

DEVELOPMENT OF POP UP BOOK MEDIA IN LEARNING IN PRIMARY SCHOOLS

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***Abstract:** Limited facilities and infrastructure in schools and teachers still do not use media creatively in conveying material to students during the learning process. To optimize science lessons, the Popup Book learning media was developed as a companion when teaching. The development of Pop Up Book learning media aims to increase the diversity of Thematic learning media as well as efforts to increase student attractiveness in Thematic lessons. In this development, researchers chose to use the ADDIE model. This model stands for Analyzed Design, Development, Implementation and Evaluation. This research instrument uses a questionnaire sheet consisting of a validation questionnaire for 3 experts and a practicality questionnaire for students. The results showed that the development of valid media for use in the learning process obtained an average of 91% valid category based on the material validator, 99% very valid category based on the media design validator, and 98% very valid category based on the language validator. The results of the study also show that the media is suitable for use based on the value obtained from the results of the practicality test of students with an average of 87% in the very good category.*

***Keywords:** Development, Learning Media, Pop Up Book*

Introduction

Education is a teaching that has been held in schools for formal educational institutions. Education can also be interpreted as all the influences that have been attempted by the school for children and teenagers which have been entrusted to the school so that children and teenagers have perfect abilities and have a full sense of awareness of social relationships and duties (Mudyahardjo, 2014: 6). Parents who have been entrusted to the school certainly have the hope that the child will be trained in learning, especially in matters of the child's knowledge, attitudes and skills.

However, learning is not only at school, but can also be found in the home environment, which allows children to increase their knowledge with the people around their house. This learning can create a process of changing human behavior as a result of individual relationships with their environment. According to (Dimiyati, 2015: 10) learning is a set of knowledge processes that can change the nature of the environment, through information management, and become new abilities. (Sani, 2019: 2) says that learning is defined as an effort to teach students.

In the learning process activities, of course, media is needed as a tool to explain material to students so that they better understand a lesson that has been explained by the teacher. When the learning process uses learning media in class, of course it can make students feel more interested and fun to take part in a lesson. Dewanti et al., (2018) said that learning media is a tool for conveying learning material to make it easier for students to gain knowledge, skills, and attitudes according to learning objectives. Mustofa et al., (2020: 4) learning media is something to convey messages through various channels, from a learning media it can stimulate thoughts, feelings and encourage students to create a learning process in order to add new information to students so that they can achieve learning goals. achieved well. So, the use of learning media is very helpful in achieving the desired learning objectives. Especially helping teachers explain material that is difficult to convey to students, learning media can help students understand.

(Himayaturhman, 2019) says that an educator is required to have ten abilities, namely: ability to master materials, ability to manage teaching and learning programs, ability to manage the classroom, ability to use media or learning resources, ability to master the basics of education , the ability to manage teaching and learning interactions, the ability to assess student achievement for learning purposes, the ability to recognize the function of guidance and counseling in schools, the ability to recognize and carry out school administration, as well as the ability to understand principles and the ability to interpret the results of educational research for teaching purposes . Therefore, here the role of the teacher in developing learning media is very important in order to involve students in participating in the learning process or being directly involved in discussing the material being taught by the teacher, so that students will be more active and understand the material explained by the teacher.

In the learning process, the lack of use of learning media in the classroom often becomes a problem, which is carried out by teachers during the teaching process in class, teachers still use an approach that is only teacher-centred, or only focuses on the teacher's role alone. In this case, researchers found problems related to teachers who were unable to develop learning media for various reasons. One of them is that teachers are still confused about creating media related to science subjects, because schools have limited facilities and infrastructure at school.

Due to the use of image media, students only listen to the teacher's explanation verbally, without being directly involved in learning using this media. So most students are lazy to note down explanations of the material that has been taught by the teacher, making excuses that the teacher is too quick in explaining the material so that students cannot note down important things related to the material that has been taught. Furthermore, it can be seen that during the learning process, many students still do not pay attention to the teacher when explaining, students are busy talking to their classmates and there are also students who are sleepy and daydreaming while studying.

The media currently used by teachers has not been able to make students understand the material better and has not been able to make students feel that learning is fun and attracts students' attention. For this reason, students really need media that can summarize lesson material so that it can be used as a companion to textbooks that will contain more concise material, so that students can understand it more, and of course the media is in sync with the pictures that will contain the material being taught. Therefore, in learning, it is very important for teachers to choose the right media to use during the learning process. If the choice of media is correct, it will make students active in learning, and increase enthusiasm for students, one of which is using popup book learning media. A popup book is a medium that has three-

dimensional elements that can move when the pages of the book are opened, and can make people who see it feel interested in its appearance, so that this popup book can increase students' understanding of the material that has been taught. Popup book media has a surprise from every page that is opened, pop up books also have beautiful colors, so with popup book media it can make students more interested, because every page that is opened there is a three-dimensional surprise (Puspita et al. al., 2022).

