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Developing Flipbooks and Wordwall-Assisted Digital Media for Teaching Procedural Writing in Elementary Schools

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ABSTRACT

This book is based on the theory of constructivism that allows students to build their knowledge through fun and interactive interactions. Flipbooks make it easy to present material with various multimedia elements, while wordwall provides interesting wordplay in writing procedural texts so that it is an easy learning support tool. The purpose of this research is to find out the development of flipbook-based digital books with the help of wordwall for learning to write procedural texts. This research method is development research or R and D using ADDIE design. ADDIE's design steps are Analysis, Design, Development, Implementation, Evaluation. The subjects in this study are teachers and 5th grade elementary school students in Madiun Regency, which totals 5 teachers and 87 students. Data collection techniques using observation and questionnaires. Additional statistical analysis To strengthen the quantitative analysis, a descriptive statistical test was conducted in the form of calculating the average value (mean), standard deviation, minimum, and maximum of the user assessment results. Instrument Validity and Reliability. The questionnaire instrument was validated by two experts, namely a material expert and a media expert, to measure content validityThe results of the study show that the development of digital books is developed according to the needs of teachers and students. Flipbook-based digital books are declared feasible for learning to write procedural texts. With this, it is hoped that it can make students understand more deeply the procedural text material with a fun learning experience.

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1. INTRODUCTION

Indonesian learning aims to improve students' skills and abilities in Indonesian, good and correct oral and written communication. The scope of Indonesian subjects includes four aspects of language skills, namely listening, speaking, reading and writing. These four aspects are integrated learning aspects, although they can still be separated from their presentation in the curriculum (Ivanka et al., 2025). Students must be skilled in speaking Indonesian, including writing skills. Writing skills have an important role for students, both (Arias-Gundín et al., 2025). Writing is a skill A person's ability to convey ideas, thoughts, or information in writing in a clear, structured, and effective manner. Writing requires students to master cognitive, linguistic, and literacy skills to be able to compose writing with the right context (Mitchell et al., 2023; Vandermeulen et al., 2024; J. Wang et al., 2024). Therefore, writing is said to be a complex language skill that has been taught in elementary school.

One of the learning to write in elementary school is writing procedural texts. Procedural texts are texts that explain the steps completely and clearly on how to do something (Agustin & Indihadi, 2020; Dewi et al., 2018; Juniari et al., 2024). Learning about procedural texts is very important for students to learn, because learning procedural texts can increase students' knowledge and insight about the steps or stages that must be taken before doing something. With the learning of procedural texts, students also know what to do before doing something they want to do so that students do not hesitate in doing something that will be done (Nasution et al., 2024). To learn the text of the procedure, skills in the above aspects are required. Procedural text learning is considered very important for students because it can train students to think structured, improve understanding related to instructions, and build habits of giving instructions clearly (Yahya et al., 2023). This is very beneficial for students in the present and future masses, both in the world of education and in the community. In addition, procedural tests can also train students to think logically and systematically.

In learning procedural texts, there are several problems that occur, namely, (1) Students in writing procedural texts have not used the correct stages of procedural texts. (2) Students write procedural texts do not use the structure of procedural texts correctly (Agustina et al., 2024). Another problem is that students still lack vocabulary and language mastery so that students have difficulty writing procedural texts. Students who are less active when attending lessons. Some students still tell stories, are sleepy, and do not pay attention to their teachers when explaining the subject matter of procedural texts (Annisa et al., 2024). Another problem is that students still have difficulty in developing sentences, students have difficulty in writing proper and clear procedural texts because they are not used to presenting their facts and ideas in writing communication, students lack knowledge about writing procedural texts (Kirana et al., 2024).

