Digital PopUp Book Media Profile to Improve Learning Outcomes of Elementary School Students on Fairy Tale Material

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Abstract

This study aims to analyze the initial ability of student learning outcomes on fairy tale material and find learning media solutions that suit the conditions of students. The design of this study was pre-experimental. This type of research is descriptive so it does not require a hypothesis test. The results of this research will be used as a preliminary study and consideration in the development of *digital pop up book media* and to improve the learning outcomes of elementary school students. The study was conducted on 20 grade III students for the 2022/2023 academic year of SDN Sidorejo. This study used several instruments to collect data, namely student response questionnaires, teacher interview sheets, and fairy tale material tests. It was concluded that the learning outcomes of students in the cognitive realm of the Revised Bloom Taxonomy, the lowest results were found in the analyzing indicator (C4) by 10%, the understanding indicator (C2) by 35% and the remembering indicator (C1) by 55%. Novelty: Exploring the advantages of using *digital pop up book* media to improve student learning outcomes, which contributes to increasing students' reading interest, knowledge and skills in a balanced manner. In this study, the use of *digital pop up book* media is expected to improve student learning outcomes in the cognitive realm. So it can be concluded that if the learning outcomes of students are still low, it is necessary to make improvements in teaching and learning activities, namely by using *digital pop up book media* so that students understand the material presented, especially fairy tale material.

Keywords: *Digital; Storytelling; Learner Learning Outcomes; Media; Pop Up Book*

Introduction

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals and skills needed by themselves, society and the nation. In this sense, it has an implied meaning that education has the aim of developing human resource potential (Rozi, 2016). In learning, each student has different characteristics so that the level of understanding of the concept of the material also varies. This will cause differences in ways and opinions in solving a problem. The more mastered a concept in learning, it is expected that problem solving will become easier, and

learning outcomes will be better. In the learning process in the classroom, surely a teacher often encounters students who have learning difficulties. This is where the role of teachers to manage classes by utilizing appropriate diverse learning resources and media is crucial (Ulfa, 2020). In the learning process, learning media has an important role. Teachers are required to be able to create and use a variety of learning media that can be used to deliver messages from teachers to students, so as to stimulate the thoughts, feelings, and interests and attention of students in the learning process (Malfia, 2021).

Learning media can be in the form of tools that are physically used to convey the content of teaching materials, consisting of books*, tape-recorders*, tapes, video cameras, *video recorders*, films, *slides* (frame images), photos, images, graphics, television and computers. Thus, it can be concluded that learning media is everything that is used to convey the content of learning material to make it easier for students to obtain knowledge, skills and attitudes according to learning objectives (Dewanti, 2018).

The use of *pop up book* media is one strategy to create interactive learning by describing the material audio-visually. *Pop up books* add new experiences in learning activities, provide opportunities for students to participate in teaching and learning activities so as to make the learning process more effective, and describe learning through visualized learning materials (Ramadhani, 2022).

Learning outcomes are the final results or giving values given by teachers to students in accordance with the abilities they obtain in the form of attitudes, knowledge and skills. The determination of learning outcomes obtained by students is very influential on the methods and media used by teachers in learning. Learning outcomes are specific statements expressed in behavior and appearance that are manifested in written form to describe the expected learning outcomes (Maisarah, 2021). In other words, learning outcomes become indicators of the achievement of learning objectives. Good learning outcomes can be used as a reference that learning goals have been successfully achieved, so that educational goals can be optimized.

One of the factors that trigger learning goals in schools not to be achieved optimally is the learning process, both in terms of learning strategies carried out by teachers are less relevant to the targets or the evaluation system used is not totality, so that the changes that have been achieved by teachers are only in the cognitive plain, have not reached the affective and psychomotor aspects perfectly.

Departing from the description above, efforts to achieve work efficiency and effectiveness in order to achieve educational goals, it is necessary to innovate the right learning strategy to improve the quality of education, especially in the learning process. Therefore, innovation in learning really needs to be applied.

Based on the background, the novelty of this study is to explore the advantages of using *digital pop up book* media to improve student learning outcomes, which contributes to increasing students' reading interest, knowledge and skills in a balanced manner. This study aims to analyze the initial ability of student learning outcomes on fairy tale material and find learning media solutions that suit the conditions of students. Schools that have been able to improve the quality of learning are expected to be a reference for teachers and other schools in terms of using ideal media in learning. The development of digital technology in the industrial era 4.0 has brought many changes and developments as well as influences on human life, especially in the field of education. Learning media in the industrial era 4.0 is certainly more suitable when using digital technology that facilitates students in learning to understand the material learned. Need to develop *pop-up book* media by adding digital technology. This *digital pop-up book* will be able to help learners in facing difficulties in visualizing phenomena that are impossible to see in the real world or complex concepts. This *digital pop-up book media* will be the main focus in the preparation of the product after the preparation of this preliminary study.

