



## **Development of Pop-Up Book Media to Improve Reading Skills of Grade II Elementary Schools**

**Bintang Khoironi\***

**Ali Sunarso**

Elementary School Teacher Education, Faculty of Education and Psychology, Universitas Negeri Semarang - Jl. Raya Beringin No.15, Wonosari, Kec. Ngaliyan, Kota Semarang, Central Java

\*Corresponding author, Email : [bintangkhoironi@students.unnes.ac.id](mailto:bintangkhoironi@students.unnes.ac.id)

Paper received: 05-02-2025 ; revised: 10-03-2025; accepted: 19-05-2025

### **Abstract**

Limited use of learning media can result in low reading abilities of students, especially in lower grades. The aim of this research is to produce and develop a Pop-Up Book learning media that is valid and suitable for use to improve reading skills. This research is a type of R&D (Research and Development) research or what is usually called development research using the ADDIE model. ADDIE has five stages: analysis, design, development, implementation, and evaluation. Data obtained from validation questionnaires. The research subjects involved 20 class II students at SDN 05 Pegundan, class teachers and validation from material and media experts. The data analysis techniques used are normality test, N gain test and t test. The validation results by media experts obtained a percentage of 92 percent (very feasible) while the validation results by material experts obtained a percentage of 94 percent (very feasible). The results of the pre-test and post-test evaluation show that there are significant differences. So it can be concluded that the research results from Pop-Up Book media to improve students' reading skills are valid, feasible and effective for use in the learning process.

**Keywords:** media, pop up book, reading skills

### **INTRODUCTION**

Education is a form of meeting place between students and teachers to create learning outcomes and for learning objectives that will be implemented in the learning environment (Haranti et al., 2022). Education is very important for all humans in all aspects of their lives. It is through education that the development of human personality can be directed towards the better. Education is a process that never stops and aims to produce people with good character. According to Sulistyani & Retnawati (2015) education does not only prioritize mastery of knowledge but also creates a person's thinking patterns and attitudes. One method used to support learning activities to be more effective is by using learning media. Teachers as educators are required to be able and able to develop learning media because they are considered important in the learning process.

One appropriate application of learning media is in Indonesian language subjects. Indonesian is the national language in Indonesia and must be taught to students, especially lower grade elementary school students. This aims to make students proficient in the language, both in listening, speaking, reading or writing. The main role of learning Indonesian is to improve 4 skills, namely listening, reading, speaking and writing skills (Santika & Nasution, 2021). Language is also a means of human communication in interacting in everyday life (Samiyatun, 2022). One thing that must be mastered is reading. This is in line with one of the studies by Saddhono (2015) which states that Indonesian Language skills include speaking,

writing and listening skills. Reading skills are considered to be the main key because reading will expand students' knowledge.

Reading ability is one of the skills that must be mastered by every child of course because by reading we get a source of information that will be developed in every child's thinking (Mullis & Martin, 2019; Ardhian et al., 2020). The application of reading to children from an early age is necessary and should use creative learning methods and educational media so that without children realizing it they play while learning. One of the basic reading skills is by reading stories. Learning to read stories in elementary schools is very important. Reading skills must be mastered when children are in grade II of elementary school (Putri & Rati, 2022). The learning process certainly requires media to become a medium to encourage learning. According to Briggs, defining a media as a physical tool used to convey messages to students that aims to stimulate them in learning (Seels & Richey, 1994). Then according to Guslinda & Kurnia (2018) which explains that media is a tool that can distribute information from educators to students that can attract attention, stimulate the child's mind and will so that the learning that takes place becomes efficient.

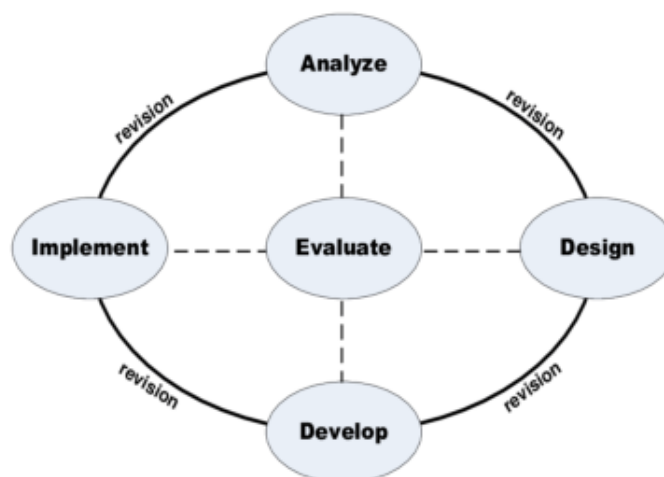
Previous research on Pop-Up Book media has been widely used as a research topic, such as research conducted by Mahmudi et al. (2023) entitled "Development of Pop-Up Book Media on Students' Reading Ability in Indonesian Language Lessons in Class II of SD Negeri 308 Rantau Suli". And research conducted by Erika (2021) entitled "Development of Pop-Up Book Media in PKN Learning in Elementary Schools". Both have similarities in developing learning media using Pop-Up Books using R&D (Research and Development) research methods. Meanwhile, the differences depend on the subjects, research location and year of research. The first research focuses on Indonesian language subjects while the second research focuses on PKN subjects