Seeing these problems, there needs to be a solution to overcome them. Solutions to overcome by using interesting learning. According to research (Juliani & Ibrahim, 2023) which states that flipbook media affects Indonesian learning outcomes in elementary schools. In addition, research (Novitasari et al., 2023) states that flipbook media is effective for learning to write narratives. Therefore, using Flip Book media can be used as one of the interesting learning media because students can participate directly in the learning process and get a better learning experience. The research (Suwandi et al., 2025) developed flipbook media to improve the skills of writing explanatory texts with a scientific approach. In the study, it was found that flipbook media can improve the writing skills of explanatory texts for elementary school students. (Gutari & Mukhlishina, 2023) in their research stated that this flipbook media is very suitable for use in elementary schools in learning Indonesian narrative text material.

In education in the 21st century, teachers are required to master various skills due to the development of ICT (information and communication technology) and the advancement of the digital era. In this case, teachers are not only required to have teaching skills, but also have to adapt to

technological developments in the world of education. Teachers must be able to provide learning media that is in accordance with current technological developments (Mursidi et al., 2022). In overcoming difficulties in learning Indonesian text materials, the above procedure is by using appropriate digital-based interactive learning media, namely flipbook media and wordwall games. The combination of these two media is the right alternative to overcome difficulties in learning procedural texts. Flipbook media is an electronic media in the form of digital books in the form of images and text, then further developed by presenting digital books in the form of images, videos, audio, quizzes, and text (Prasasti & Anas, 2023). Wordwall is a website-style platform that offers a wide variety of interactive quizzes (F. Wang et al., 2025; Pradini & Adnyayanti, 2022; Safitri et al., 2022). Wordwall is an application that can be used as a learning tool, learning reference, and assessment tool for teachers and students. Wordwall can be interpreted as a web application used to create interesting quizzes (Zulfah, 2023). By using this medium, students are expected to deepen their understanding of procedural texts through fun and interactive learning experiences using flipbooks and word walls. Flipbooks are used to present procedural text materials, and word walls are used as games to create procedural text sentences.

Flipbooks have several advantages, namely, the learning materials presented can be in the form of text, images, videos, audio, or animations, and can display colors that attract students' attention. Flipbooks with the above elements can help improve students' learning activities and improve mastery of abstract material. If you want to duplicate a flipbook, you can easily and quickly duplicate it between phones, computers or laptops (Lake et al., 2023). Meanwhile, wordwall has several advantages, namely, as a supporting tool for learning media. This means that it is a technology-based media that is flexible and versatile, easy to use and customize, has free features, and has an attractive appearance (Yanti et al., 2023). Teachers can create various types of learning activities that suit their subject matter. There are different types of activities to improve student understanding, including flashcards, word games, tests, and interactive game boards. Additionally, students can access this word wall media from smartphones, laptops, or tablets, thus providing flexibility. Wordwall provides templates and project examples from other users that make it easier for teachers to create similar learning media (Fitria, 2023). In addition, Wordwall also allows teachers to modify existing templates and adapt them to their needs, including the use of images, audio, and video in learning activities. In learning procedural texts, you can use wordwall templates, which are to arrange blank words. This template can be filled with procedural text that is incomplete in sentences, students are asked to compose sentences that are still blank (Zulfah, 2023).

The difference between this study and the previous research is that this study developed a flipbook-based digital book with the help of a wordwall, while the previous research examined the separation between flipbook and wordwall. In addition, the writing material raised is also different, while the subject of this study is different from the previous research. Based on the above explanation, the purpose of this study is to find out the development of flipbook-based digital books with the help of wordwall for learning to write procedural texts.

2. METHODS

Types of Research

This type of research includes research and development research. Research R&D is a research approach that not only focuses on discovering new knowledge, but also developing practical products that can be used to solve real problems (Ibrahim et al., 2023). Development research, is a type of research that aims to develop, design, and test the effectiveness of a certain product in the fields of education, technology, health, and others. This research model uses the ADDIE design. ADDIE's design steps are Analysis, Design, Development, Implementation, Evaluation (Mulyatiningsih, 2019).