Method

The design of this study was pre-experimental. This type of research is descriptive so it does not require a hypothesis test. The results of this research will be used as a preliminary study and consideration in the development of *digital pop up book* media to improve the learning outcomes of grade III students of SDN Sidorejo in subjects Indonesian fairy tale material. The study was conducted on 20 grade III students for the 2022/2023 academic year of SDN Sidorejo. This study used several instruments to collect data, namely (1) student response questionnaires, (2) teacher interview sheets, and (3) fairy tale material tests.

Student response questionnaire sheets are used to determine student responses to Indonesian lessons and the use of *digital pop up book* media in learning. The student response questionnaire contains 11 questions that students answer using scores (4= strongly agree, 3=agree, 2=disagree, 1=strongly disagree). In the questionnaire there are 3 guidelines used, including:

1. Learning experience

   Example statement: fairy tale material is difficult for me to understand.

2. Learning process

   Example statement: teachers use ordinary textbooks more often than using learning media.

3. Media

   Example statement: I am happy if I learn to use *digital pop up book media*.

In the next stage of research, 2 class teachers who had taught class III were interviewed. The purpose of this interview is to find out more about the teaching and learning process in the classroom, whether to use learning media and whether the learning outcomes of students have reached the target expected by the teacher. The interview contains 8 questions that can explain the conditions related to the Indonesian learning process and the learning media used. The information sought is whether *digital pop up book* media has been applied in Indonesian lessons, especially fairy tale materials to improve student learning outcomes. While *the test* questions are used to determine the learning outcomes of students in the cognitive realm. The *test questions* on the fairy tale material consist of 2 readings. The first reading consists of 5 questions and the second reading contains 1 analysis question.

The data analysis technique used in this study is a qualitative descriptive technique that describes the actual situation according to the actual situation. Qualitative descriptive analysis is an analysis of data obtained in the form of images, words, or behaviors related to a condition under study with narrative description (Ariesca, 2021). For more details, the research steps can be seen in Figure 1.
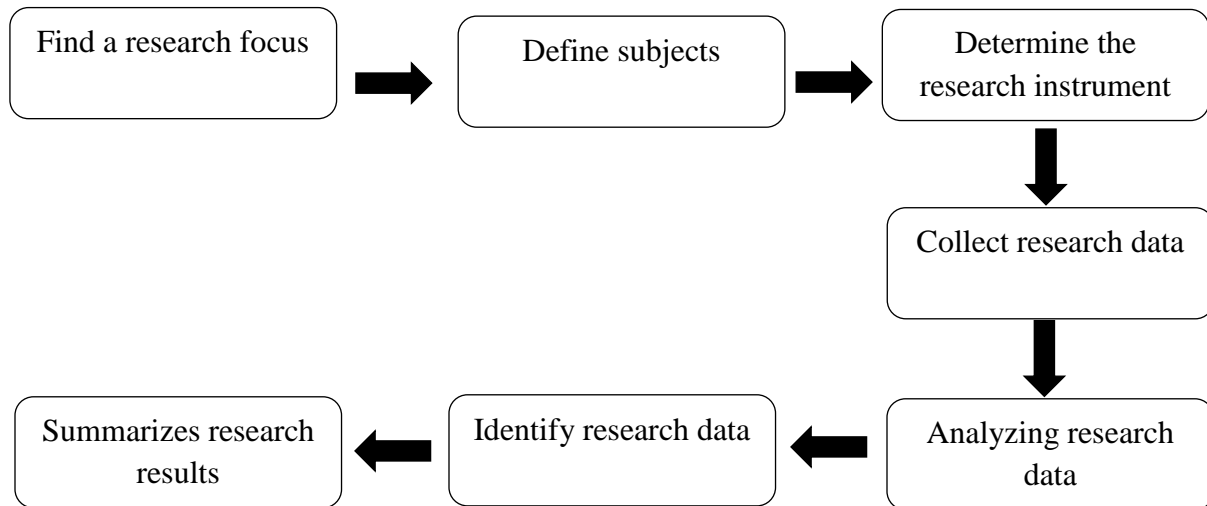
Figure 1. Method Study

Results and Discussion

Questionnaire Results Response Participant educate

To determine the response of students to Indonesian lessons and the use of *digital pop up book* media in learning, a questionnaire was created containing 11 questions about the Indonesian learning experience and the media used by teachers during the learning process. Student response questionnaires are answered by students using scores (4= strongly agree, 3=agree, 2=disagree, 1=strongly disagree). The following are the results of student responses from the questionnaire presented in Table 1.