Through observations and questions and answers with educators conducted by researchers, several problems were found, namely low reading ability and lack of available learning media. In fact, reading It is very important to educate from the start. The media previously only used books and blackboards which caused students to become bored. Therefore, there needs to be teacher innovation to develop concrete and interesting media for students. The solution to this problem is to create and develop a media that aims to improve reading ability. Like the Pop-Up Book media which is never used in class, of course this aims to stimulate students' interest and attraction during reading activities.

Ningsih (2020) stated that elementary school students really like books that have pictures that can attract their attention, for example, Pop-Up Books where original illustrations of teaching materials are distributed. Pop-Up Books are media that illustrate images that appear when used (Sari & Suryana, 2019). Every page when students change pages. The Pop-Up Book has 3 dimensions and has a unique story visualization, from illustrations that move when opened. Pop-Up Book media is used as a medium to train, attract, and help children in language, especially in the field of reading. Based on the explanation of the problem that has been described previously, the researcher is interested in conducting research entitled "Developing the Use of Pop-Up Book Media to Improve Reading Ability of Class II Elementary School Students", the objectives of this research are as follows: (1) to produce Pop-Up Book media to improve reading ability of class II students of SDN 05 Pegundan, (2) to observe the optimality of Pop-Up Books to develop the reading skills of class II students at SDN 05 Pegundan, (3) to observe the magnitude of the impact of Pop-Up Book media to develop the reading skills of class II students at SDN 05 Pegundan.

## METHODS

This learning takes an R&D (Research and Development) approach. This approach will produce a product that is suitable for use or not which has initially been tested by each expert from the validation phase. The ADDIE design is used in this lesson. There are 5 phases in the form of: Analysis, Design, Development, Implementation and Evaluation. A Pop-Up Book application will be produced that focuses on fable material or animal fairy tales. The ADDIE model was chosen because it has a systematic, complete and simple model flow as shown in Figure 1



**Figure 1. ADDIE model stages (Branch,2010)**

In this study, the researcher took subjects consisting of 2 expert material and media validators, 1 teacher and 20 students registered in class II of SDN 05 Pegundan. The data used were obtained using test and non-test instruments. This study uses student and teacher needs analysis, validation from 2 experts, namely material expert, teacher, media and student responses. For the test instrument consisting of pretest and posttest to analyze the media. Then the data was collected through a non-test instrument consisting of observation, interviews and questionnaires with material and media validation that focuses on learning objectives, material and student psychomotor. The media feasibility analysis technique developed was evaluated by material and media experts as well as educator student responses will be validated using a Likert scale feasibility instrument. The Likert scale is used to analyze data that changes qualitative data into quantitative. The feasibility test of the product or media and materials produced at the validation test stage is then calculated as a percentage using the following formula.

$$NP = \frac{R}{SM} \times 100\%$$

### Information :

NP = percentage value sought

R = score obtained

SM = maximum score

100 = fixed value

The percentages generated through these calculations are then converted into the following eligibility criteria (see table 1).

**Table 1. Eligibility Criteria**

No	Presentation	Criteria
1	25 % to 43%	Not suitable for use
2	44 % to 62%	enough to use
3	63% to 81%	Worth using
4	82 % to 100%	Very worth using

Source : (Purwanto, 2017)

The technique of analyzing student and teacher responses to Pop-Up Book media uses formulas such as expert validation. Normality test as part of the first data analysis of the study. Paired t-test and N gain analysis are used for final data analysis. Hypothesis testing will be held to determine the effectiveness of using Pop-Up Book media using a paired t-test. While the average increase test (N-gain) is used to determine whether students' abilities have increased or not after treatment. Low and high N-gain values are determined by the criteria in the table 2.

**Table 2. N-gain criteria**

No	N-gain value	Criteria
1	$g > 0.70$	Tall
2	$0.30 < g < 0.70$	Currently
3	$g < 0.30$	Low

Source : (Wahab & Azhar, 2021)

## RESULTS AND DISCUSSION

This research data presents data and trials of Pop-Up Book media products to develop students' reading skills. Learning with an R&D approach takes the form of ADDIE which includes 5 phases.