Research Subject

The test subjects are required to provide input to the researcher through the use of digital book products by users. The subjects in this study are teachers and 5th grade elementary school students in Madiun Regency, which totals 5 teachers and 87 students. The selection of subjects in this study fell because it was in accordance with the conditions and needs of books related to writing procedural texts

Data Collection Techniques

The data collection techniques in this study are observation and questionnaire. First, observation. Observations were made to find out the learning process of writing procedural texts using flipbook-based digital books with the help of wordwalls in elementary schools. Second, the questionnaire. The questionnaire in this study was used to find out the assessment of material experts and media experts related to the products that have been developed. The questionnaire is also used to determine the assessment of users, namely teachers and students regarding flipbook-based digital books in learning to write procedural texts. The following are the questionnaire instruments in this study.

Table 1 Material Expert Questionnaire Instrument

Num	ASPECTS	INDICATORS
1	Learning	Clarity of learning outcomes and learning objectives
		Completeness and quality of learning aids
		Suitability between material, media and evaluation with learning objectives
		Ease of understanding
		Clarity of descriptions, discussions, examples, simulations and exercises
		Consistency of evaluation with learning objectives
2	Material	Suitability of the material in theory and concept
		Depth of material
		Suitability of the material with the student's learning development
		Suitability of practice questions with the material
		The presentation of material can construct students' knowledge
3	Language	The language used is straightforward
		Language used interactive dialogs
		Language according to the development of students
		Collapse and integration

Table 2 Media Expert Questionnaire Instrument

Num	ASPECTS	INDICATORS
1	General Aspects	Creative and innovative (new, flexible, interesting, intelligent, unique, and not different)
		Communicative (easy to understand and use good, correct, and effective language)
		Superior (has advantages over other textbooks or in conventional ways)

Num	ASPECTS	INDICATORS
2	Aspects of Software Engineering	Effective and efficient use of learning media
		Reliability
		Maintainable (can be easily maintained or managed)
		Usability (easy to use operation and simple in operation)
		Accuracy in selecting the type of application/software/tool for development
		Compatibility (learning media can be installed and run on a variety of existing hardware and software)
		Integrated and easy to execute learning media programs
		Complete learning documentation
3	Visual Communication Aspects	Communicative: visual elements support the teaching material, so that it is easy for students to digest
		Creative: visualizations are expected to be presented in a unique and non-cliché (often used) way, in order to attract attention
		Simple: visualization is not complicated, so as not to reduce the clarity of the content of the teaching material and is easy to remember
		Unity: using visual and audio language that is harmonious, whole, and equal, so that the teaching material is perceived in its entirety (comprehensive)

Table 3 Teacher and Student Questionnaire Instrument

Num	ASPECTS	INDICATORS
1	Display	The overall appearance of the digital book is attractive
		The writing used in this digital book is very clear
		Selection of typeface and size accordingly
2	Practicality	The use of digital books is very practical
		Digital books are easy to use
3	Material	The material is in accordance with the learning objectives
		Evaluation according to indicators
		Easy-to-understand material
4	Language	The language used in digital books is easy to understand
		The use of sentences in digital books is in accordance with the right sentence structure
		This digital book uses sentences that do not give rise to double meanings

Assessments by media expert validators, material experts, Indonesian subject teachers, and students in this development research using the Likert scale, are presented in the following table:

Table 4. Linkert Scale Guidelines

Information	Score
Excellent	5
Good	4
Quite	3
Less	2
Very Insufficient	1

Data Analysis Techniques

The results obtained from questionnaires or questionnaires distributed to media experts, subject matter experts, teachers and students were analyzed to determine the feasibility of flipbook-based digital books. The results of the calculation from the formula so that it can be interpreted, the criteria in table 5 are used.