Table 1. Response participant educate to Indonesian language learning and the use of *digital pop up book* media

No	Statement	Answer (%) (n=20 participants educate)			
		1 (Absolutely No Agreed)	2 (No Agreed)	3 (Agree)	4 (Strongly Agree)
1	Indonesian lessons are fun lesson _	10 (2)	45 (9)	40 (8)	5 (1)
2	Material Fairytale important For I learn	5 (1)	15 (3)	60 (12)	20 (4)
3	Material Fairytale difficult I understanding	10 (2)	10 (2)	50 (10)	30 (6)
4	During This my fairy tale learn originate from another area	5 (1)	15 (3)	25 (5)	55 (11)

5	Master more often use book package normal rather than using learning media	15	10	40	35
		(3)	(2)	(8)	(7)
6	I know What it's a *digital* media *pop up book*	30	35	25	10
		(6)	(7)	(5)	(2)
7	I have Once Study using *digital pop-up book* media	10	40	30	20
		(2)	(8)	(6)	(4)
8	I'm happy If Study using *digital pop-up book* media	10	15	20	55
		(2)	(3)	(4)	(11)
9	Media *pop up digital book* will help I understand material Fairytale in Indonesian lessons	5	10	50	35
		(1)	(2)	(10)	(7)
10	Important *digital* media *pop up book* For used in learning at school	5	15	20	60
		(1)	(3)	(4)	(12)
11	I always get mark Good in Indonesian lessons	10	35	30	25
		(2)	(7)	(6)	(5)

Table 1 shows more learners disagree that Indonesian lesson is a fun lesson. The next statement regarding the fairy tale material of students agrees more that the material of fairy tales is important to understand. However, students find that fairy tale material is difficult to understand because so far fairy tales come from other regions and teachers more often use ordinary package books than using learning media in the process of teaching and learning activities.

Further related to digital *pop up bool* media, based on Table 1 it is known that most students do not know and have never learned to use *digital pop up book* media so that if this media is used in learning, especially fairy tale material, students will feel interested and enthusiastic in learning the material. This is in accordance with Table 1 which states that students agree and feel happy if learning uses *digital pop up book media*. Digital *pop up book media* will also help students in understanding fairy tale material so that in the future it is hoped that student learning outcomes can increase.

Results of Interviews with Teachers

This research is not only from the perspective of students, but also asks for the opinions of 2 class teachers who have taught in grade III on learning media and student learning outcomes. Interviews were conducted to find out more details about Indonesian learning in schools. The results of the interview, which consisted of 8 questions, are presented in **Table 2.**

Table 2. Interview results with 2 class teachers ever teach in class III

No.	Question	Answer 1	Answer 2
1	is moment activity Study teach specifically moment eye Indonesian language lesson material Fairy tales , do you use learning media ?	Yes	Yes
2	What media do you use ?	New form book packages and worksheets.	Pictures and storybooks
3	is participant educate understand with submitted material ?	Not fully understood and the results of student learning are still lacking.	With the media of pictures or story books, students will more easily understand
4	is weakness from the learning media that has been used ?	Textbooks bore learners	Only emphasizes on sensory perception alone and presentation that is less effective for learning activities.
5	Constraint what are you facing in convey material Fairy tales ?	Many fairy tales come from other regions, so learners find it difficult to understand the elements of fairy tales.	Takes a little too long.
6	Does Mother know or even Once using *digital pop up book* media ?	Already know but Not yet Once using .	Never
7	How according to Mother if *digital pop up book* media is used in learning ?	Very helpful in delivery material fairytale	According to i am very good Because can give effect attractive , showing A picture in accordance with the desired teaching material delivered .
8	What is your mother's advice on process improvement activities Study teaching in class III in particular in material Fairy tales ?	It is expected that teachers can utilize appropriate learning media so that it is easier for students to understand the material and learning outcomes can increase	My advice is to choose a suitable learning model that is easily understood by learners

Table 2 proves that learning Indonesian especially fairy tale material is still carried out conventionally and traditionally. Very little special treatment from teachers to improve learners' learning outcomes. In addition, Indonesian learning in schools still does not apply many learning innovations. It also affects the attitudes, motivations, interests, and learning outcomes of students towards Indonesian learning, especially fairy tale material in class III. The teacher also said that he had never used *digital pop up book* media to facilitate the delivery of learning materials to improve student learning outcomes. This is because teachers are constrained by time and infrastructure. Therefore, teachers are expected to use *digital pop up book* media to improve student learning outcomes.