### *Analysis*

The analysis stage is the initial stage carried out before conducting research. Based on questions and answers and observations that have been held by researchers, the learning process at SDN 05 Pegundan is still teacher-centered and still rarely uses learning media so that students become less active. Based on observations made by researchers, what happened was that students looked bored, passive and less interested in participating in learning that only relied on textbooks and worksheets. Limited learning media causes low reading ability of students so that students become lazy to read readings. This is also based on observations that researchers have made and found the problem of some students who are reluctant to read due to several factors, namely they are still not fluent in reading and the reading in books is only written (there is nothing interesting for students). Therefore, researchers plan to create and develop a Pop-Up Book media to improve reading ability of students in grade II.

## Design

At this stage, the researcher designed the Pop-Up Book media with the following details.



**Figure 2. Product design**

Figure 2 above is a product design that will be used as a development medium. In part 1 there is a Pop-Up Book cover entitled "Kehidupan di Hutan" using colors, writing and several interesting animal pictures. White writing with a unique font. Animated pictures of animals are also made as attractive as possible with the aim of making children more interested in reading the content. The first page contains an introduction, learning outcomes and learning objectives. The foreword contains expressions of the author's thoughts such as thanksgiving to Allah SWT, thanks and hope. Meanwhile, CP and TP determine the material that must be studied. The next page is the content or core of the book which contains interesting fable stories or animal tales. With the display of embossed text and images, when the book is opened it can produce movements and visualizations that can attract children's attention. The next page contains supporting information in the form of letters of the alphabet and several syllables which aims to help students improve their reading skills. The last page or cover of the book contains biodata of the developer and supervisor which includes name, identity number and affiliation.

## Development

Validation tests were conducted on the Pop-Up Book media that had been planned throughout the development stage. Before entering it into the learning process, the Pop-Up Book media underwent a validation testing process to ensure its feasibility. In addition, the validation test also ensures that high-quality media is produced that is in line with and the same as the development theory (Kurniawan et al., 2023). Media and material experts who are professionals in their fields and have expertise in media and materials conducted validation tests in this study. The validation tests carried out by each subject matter and media specialist produced the following results. When the Pop-Up Book media undergoes a validation process to material experts. The media is evaluated based on 3 aspects: learning objectives and achievements, learning materials, materials according to student ability levels. The percentage value obtained was 94% and was said to be suitable for learning in class from validation testing for each material expert.

**Table 3. Results of the material validation assessment**

Aspect	Indicator	Score
Learning objectives and achievements	a. Suitability of material to learning outcomes	8
	b. Suitability of materials to learning objectives	
Learning materials	a. Clarity of material delivery	27
	b. Learning flow	
Material according to students' thinking ability level	a. Level of difficulty of the material	10
	b. Material according to real life	
<b>Total score</b>		<b>45</b>

Based on the results of the material validity test (see table 3) by providing an assessment questionnaire to the material expert lecturer in the Language and Literature study program. Generate values or scores for each aspect or indicator. For the first aspect, the learning objectives and outcomes received a score of 8. The second aspect of the learning material received a score of 27. And for the third aspect, the suitability of the material to the student's ability level received a score of 10. So the total score produced was 45. The final score is then calculated as a percentage using a formula. The percentage generated through these calculations is then converted into eligibility criteria.

#### ***Media or Product Expert Validation***

To ensure that the Pop-Up Book media is feasible to use, media expert validation is used using established evaluation criteria that include device engineering, learning design, and visual communication. The score obtained was 92%. is said to be suitable for teaching and testing the validity of each material feasible to use.

**Table 4. Results of media validation assessment**

Aspect	Indicator	Score
Software engineering	a. Effective and efficient use of media	18
	b. Reliable and reusable	
	c. Usable (easy to use)	
	d. The accuracy of selecting the type of software for development	
Learning design	a. Presentation of learning objectives	11
	b. Presentation of media content with learning objectives	
	c. Motivation to learn	
Visual communication	a. Communicative	22
	b. Creative	
	c. Simple and attractive animation	
	d. Quality	
	e. Visual quality	
<b>Total score</b>		<b>55</b>

Based on the results of the media validity test (see table 4) by providing an assessment questionnaire to the media expert lecturer in the Arts Education study program. Generate values or scores for each aspect or indicator. For the first aspect, device engineering and obtained a score of 18. The second aspect of learning design received a score of 11 and the third aspect of visual communication received a score of 22. So the total score obtained was 51. The final score

is then calculated as a percentage using a formula. The percentage generated through these calculations is then converted into eligibility criteria.

Through testing in Table 2. The acquisition of these criteria is from the end of product suitability testing and the materials formed. If it has met the feasibility criteria that include the suitability of learning materials, the feasibility of supporting learning media and technical quality, then the Pop-Up Book media for fable story teaching materials which are considered to be the optimal media used for second grade of Elementary School.