Table 5 Product eligibility criteria

Num	Numerals	Category
1	81-100	Highly feasible
2	61 – 80,9	proper
3	41 – 60,9	Quite decent
4	21 – 40,9	less worthy
5	0 – 20,9	Very Less worthy

The research method should be included in the Introduction. The method contains an explanation of the research approach, subjects of the study, the conduct of the research procedure, the use of materials and instruments, data collection, and analysis techniques.

Additional Statistical Analysis

To strengthen the quantitative analysis, a descriptive statistical test was conducted in the form of calculating the average value (mean), standard deviation, minimum, and maximum of the user assessment results. This data provides an overview of the general tendency and variation of responses to the product being developed.

Instrument Validity and Reliability

The questionnaire instrument was validated by two experts, namely a material expert and a media expert, to measure content validity. Validity was measured using the expert judgment technique, namely the experts assessed the relevance and suitability of the instrument items. The reliability of the instrument was tested using an internal consistency test, by calculating the Cronbach's Alpha coefficient. The instrument is declared reliable if the Cronbach's Alpha value ≥ 0.70.

3. FINDINGS AND DISCUSSION

Findings

Flipbook-Based Digital Book Prototype with Wordwall Assisted

At this stage, the researcher developed a Flipbook-Based Digital Book module with the help of wordwall. The researcher determines the design of the module, background color, font and font size, and layout. This aims to develop books that are interesting, easy to read, and as needed. There are several parts of a Flipbook-Based Digital book with the help of wordwall, which are as follows. Cover: The frontmost page is the cover. The cover here is designed to show the contents of the digital book. This is done so that users immediately know this digital book related to why when they see the book cover. The cover of the book is made in attractive colors with pictures of schoolchildren and the title of the book "Writing Procedural Texts". By reading the title, it can be seen that the digital book discusses the procedural text.

Learning Objectives: Digital books are equipped with teaching purposes to make it easier for teachers to use books and also make students aware of the learning objectives. The following is a picture of the learning objectives in the digital book. Material: The essence of digital books is in the material. In the material, it is explained related to material about writing procedural texts. In addition, in this section there are also examples of procedural texts and videos related to procedural texts. Here's an example of a picture of the material in a digital book. Exercises: The exercises here are used to measure students' understanding of writing procedural texts. The exercises are presented using a wordwall. In addition, students are also given the task of writing procedural texts on student worksheets.

Validation Results of PjBL-based Digital Book Prototype

At this stage, development is a form of research used to produce a product and test the feasibility of the product. The instrument used for the validation sheet contains an assessment of flipbook-based digital books with the help of wordwall for elementary school students' procedural text writing lessons. The validation process of the digital book module is carried out by two validators, namely material experts and media experts. To obtain decent results, the validator conducts an assessment by filling out a validation sheet using a rating scale of 5=very good, 4=good, 3=adequate, 2=less, 1=very poor. The results of the validation of material and media experts are in the form of assessments, suggestions, and comments that can be used as a basis for improving the digital books that have been developed. The following is a detailed description at the development stage.

a. Media Expert Validation

The validation of media experts is carried out with the aim of determining the feasibility of digital books. The assessment of digital books by media experts is based on 3 aspects of assessment and consists of 15 indicators, as follows:

Table 6 of Assessment Results from Media Experts

Num	Aspects assessed	Scores obtained
1	General Aspects	11
2	Aspects of Software Engineering	34
3	Visual Communication Aspects	17
Sum		62
Average		82,7

Based on the table of assessment results by media experts, it can be concluded that digital books obtained a score of 62 from validators and the maximum expected score was 75, so the percentage obtained was 82.7% with the category "very feasible". Media experts also provide suggestions for improving and improving digital books. The advice given by media experts is as follows.

