan Literasi Membaca bagi Siswa Sekolah Dasar. *Proceeding of Biology Education*, 3(1), 26–31. <https://doi.org/10.21009/pbe.3-1.4>
- Asih, P. K., Hawanti, S., & Wijayanti, O. (2020). Pengembangan Media Pembelajaran Scrapbook Untuk Keterampilan Membaca. *Indonesian Journal of Primary Education*, 4(1), 87–100. <https://doi.org/10.17509/ijpe.v4i1.25404>
- Dwi Cahyani, I., Nulhakim, L., & Yuliana, R. (2021). Pengembangan Media Pembelajaran Scrapbook Dongeng Fabel Terhadap Minat Literasi siswa SD. *MIMBAR PGSD Undiksha*, 9(2), 337. <https://doi.org/10.23887/jjpgsd.v9i2.35271>
- Dwijayanti, K., Leksono, I. P., & Rohman, U. (2022). Development of Canva-Based Digital Scrapbook Learning Media Using The ADDIE Model in Indonesian Language Learning Material Writing Short Story Text. *Studies in Philosophy of Science and Education*, 3(3), 113–126. <https://doi.org/10.46627/sipose.v3i3.299>
- Gede, I., Suwela Antara, W., Suma, K., & Parmiti, D. P. (2022). E-Scrapbook: Konstruksi Media Pembelajaran Digital Bermuatan Soal-soal Higher Order Thinking Skills ARTICLE INFO. *Jurnal Edutech Undiksha*, 10(1), 11–20.
- Gogahu, D. G. S., & Prasetyo, T. (2020). Pengembangan Media Pembelajaran Berbasis E-Bookstory untuk Meningkatkan Literasi Membaca Siswa Sekolah Dasar. *Jurnal Basicedu*, 4(4), 1004–1015. <https://doi.org/10.31004/basicedu.v4i4.493>
- Guru, P., Dasar, S., Pendidikan, F. I., & Surabaya, U. N. (2021). *PENGEMBANGAN MEDIA DIGITAL SCRAPBOOK BERBANTUAN ARTICULATE STORYLINE MATERI PROKLAMASI KEMERDEKAAN INDONESIA KELAS V SEKOLAH DASAR Rahayu Lestari Ganes Gunansyah Abstrak*. 903–912.
- Murjainah. (2013). Pengembangan Digital Scrapbook Pembelajaran Geografi Dengan Kompetensi Dasar Menganalisis Kecenderungan Perubahan Litosfer Di Muka Bumi Di Kelas X Sekolah Menengah Atas. *Seminar Pendidikan Nasional, Universitas PGRI Palembang*, 927–946.
- Permatasari, A. D., Iftitah, K. N., Sugiarti, Y., & Anwas, E. O. M. (2022). Peningkatan Literasi Indonesia Melalui Buku Elektronik. *Kwangsan: Jurnal Teknologi Pendidikan*, 10(2), 261. <https://doi.org/10.31800/jtp.kw.v10n2.p261--282>
- Pulungan, M., Laihat, L., Dewi, S., Herdiana, B., Leva, M., & Safitri, O. (2024). *Development of scrapbook learning media in Indonesian language content for class III primary school*.
- Rahmawati, D. (2019). Pengembangan Media Pembelajaran ... Pengembangan Media Pembelajaran *AL-Ahya*, 01(01), 219–232.
- RE, P., Tauchid, S. N., Erwin, E., & Noviani, N. (2023). The Effect of Tooth Pain Relief Material Scrapbook On The Knowledge and Behavior Criteria of Preventing Tooth Cales for Students of Public Elementary School Cilandak Timur 03 South Jakarta. *Al Qalam: Jurnal Ilmiah Keagamaan Dan Kemasyarakatan*, 17(2), 136. <https://doi.org/10.35931/aq.v17i2.1965>
- Sari, F. N., Kuryanto, M. S., & Pratiwi, I. A. (2024). *CJPE : Cokroaminoto Juornal of Primary Education Pengembangan Media Scrapbook Materi Warisan Budaya Indonesia Pada Pembelajaran IPAS Pendahuluan*. 7.
- Situmorang, R., Simanungkalit, E., Karo-karo, D., Simanjuntak, E. B., & Simanuhuruk, L. (2023). Pengembangan Media Pembelajaran Scrapbook Berbasis Canva Pada Tema 8 Subtema 1 Untuk Siswa Kelas V Sd Negeri 16 Urat Timur T.A 2022/2023. *CENDEKIA: Jurnal Ilmu Sosial*,

Bahasa Dan Pendidikan, 3(3), 205–213.

Wusqo, I. U., Khusniati, M., Pamelasari, S. D., Laksono, A., & Wulandari, D. (2021). The effectiveness of digital science scrapbook on students' science visual literacy. *Jurnal Pendidikan IPA Indonesia*, 10(1), 121–126. <https://doi.org/10.15294/jpii.v10i1.27130>