As many as 92% of material experts have assessed the validity of the media for use in learning as an indicator of the suitability of its content. The material provided is aligned with the interpreter's learning targets by reviewing information. The media is aligned with phases, targets, learning achievements. Anggraena et al. (2022) said it is necessary to adjust the learning plan to the development stage of each student. In terms of product suitability, media experts stated if the Pop-Up Book is valid to use for studying, it gets 92%. Conclusion from the test, obtained very good results with an average validation score of 93%. The resulting Pop-Up Book media passed the validation test, meaning it is ready to be used in class. Content, presentation and suitability of the material are the criteria used to evaluate the findings of the validation test.

### **Implementation**

After the media is deemed good by each expert, monitoring continues with the implementation of distributing Pop-Up Books for the learning phase. The trial is guided by the media that you want to create, which is intended for 20 students. The model trials will be aligned to predetermined procedures.

**Table 5. Student learning outcomes**

Action	Average	Highest score	Lowest score
Pre-test	59	83	40
Post test	91	98	80

The number of students who took the Pre-Post test was 20 students. The pre-test score of students obtained a score of 59 with a maximum score of 83 and a minimum score of 40, as shown in the results of table 5. While the post-test score obtained a score of 98 with a maximum score of 98 and a minimum score of 80. Learning completeness increased between the pre-test and post-test. This shows that the Pop-Up Book media has increased. Initial investigation of the normality of student psychomotor data in pre- and post-test scores is the next step known as initial data analysis. If the message is distributed stably, parametric statistical formulations will be used to carry out the t-test, if it is not distributed normally, non-parametric statistics will be used.

The normality test helps researchers in choosing data analysis techniques, the following are the results of the pre-post test on class II students at SDN 05 Pegundan.

**Table 6. Results of the Normality Test for Pre-test and Post-test Data**

Test	Statistics	df	Sig. (p-value)
Pre-test	0,907	20	0,055
Post-test	0,923	20	0,115

Source: processed by the author from SPSS 2024

Normality testing conditions are assumed to be normal if they are valuable  $> 0.05$ . The normality test of the pre-test score obtained a result of 0.055 and the post-test score obtained a result of 0.115. Table 6 shows that the message is distributed normally. Then the researcher used parametric statistical techniques with the t-test formula to evaluate the difference in the average of both. The t-test is used to differentiate range scores pre-post test which are then used to assess how effective the media is. The following table 7 shows the results of the t-test calculation on grade II students of SDN 05 Pegundan

**Table 7. Results of the difference in means or t-test**

	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	of	Sided p
Pretest-posttest	-32.800	13.83968	3.09465	-39.27717	-26.32283	-10.599	19	<0,001

Source: processed by the author from SPSS 2024

The criteria for the *paired sample t test* or t test is if the reported value of the test is less than 0.05 then the result is said to be significant. However, the t test produces 0.01 or below 0.05, it can be concluded that there is a significant comparison between the two test results.

The following data analysis results from *the average increase test (N-Gain)* on table 8 are used to analyze psychomotor abilities, namely to determine the difference between scores before and after the experiment. *N-Gain* shows that students' psychomotor results have increased after using the Pop-Up Book media. There are gains *the N-Gain test* on class II students of SDN 05 Pegundan

**Table 8. N-Gain Test Results**

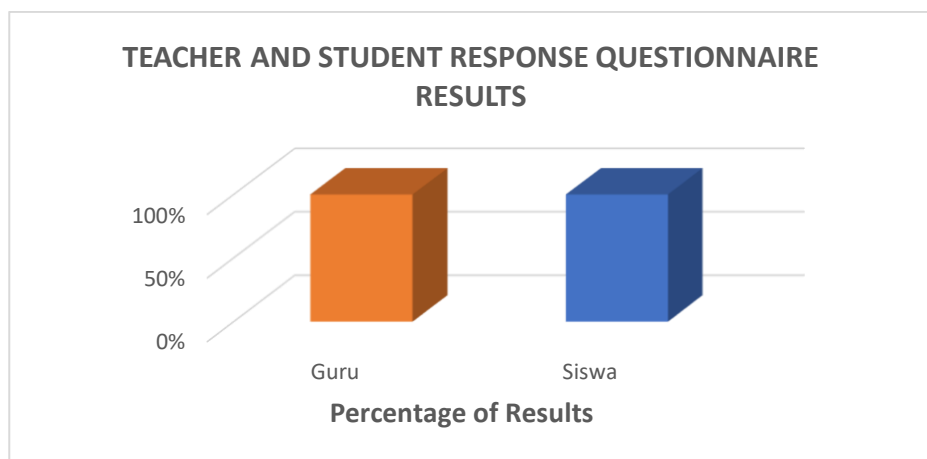
	N	Minimum	Maximum	Mean	Std. Deviation
N-Gain	20	38.40	77.47	56.0602	13.46334
Valid N	20				

Source: processed by the author from SPSS 2024

Through calculations average increase test (N-Gain) of the pre-test and post-test data using the Pop-Up Book media which have been presented in the table above, this shows that the group test significantly increased by an average of 0.56 with an average difference of 20 which is summarized from *N-Gain test* are included in the moderate criteria.