Table 7 advice and improvement of media experts

Suggestion	Repair
Font size made larger	Improvements were made by changing the font size to a larger one.
Accented with attractive colors	Improvements were made by coloring each page of the book

b. Material Expert Validation

Validation of material experts is carried out with the aim of determining the feasibility of digital books. The assessment of digital books by subject matter experts is based on 3 aspects of assessment and consists of 15 indicators, as follows:

Table 8 results of subject matter expert assessment

Num	Aspects assessed	Scores obtained
1	Learning	24
2	Materials	19
3	Language	17
Sum		60
Average		80%

Based on the table of assessment results by material experts, it can be concluded that digital books obtained a total score of 60 out of a total score of 75, then the percentage obtained was 80% with the category "feasible". Subject matter experts also provide suggestions for improving and improving digital books. The advice given by the material expert is as follows.

Table 9 Advice and improvement of material experts

Suggestion	Repair
Evaluation adjusted to indicators	Make an evaluation according to the indicator, namely writing the procedure text
Typography and punctuation on books need to be improved	Correct typography on terms used and Correct punctuation

The percentage results obtained by the two experts, namely media experts and material experts, will then be totaled using a predetermined formula to find out the overall percentage. This aims to determine the feasibility of flipbook-based digital books for learning to write procedural texts. Based on the table of the results of the combined percentage by media experts and material experts, it can be concluded that digital books obtained a score of 81.3% with the category of "very feasible".

Flipbook-based Digital Book Prototype Trial Results with the Help of Wordwall

At the implementation stage, the revised digital book is in accordance with the validator's comments, then testing is carried out. The digital book trial was carried out in 5 elementary schools in Madiun Regency. In this study, the number of respondents taken was 87 grade V students and 5 elementary school teachers. In this implementation stage, the researcher provides an opportunity for students to learn using the help of digital books. After the trial is carried out during the Indonesian lesson, then students and teachers fill in the response sheet that has been provided by choosing an assessment scale of 5=very good, 4=good, 3=adequate, 2=lacking, 1=very poor. The test was carried out to determine the feasibility and validity of digital books by calculating the results of the responses of students and teachers of Indonesian subjects. The following are the results of the assessment of the teacher's response:

Table 10 Assessment Results from Teachers

Num	Aspects assessed	Scores obtained
1	Display	84
2	Practicality	86
3	Material	80
4	Language	78,7
Sum		328,7
Average		82,2

The results of the calculation of the class teacher's response questionnaire obtained a percentage score of 82.2% with the category "very feasible". This shows that flipbook-based digital books are assisted by wordwalls in learning to write procedural texts.

Table 11 Assessment Results from Students

Num	Aspects assessed	Scores obtained
1	Display	79,8
2	Practicality	81
3	Material	82,2
4	Language	80,8
Sum		323,8
Average		80,9

Based on the table above, the student response questionnaire received an average score of 80.9% from 87 elementary school students in Madiun Regency. This is included in the feasible category. Based on the results of the calculation of student and teacher responses, it can be concluded that flipbook-based digital books for writing learning are said to be valid and suitable for use as an Indonesian learning tool. Digital books can be used as a means of delivering material for writing procedures for grade V elementary school and can be a forum that students can use to learn independently.

Discussion: The discussion is highlighted through the title and subtitles of the section when needed

The development of flipbook-based digital books was carried out by researchers based on the results of analysis of learning problems, conditions and module needs. The purpose of this development is to produce a product that is in accordance with the needs and can be used in the Indonesian language learning process and integrated with technology. The development of digital books is carried out by following the procedures in the Addie model. The first stage is the analysis stage. The analysis stage is the initial stage carried out by the researcher before making the product. According to (Rustandi & Rismayanti, 2021) the analysis stage is the initial stage that is carried out to analyze the problems that occur so that the causes and solutions to the problems that arise can be known. At this stage, it is known how the conditions and needs of teachers and students are related to the learning book writing procedural texts.