Learner Test Results of Fairy Tale Material

Tests are used to determine the learning outcomes of students in the cognitive realm. The *test questions* on the fairy tale material consist of 2 readings. The first reading consists of 5 questions and the second reading contains 1 analysis question. Data analysis was carried out by researchers based on the cognitive realm of Bloom's Revised Taxonomy according to Anderson and Krathwohl. The following classification of fairy tale material test questions is presented in Table 4.

Table 3. Classification Question Pretest

Cognitive Level	Number Question	Amount Question	Percentage
Remember / *remember* (C1)	1	1	17%
Understand / *understand* (C2)	2, 3, 4, 5	4	66%
Apply / *apply* (C3)	-	0	0%
Analyze / *analyze* (C4)	6	1	17%
Evaluate / *evaluate* (C5)	-	0	0%
Create / *create* (C6)	-	0	0%

Table 3 shows that the cognitive level in the fairy tale *material test questions there is 1 question* that is classified as the cognitive realm of remembering (C1), which is question number 1. The questions are categorized at the cognitive level of recall (C1) because students are asked to name characters from the reading. Questions number 2, 3, 4, and 5 are classified as cognitive understanding (C2) because they require students to understand the content of the reading. While question number 6 is classified as the realm of cognitive analyzing (C4) because students are asked to study and detail the content of the reading according to the question instructions.

The results *of learners' tests* on fairy tale material based on the cognitive realm of Bloom's Revised Taxonomy are presented in Figure 1 below.
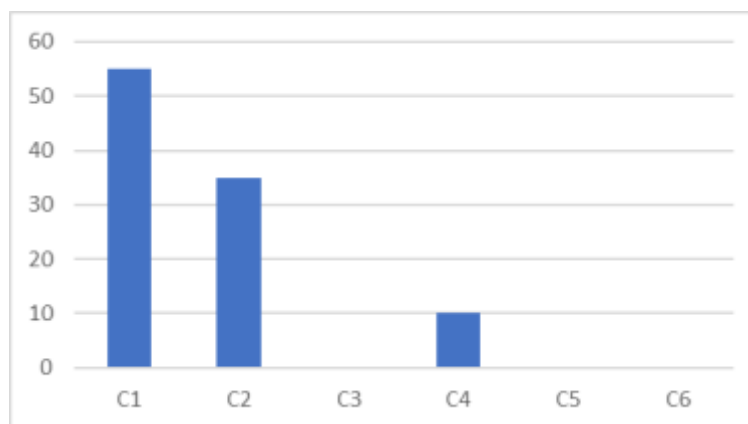

Figure 2. Percentage Based on *Pretest* Results realm cognitive Revised Bloom's Taxonomy

Figure 2 explains that the questions presented in the *test* average percentage of class III cognitive domains are as follows: (a) the cognitive realm of remembering (C1) is 55%, the cognitive realm of understanding (C2) is 35% and the cognitive domain of analyzing (C4) is 5%. This indicates that most students can solve *test* questions on the remember indicator (C1) while the comprehension indicator (C2) is lower and the analyzing indicator (C4) is only a small percentage of students are able to complete it well.

Discussion

Furthermore, an analysis of the results of students' work was carried out in order to determine the level of cognitive thinking of students based on the revised Bloom Taxonomy. The subjects of the study were not randomly selected, but involved all grade III students. The subject aims to know thoroughly the level of understanding of students in remembering, understanding, and analyzing a reading in fairy tale material. The selection of subjects in this study was taken from 20 grade III learners who took the written test and had been classified based on the interpretation of cognitive processes in the revised Bloom's Taxonomy. Through this grouping, 2 students were selected who were used as research subjects, namely one student from the low ability category (S6) and one student from the high ability category (S4).