### **Evaluation**

This stage will carry out data analysis obtained from material and media validation from the expert team. Then the next step is to analyze the responses or responses of teacher and student surveys. To ensure the feasibility of the Pop-Up Book media, teachers and students fill out a questionnaire. The questionnaire is given after The learning stage is carried out using media. There was a survey of student teachers responding to fable teaching materials displayed in Pop Up Book media.



**Figure 3. Percentage of teacher and student responses received**

Based on the Figure 3, it can be concluded that the percentage of teacher and student responses received positive reactions with a total percentage of 100%.

### **Discussion**

Based on the results of the analysis above, it is very important for the role of learning media to improve the quality of the learning process according to today's times . Developing learning media that can assist students' reading process is the aim of this research and development. The definition of learning media (Supriyono, 2018) is an important part of a learning activity that is carried out. The application of good and appropriate learning media can increase students' enthusiasm in studying the knowledge being taught (Sari & Erita, 2021). The media created and developed by researchers is in the form of Pop-Up Book media which aims to improve the reading skills of lower classes, especially in class II of SDN 05 Pegundan. Based on Dzuanda's opinion (Dewanti et al, 2018: 222), he explains that Pop-Up Book media has very useful benefits, namely developing children's creativity, stimulating children's imagination and can increase knowledge and provide recognition of the shape of objects. Pop-Up Book media can also be used as a medium to foster motivation and instill in children a love of reading.

One appropriate application of learning media is in Indonesian language subjects. Indonesian has a very important role in the world of education because it functions as a communication tool. The main role in learning Indonesian is to improve 4 skills including reading and writing. Reading is an activity to obtain information or messages involving vision, eye movements, inner speech and memory. Therefore, it is hoped that students must be able and able to master reading skills, because if not, students will find it difficult to understand the lesson. Beginning reading is taught to elementary school students starting from grades I and II. What is focused on is that students can recognize letters and differentiate each letter and reading and are able to arrange letters into words and sentences. Students are required to master reading skills since they are in class II of elementary school. It turns out that based on observations made by researchers there are still some students who are able to read fluently.

Based on the problems at SDN 05 Pegundan, there is a problem of students' low reading ability due to the limited media used, which has an impact on students' reading ability because

they only focus on reading which is less varied. This causes students to be reluctant to start reading. This makes researchers conduct research into the development of learning media in the form of Pop-Up Book media which is expected to be an alternative solution in overcoming the above problems.

### ***Pop-Up Book Media Development***

The media will be formed in the form of ADDIE, considered a systematic way by some experts. Media is a tool that helps educators share teaching materials. Students who have difficulty understanding learning materials can be helped by using tools in the form of learning media. To create active, effective and enjoyable learning, creative teachers are needed in developing learning media. Media with lots of images are used in elementary schools to teach, attract and help students in language, especially in reading. However, not just images, but images that have extraordinary imagination. A work of art in the form of a new image has recently emerged and is applied in 3D format.

Pop-Up Book is a type of three-dimensional media whose images appear when the page is opened (Sari & Suryana, 2019). Pop Up Book, according to Dzuanda (2011), can share unique visualizations of material being taught when viewed from the perspective of images that can arise and be sized. In addition, pop up books are interesting because they have the ability to present surprises on each page when students change pages. Pop-Up Book is a moving media based on images and provides a unique story visualization aspect, starting with the moving presentation of each open page. From assumptions by Bluemell & Taylor (2012) Pop-Up Books are books that present illustrations of the movement of using paper to roll, fold, cartwheel or rotate.

Pop-Up Book media is used as a medium to train, attract, and help children in language, especially in the field of reading. Where reading has a value of truth in reading punctuation, intonation, and understanding of the story. Because one of the basic reading skills is reading stories, reading story texts requires good reading skills, both in intonation when finding punctuation and imagination when reading. This will facilitate students to deepen the contents of the story being read. To attract students to the first reading, namely pictures and stories, students will be interested in reading until they find an understanding of the story, thus when students like and read more often, it can train their reading skills, especially reading stories. So the author is interested in proposing this title "Development of the Use of Pop Up Book Media to Improve the Reading Ability of Lower Grade Students of SDN 05 Pegundan".