The second stage is the design stage. At this design stage, the researcher determines the product of a flipbook-based digital book with the help of a wordwall for learning to write procedural texts. The choice of digital books is because digital books can be downloaded or accessed anytime and anywhere, as long as there is an internet connection. In addition, it also reduces the use of paper and ink, making it more eco-friendly than printed books. Digital books can be equipped with audio, video, animations, or external links, which make the reading experience more engaging and interactive. This is in line with research (Kisno & Sianipar, 2019) which also states that more students choose to use digital books. (Uner & Roediger, 2018) also stated that digital books are more in demand. Digital books further increase students' interest in learning (Fitri & Nur Syafiqoh, 2020). This digital book is made based on flipbooks. The advantage of flipbook-based digital books is that the presentation of the material is not only in the form of textbooks, but also contains interactive videos and quizzes that will attract students' interest in learning procedural text material. In addition, another advantage is that it can be easily accessed on the mobile phones of each student, the material presented is more complete so that students get more knowledge about the procedural text. Then, another advantage in the media made is that this flipbook has an attractive appearance, with a scenery theme design, utilizing a variety of interesting icons, and bright colors that attract the attention of students to understand the procedural text material on the flipbook. With this media, another advantage is that students can be more active and more immersed in the procedural text material.

Strengthened by several previous studies, excellence in research (Juliani & Ibrahim, 2023) Flipbooks can convey material more concisely and clearly, can be accessed anywhere, and are easy to carry around. The study examined 4th grade elementary school students on story writing material, while this study examined grade 5 elementary school with procedural text material. This shows that there is a difference between subject and material. The display in the study presents folklore with a simple background, simple images, and a one-color writing font. While the current research features materials, examples, videos, procedural text quizzes and is complemented by cheerful children's songs. With a colorful scenery background, and some interesting images.

The advantages of the wordwall game media that are made are: 1.) Students can arrange words in a procedural text. 2.) Students can better understand the procedural text material from the structure to how to create the procedural text. 3.) Students can play an active role in learning procedural texts. 4.)

Increase students' curiosity. 5.) Train students to write procedural texts. Research (Kusumawati & Fadiana, 2024) The advantages of wordwall media are: In learning, students become more interested, happy, and foster curiosity in answering questions so that the value of learning outcomes increases. In addition, with wordwall educational games, students can answer directly the evaluation questions made by the teacher and can find out the scores or grades they get directly after doing the evaluation.

Next, the researcher compiles a design of the material that will be used as the content of the material in a flipbook-based digital book. The preparation of this material is matched with the curriculum implemented in class V. This book contains a cover, learning objectives, materials, sample procedural texts, and student exercises/evaluations. The next stage is the development stage. At this stage the prototype is arranged according to the design that has been made. After that, an assessment instrument is prepared that will be used as a reference in assessing a product that has been developed. The prototype that is ready is then validated by experts, namely material experts and technology experts. The assessment carried out by the validator is used by the researcher as a reference to improve/revise the digital book before it is implemented or applied to teachers and students of grade V of elementary school.

The results of the media validation obtained a percentage of 82.7%, indicating that the percentage of 81-100% is included in the category of "very feasible". Therefore, it can be concluded that digital books based on dflipbooks are suitable for use in the learning process. Meanwhile, the results of the material validation get a percentage of 80% that the percentage of 61-80% is included in the "feasible" category. Therefore, it can be concluded that flipbook-based digital books are suitable for use in the learning process.

The fourth stage is the implementation stage. Implementation or application of digital books in learning and writing. At the implementation stage, the researcher also provided student response questionnaire sheets and teacher response questionnaires to determine the feasibility of flipbook-based digital books. The fifth stage carried out by researchers in developing flipbook-based digital books is the evaluation stage. At this evaluation stage, the researcher analyzed the advantages and disadvantages of flipbook-based digital books that have been developed from the suggestions and comments of users, namely teachers and students. These comments are used by researchers as an evaluation in improving learning media so that it is better in the future. From some previous studies with the current one, there is another difference, namely: if previous studies were made only one medium. Flipbook research only makes flipbooks, wordwall research only makes wordwalls, but in current research it makes a combination of flipbooks and wordwalls.