The ability to analyze (C4) can be interpreted as the ability of students to determine the parts that make up a certain shape, object, or problem so that students are able to show the relationship with each other (Rochman, 2018). In this *test,* students are expected to have the ability to investigate a fairy tale to find out the content of a reading. Students are able to understand fairy tale titles, storylines, characterizations, setting events, character traits and moral messages. The questions used to analyze the ability of students related to the analyzing indicator (C4) are presented in question point number 6. The following are presented the results of the work of S6 and S4 students related to the work process can be seen in Figure 3.

Answer Participant S6 students

Answer Participant S4 students
Figure 3. Answer Results Participant Educate On Indicators Analyze (C4)

The analyzing indicator (C4) can be achieved by S4 students while S6 students who are subjects from the low ability category have not been maximized in achieving these indicators. S4 students have been able to analyze questions from the fairy tale readings presented. Every answer given by S4 learners fulfills the elements of the requested fairy tale. Meanwhile, S6 students have not been able to achieve this analyzing indicator (C4). S6 students can do the question but the answer to the question is not correct and it seems that S6 students have not been able to analyze the question well.

Understand is the ability to construct meaning from learning messages and be able to communicate them in oral, written, and graphic form. Learners understand when they are able to determine the relationship between newly acquired knowledge and their previous knowledge (Oktaviana, 2018).

Many studies have been conducted to determine the impact of using *pop up book media*, especially if integrated with the latest technological developments, namely digital developments. In order to strengthen the knowledge of researchers and look for gaps from previous research related to *digital pop up book* media, researchers conducted an analysis of previous research.

Table 4. Results of relevant research analysis

Writer	Objective Study	Research Results
(Siti Samsidar , 2022)	Describe the process of developing learning media *pop up digital book* on material fairy tales and analyze teacher's response in class III to the feasibility of learning media *pop up* digital *book on* material medium fairy tale developed by researchers .	Digital pop up book *learning media on* fairy tale material in grade III SD Negeri Lamreung Aceh Besar has met the very feasible category based on the results of validation of the media, then a score of 94% was obtained and the results of material validation obtained a score of 94% with very feasible criteria. Meanwhile, the response data from two class teachers obtained scores, namely class III-A teachers with a score of 92% and class III-B teachers with a score of 96% with very feasible criteria.
(Malfia Arif & Hijrawatil Aswat, 2021)	Improve student learning outcomes in science subjects using *pop up book media*.	The application of learning using *pop up book media* has succeeded in achieving the completeness criteria. Data analysis showed that student learning outcomes from an average of 68.3 in cycle I increased to 86.1 in cycle II. The increase also occurred in the level of student completeness where in cycle I as much as 50% to as much as 88.9% in cycle II.
(Febri Ukhtinasari , Mosik , & Sugiyanto , 2017)	Knowing the feasibility of media developed in the form of *pop up books,* materials for optical tools.	*The resulting pop up book* has an effectiveness rate of 75.42%, which is in the very good criteria. The average eligibility score of *pop up books* is 80.62% or in good criteria. Based on predetermined indicators and respondent data results, the *pop up book* is suitable to be used as a learning medium for physics of optical equipment materials for high school students.

Table 4 proves that the use of *pop up book media* is proven to be feasible and effective in improving student learning outcomes on various materials and lessons as long as they are developed and applied according to the situation, conditions, and characteristics of students, the environment, and the scope of the material taught.

Conclusion

Based on the results of research using preliminary research methods that have been carried out, it was concluded that the learning outcomes of students in the cognitive realm of the Revised Bloom Taxonomy, the lowest results were found in the analyzing indicator (C4) by 10%, the understanding indicator (C2) by 35% and the remembering indicator (C1) by 55%. As a result, it can be concluded that

the learning outcomes of the cognitive realm of learners are still low. Based on the results of the study, teachers should facilitate the teaching and learning process tailored to the needs of learners to assist them in improving student learning outcomes. This study was limited to obtaining student response questionnaire data, interview results of 2 teachers, and *test* results on fairy tale material. Furthermore, the data is used to measure the results of student learning outcomes and the use of appropriate learning media. The results of this study can be used as a reference and main alternative for future researchers who create learning media to improve student learning outcomes. In this study, the use of *digital pop up book* media is expected to improve student learning outcomes in the cognitive realm. So it is concluded that if the learning outcomes of students are still low, it is necessary to make improvements in teaching and learning activities, namely by using *digital pop up book media* so that students understand the material presented, especially fairy tale material.

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