The media created is designed to overcome problems to improve students' reading abilities in class II. This media was created to attract students' attention so that students can read and explore the concept of this media. The choice of Pop-Up Book media is of course in accordance with various considerations of teachers and lecturers. The choice of bright colors gives a cheerful and enthusiastic impression so that it can attract students' attention, the illustrations, layout, appropriate font size, number of pages, the choice of characters in the form of fables or animal characters increase students' interest, the choice of features and size of the book is also of course taken into consideration by media expert lecturers and materials that have been adapted for children or lower grade students. Responses from several material and media

expert validators were also very useful, especially in the product quality section which must truly suit students' needs.

### ***Feasibility and Effectiveness of Pop-Up Book Media***

Learning media is said to be suitable for use and utilization if it has gone through various validation tests or feasibility tests. Whether it is suitable or not depends on the results obtained by experts (Mashuri, 2020). Validation is carried out by people who have expertise in their fields, such as lecturers who are material experts and media experts. Validators want to be able to share assessments in the form of suggestions for improvement and input that can be used to improve the quality of a product being developed. Both experts come from PGSD lecturers who each have expertise in Indonesian language material and media experts who will later be used in the classroom. The main aspects of the assessment of material experts are suitability with learning achievements, learning objectives and suitability with student needs. Then the main aspects of the assessment of media experts are in appearance and use.

Through validation testing from material experts it was found to be 91% (very feasible) then from media experts 91% (very feasible). Specifically, material experts and media experts consider the Pop-Up Book media suitable for use in the classroom during the feasibility assessment. This validation is a requirement in educational research so that the material can be published and therefore has several pedagogical issues that must be understood by the audience (Saeverot & Kvam, 2019; Tassone et al., 2018). The results of the study found that the use of Pop-Up Book media had a fairly practical impact for use in the classroom. Thus, the Pop-Up Book Learning Media for fable material to improve reading skills for class II can be used by students and teachers in their learning activities.

From testing it is feasible to produce learning media Pop-Up Book fable story material was categorized as "very feasible to use" with an average percentage score of 91%. This average was taken from the score of the Indonesian fable learning material expert of 91%, the learning media expert of 91.6%. Teachers responded well to the media around 100%. This provides the fact that the media is suitable for use. The media used will present teaching materials for animal stories or fables. This is evidenced by the results of students' psychomotor skills in the pretest and posttest that have been carried out. The assessment results for *the N-Gain test* were 0.56 classified as moderate. Through this, the media can be used by teachers delivering fable material because it is practical and feasible to use for the learning process.

The results of the teacher and student response questionnaires also obtained a percentage of 100% and can be said to be very suitable for use as a medium to improve students' reading skills. The results of the student response questionnaire are as shown on Table 9.

**Table 9. Student questionnaire results**

No	Indicator	Assessment Indicators	
		Yes	No
1	The initial appearance of the media is interesting	√	
2	Ease of using media	√	
3	The type of font used is easy to read	√	
4	The image display in the media is clear	√	
5	Ease of accessing media	√	
6	After using the media, it becomes easy to read and understand the content.	√	
7	Practice questions according to the material presented in the media	√	
8	Learning independence with the help of media	√	
9	The use of media makes learning interesting	√	
10	The language used in the media is easy to understand	√	

The research above is also relevant to previous research conducted by Shobakhah Lutfiana Badotius, Muhammadiyah University of Gresik with the title "Development of Pop-Up Book Media to Improve Learning to Read Poetry in Grade 1 Elementary School Students" using research instruments in the form of interview sheets, expert validation sheets, and test sheets. The results of this research are that the Pop-Up Book media developed by researchers in terms of media presentation components is in the "Very Good" category with validation results reaching 94.5%, while in terms of competency it is in the "Good" category with validation results reaching 86.7%. The average achievement of success in developing Pop-Up Book media is 89.6% in the "Good" category. So it can be concluded that this research can develop poetry reading in grade I elementary school students

### ***Benefits of Pop-Up Book Media***

The success of this media is certainly inseparable from the various benefits and advantages of the Pop-Up Book media. There are many benefits of the Pop-Up Book media in the teaching and learning process. As Dzuanda (Dewanti et al., 2018) said, the Pop-Up Book media has many useful benefits, namely teaching children to appreciate books more and take good care of them without any coercion, developing children's creativity and imagination, increasing knowledge and providing an introduction to the shape of objects. Pop-Up Book media can also be used as a medium to foster motivation and instill a love of reading in children.

Pop-Up Book media is an effective media to increase students' interest in reading and understanding, especially elementary school students, because of its visual appeal and interactivity. However, this media certainly also has limitations or shortcomings, especially in terms of durability, cost and the possibility of impaired focus when reading. Therefore, its use must be adjusted to needs and combined with other learning methods for more optimal results.