The development of digital books based on flipbooks with the help of Wordwall in this study has gone through a systematic process based on the ADDIE development model. The validation results from media experts and material experts as well as responses from teachers and students show that the products developed are included in the "feasible" to "very feasible" categories. This finding confirms that the use of digital interactive technology such as flipbooks and Wordwall practice platforms can improve the quality of learning, especially in writing procedural text skills at the elementary school level. The success of this media is not only determined by the visual aspects and attractive design, but also because of the integration between learning materials, interactive practice media, and access communication that allows students to learn independently. This is in line with Mayer's Multimedia Learning theory, which states that the learning process becomes more effective when the material is presented through a combination of text, images, and other visual media simultaneously. However, the analysis of the results of this study is still descriptive and has not touched on a deeper effectiveness test. The absence of inferential statistical analysis such as the t-test or comparison of pretest and posttest

means that the effect of using digital books on improving learning outcomes cannot be explained quantitatively.

This study has several limitations. First, the implementation of the study was limited to the Madiun Regency area, so the results cannot be generalized widely. Second, the absence of a control group as a comparison causes conclusions about the influence of digital books to still be correlative, not causal. Third, the success of this learning media is measured more through the perceptions of respondents (teachers and students) than through objective data that reflects direct improvements in learning outcomes. Nevertheless, this study has important implications, both practically and theoretically. Practically, the flipbook-based digital books that have been developed have been proven to be an alternative learning media that supports teacher needs and increases student interest in learning. Theoretically, this study contributes to the development of technology-based learning theories, especially at the elementary school level. The results of this study strengthen the constructivist approach that emphasizes active learning through interaction with the media. In addition, this study also contributes to strengthening media literacy among students, especially in terms of utilizing interactive and contextual learning technology.

For further research development, it is recommended that an experimental design be carried out involving a control group so that the influence of digital books on learning outcomes can be measured more accurately. Further researchers also need to consider the use of inferential statistical analysis to determine the effectiveness of the media significantly. In addition, evaluation of students' affective and cognitive aspects longitudinally can also provide a more complete picture of the impact of this learning media in the long term.

Research Limitations

The development of flipbook-based digital books with the help of Wordwall showed decent to very decent results based on expert validation and teacher and student responses, and supported active and independent learning according to multimedia and constructivist learning theories. However, this study has several limitations, including the limited scope in Madiun Regency, the absence of a control group or statistical effectiveness test, subjective assessments through respondent perceptions, the short duration of the study, and the need for devices and internet connections that are not evenly distributed. Even so, this study provides a practical contribution to digital-based learning in elementary schools and a theoretical contribution to the development of interactive learning media. Further research is recommended using experimental designs with objective data and long-term evaluations to assess effectiveness more comprehensively.

4. CONCLUSION

The development of flipbook learning media and word wall games that have been created, designed with a bright and colorful scenery background and many animations of children's pictures. Which contains a variety of procedural text materials, in addition to this media is provided with a video link about sample procedural texts so that students better understand how the procedural text is formed, added with a wordwall game link to arrange words as a student exercise in composing procedural text words so that students are used to arranging words well to write procedural texts. This makes it easier for students to write procedural texts and speak procedural texts in front of the class correctly. It is added with children's songs so that children do not get bored when reading the procedural text material on the flipbook. The development of flipbook-based digital books that has been developed is limited to procedural text writing materials. The findings of this study are that

flipbook-based digital books with the help of wordwall can be used for learning to write procedural texts. Students and teachers as users of the book can receive the book for the learning process. Flipbook-based digital book products that have been developed by researchers can be a new innovation in the learning process, especially in delivering learning materials. Advice for researchers who research this research next, must pay attention to what problems occur in schools, what needs are needed to solve problems, think about what media is suitable, recognize what previous media is like, and think about how to develop these media into new innovations that are interesting and keep up with the times. The next research can focus on innovations in digital books, adding other links, can add procedural text educational games from various websites or applications.

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