The implications of this research certainly have positive things that cover various aspects, especially in the world of education. In education, visually appealing and interactive pop-up books can increase students' interest and motivation to read, especially for students who are less motivated by ordinary textbooks for elementary school children. Illustrations and elements in pop-up books can also help students understand the contents of the reading better, especially for those who are still learning to recognize words and sentence structures. This media is very

suitable for elementary school children who are in the early stages of reading because it can help them recognize letters, words and sentences in a fun way. Furthermore, in the development of learning media, this research encourages innovation in the development of children's books that are not only interesting but also support reading skills. With the interactive features and elements in this media, students become more active in reading because students will follow the storyline by opening parts of the book or by rearranging information from pictures. Moreover, in child psychology, where students find it easier to remember new vocabulary and understand the contents of the reading because the information is presented in text and visual form. Children who have difficulty reading often feel anxious or less confident with the presence of pop-up book media which is more interesting and of course fun can help reduce stress in the process of learning to read.

Pop-up books can be developed with digital features such as Augmented Reality (AR) to add a more interactive reading experience, such as voice narration or animations that appear when the book is opened. Likewise, research can also consider aspects of the media itself that are most relevant to outcomes, thereby enabling educators to be more effective in teaching. . Research by Sulastri (2016), Lopes et al. (2023), and Yufrizal et al. (2024) to improve the reading skills and interests of elementary school students, which resulted in pop-up media as an effective and very useful media for students.

Research on the development of pop-up book media in improving students' reading skills, especially in lower grades, certainly has a significant long-term impact, including: helping to build a strong literacy foundation which has an impact on improving reading skills at the next level of education, Children who are accustomed to reading with pop-up books from an early age are more likely to develop ongoing reading habits into adulthood. Children with reading difficulties can be helped by visual elements that clarify understanding of the text, thereby increasing the inclusiveness of education. With the continued development of innovation in learning media, the use of pop-up books can be an effective strategy to create a generation that is more literate, creative and ready to face the challenges of the digital era. Research on pop-up books in improving reading skills not only has an impact on children's literacy, but also opens up wide opportunities in the development of interactive learning media for other subjects. Similar media can be used for mathematics, science, history, and foreign languages, creating a more engaging, inclusive, and effective learning experience. For example, pop-up books in mathematics can display the concept of three-dimensional geometric shapes, helping students understand shapes and sizes more realistically.

## **CONCLUSION**

### **Conclusion**

This lesson provides facts about Pop-Up Book media with fable story material that can improve reading skills in grade II of elementary school. Suitability of the media design has gone through validation results from media expert lecturers and obtained the results of "very feasible" to use, then from material experts expert lecturers also obtained the results of "very feasible". The results of the effectiveness analysis provide evidence that this media is able to improve the reading skills of students who were initially not fluent in reading by using this media making students fluent in reading.

## Suggestion

It is expected that further similar media development researchers can be carried out on a wider scale and implemented comprehensively, not only in the fable chapter. In addition, it is also expected that similar media can also be used as an innovation in learning media that encourages student activity in other subjects.

## REFERENCE

- Ardhian, T., Ummah, I., Anafiah, S., & Rachmadtullah, R. (2020). Reading and Critical Thinking Techniques on Understanding Reading Skills for Early Grade Students in Elementary School. *International Journal of Instruction*, 13(2), 107-118. <https://doi.org/10.29333/iji.2020.1328a>
- Anggraena, Y., Felicia, N., Eprijum, D., Pratiwi, I., Utama, B., Alhapi, L., & Widiaswati, D. (2022). *Kajian akademik kurikulum untuk pemulihan pembelajaran*. Pusat Kurikulum dan Pembelajaran, Jakarta.
- Bluemel, N. L., & Taylor, R. H. (2012). *Pop-up books: a guide for teachers and librarians*. Bloomsbury Publishing USA.
- Borg, W.R. & Gall, M.D. (1983). *Education research: an introduction*. 4th Edition. New York: Longman Inc
- Dewanti, H., Toenlloe, A.J.E., Soepriyanto, Y. (2018). Development of Pop-Up Book Media for Learning the Environment Where I Live for Class IV SDN 1 Pakunden. *Journal of Educational Technology Studies*. 1(3), 222-223. <https://journal2.um.ac.id/index.php/jktp/article/view/4551>
- Dzuanda, B. (2011). *Perancangan Buku Cerita Anak Pop up Tokoh-tokoh Wayang Berseri, Seri Gatotkaca*. (Online). Diakses melalui <http://digilib.its.ac.id/index.php>
- Guslinda, S. P., & Kurnia, R. (2018). *Media pembelajaran anak usia dini*. Jakad Media Publishing.
- Guspita Sari, R., & Erita, Y. (2021). Development of Learning Media in the Form of Digital Comics in Integrated Thematic Learning in Class IV Elementary Schools. *Journal of Basic Education Studies*, 4(1), 3126-3136. <https://ejournalunsam.id/index.php/jbes/article/view/4088>
- Kurniawan, H., Yulianto, R. S., Mladenov, S. V., & Ardiansyah, M. (2023). Sustainable development through community empowerment based on local wisdom. *Int. J. Prog. Sci. Technol*, 41, 164-176.
- Lopes, P. A. M. T., Ngura, E. T. ., & Dhiu, K. D. (2023). Pengembangan Media Pop-Up Book Aspek Bahasa Dalam Mengembangkan Kemampuan Membaca Permulaan Anak Usia Dini. *Jurnal Citra Pendidikan Anak*, 2(2), 524-535. <https://doi.org/10.38048/jcpa.v2i2.1152>
- Mahmudi, M. R., Dwitri, & Estika Hader, A. (2023). Pengembangan Media Pop-Up Book Terhadap Kemampuan Membaca Siswa Pada Pelajaran Bahasa Indonesia Di Kelas Ii Sd Negeri 308/VI Rantau Suli. *Didaktik : Jurnal Ilmiah PGSD STKIP Subang*, 9(2), 2406-2409. <https://doi.org/10.36989/didaktik.v9i2.985>

- Mashuri, D. K. (2020). Pengembangan media pembelajaran video animasi materi volume bangun ruang untuk SD kelas V. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar*, 8(5), 893-903.
- Mullis, I. V., & Martin, M. O. (2019). *PIRLS 2021 Assessment Frameworks. International Association for the Evaluation of Educational Achievement*. Herengracht 487, Amsterdam, 1017 BT, The Netherlands.
- Novi Engla Sari, Dadan Suryana. (2019). Thematic Pop-Up Book as a Learning Media for Early Childhood Language Development, *Jurnal Pendidikan Usian Dini Vol.13* . <https://doi.org/10.21009/10.21009/JPUD.131.04>.
- Putri, G. A. T. M., & Rati, N. W. (2022). Reading Problems in Grade II Elementary School Students. *Jurnal Ilmiah Sekolah Dasar*, 6(2), 244-252. <https://doi.org/10.23887/jisd.v6i2.42584>
- Seels, B.B., & Richey, R.C. (1994). *Instructional technology: The definition and domains of the field*. Washington, D.C.: Association for Educational Communications and Technology.
- Sulastri. (2016). Development of Pop Up Book Media for Beginning Reading of Grade 1 Students of SDN Bangunharjo Bantul. *Journal of Elementary School Teacher Education*
- Supriyono. (2018). The Importance of Media to Increase Elementary School Students' Interest in Learning. *Journal of Elementary Education*, 2(1), 43-48. <https://doi.org/10.26740/eds.v2n1.p43-48>
- Saddhono, K. (2015). Integrating culture in Indonesian language learning for foreign speakers at Indonesian universities. *Journal of Language and Literature*, 6(2), 349-353.
- Saeverot, H., & Kvam, V. (2019). An alternative model of researching educational practice: A pedagogic–stereoscopic point of view. *British Educational Research Journal*, 45(1), 201-218. <https://doi.org/10.1002/berj.3493>
- Samiyatun, S. (2022). Penerapan Media Audio Visual untuk Meningkatkan Kemampuan Menulis Puisi Pada Kelas VII. *Dharmas Education Journal (DE\_Journal)*, 3(1), 45-54. <https://doi.org/10.56667/dejournal.v3i1.618>
- Santika, A., & Nasution, A. S. (2021). Pengembangan Media Gambar Berseri untuk Meningkatkan Keterampilan Berbahasa Indonesia Di Kelas II SD. *A. S.*
- Sari, R. G., & Erita, Y. (2021). Pengembangan Media Pembelajaran Berupa Komik Digital Pada Pembelajaran Tematik Terpadu Di Kelas IV Sekolah Dasar. *Journal of Basic Education Studies*, 4(1), 3126-3142.
- Sulistiyani, N., & Retnawati, H. (2015). Pengembangan perangkat pembelajaran bangun ruang di SMP dengan pendekatan problem-based learning. *Jurnal Riset Pendidikan Matematika*, 2(2), 197–210. <https://doi.org/10.21831/jrpm.v2i2.7334>
- Tassone, V. C., O'Mahony, C., McKenna, E., Eppink, H. J., & Wals, A. E. (2018). (Re-) designing higher education curricula in times of systemic dysfunction: a responsible research and innovation perspective. *Higher Education*, 76, 337-352.
- Yufrizal, Y., Silaban, P. J., & Silaban, L. (2024). Penggunaan Media Pop Up Book untuk Meningkatkan Minat Baca Siswa Kelas II SD Negeri Malaka. *Jurnal Riset Rumpun Ilmu Pendidikan*, 3(1), 57-70. <https://doi.org/10.55606/jurripen.v3i1.2677>