The researcher chose popup book media in this research because it is not difficult to use, and the school has never used popup book media in the learning process, especially to help students understand thematic subjects, which students previously considered difficult. Then the researcher took popup book media because it does not use a projector to use it, so that schools that do not have facilities such as projectors can still use learning media for students. Pop up books also have the advantage of providing a special experience for readers because pop up books can involve readers in the story like sliding, opening, and folding the popup book section. So, for the reader will have its own impression so that it will be easier to enter the material into students' memories when using this media. Popup book learning media has also been used by previous researchers. Previous researchers used a lot of popup book media to make learning more interesting.

Literature Review

Understanding Learning Media

Media comes from the Latin word "medius" which means "middle" which is the plural form of the word medium. Literally medium means intermediary or introduction or intermediary (Ramli AR, 2019). But there is another opinion according to Arsyad, (2013: 3) who argues that the media is an introduction or message from the sender to the recipient of the message. According to Tafonao, (2018) said that learning media is something that can be used to channel messages from senders to recipients, so that the presence of learning media can stimulate students' thoughts, feelings, attention, and interest in learning.

Education in primary schools is the first formal level of education that will determine the direction of the development of a student's potential. Therefore, elementary schools need to optimally develop student character education so that the hope is that at the next level, students already have good behavioral provisions. In the Big Indonesian Dictionary, decadence is defined as the deterioration or decline and morals according to Hurlock (Cahyo, 2017) is a procedure of habits and customs where behavior is controlled by moral concepts that adhere to rules that have become a habit for members of a culture and determine the behavior expected by all members of the group. (Melyani dan Fahrani, 2023.)

Education in psychosocial term (social psychology) is an effort to develop human resources through the interpersonal intelligence process that takes place in an organized community environment. Interpersonal intelligence is not only the students' cognitive, but the ability of how student ability in understanding and feeling the desires and interests of others. This interpersonal intelligence has three main aspects, those are: social sensitivity (as indicators are empathy and attitude), social insight (including self-awareness, social situations understanding and social ethics, and problems solving skills) and social communication (communication and listening effectively). But in fact, more and more social problems occur because of the reduced ability of families, teachers, and society to develop this intelligence. (Suci, 2019)

According to Mustofa et al., (2020: 4) says that learning media is anything that can convey messages through various channels, learning media can also make students stimulate students' thoughts, feelings, and desires so that they can encourage the creation of learning processes to

increase new information to students so that learning objectives can be created well.

According to (Aqid, 2013: 5) says that the media is everything that can be used to channel messages and stimulate the learning process in students at school. Based on the explanation above, it can be concluded that learning media is a tool for teachers in conveying material to students, so that students better understand the messages conveyed by the teacher, so that the learning process can run in a conducive manner, and stimulate students' thoughts, feelings and attention as well as the learning objectives set. want to achieve running well with the existence of this learning media.

Understanding Pop Up Books Media

Ardiansyah et al., (2019) stated that Pop up books are a creative field of art made from paper or what is often called paper engineering. A popup book is a book that has parts that can move or has three-dimensional elements and provides a more interesting story visualization, starting from the display of images that can move when the page is opened. Pop up books have been used as a learning tool since the 13th century. In the 13th century, books with mechanical elements were created as a means of adult learning. An English monk named Matthew Paris is believed to be the person who first thought of a movable book (which is now known as a popup book).

According to Bluemel et al., (2012: 1) explain that "a popup book is a book that offers the potential for movement and interaction through the use of paper mechanisms such as folds, scrolls, slides, tabs, or wheels" which can be interpreted as that the popup book media is a book that displays the potential for movement and interaction through the use of paper by means of folds, rolls, shapes, wheels or rotation. According to Khadijah et al., (2021) popup book media is learning that contains teaching materials in the form of three-dimensional images or symbols. According to Ningtiyas et al., (2019) a popup book is a book that when opened can present three-dimensional or emergent elements. According to Solichah et al., (2018) explained that pop up books are three-dimensional media that can provide interesting effects, because every page that is opened will reveal an image that appears and the material contained in the popup book can be adjusted to the material to be delivered.

This pop book media really helps teachers in the teaching process, because students will become more interested in learning, and can increase students' curiosity, make students more active in class, and not make students bored in learning. According to Setiabudi et al., (2016) explain that pop up books are media that have 3 dimensional elements and have moving parts (Safri et al., 2017) pop up books can create attraction for students, because they are able to present visualizations with the shapes are created by folding, moving and appearing so that they can surprise and amaze students when they open each page.

From the explanation above, it can be concluded that the inventor of the first popup book was an English monk named Matthew Paris. Where popup book media is media that has 3-dimensional elements, which can stimulate students' imagination more, and can increase students' understanding of lessons, and make it easier for students during the learning process.

Steps for Making Pop Up Book Media

Making a popup book is certainly not easy, there is a lot that has to be prepared starting from the plan or design, then choosing suitable colors, and choosing images that match the content of the material that will be taught by students. The steps for making it according to (Khadijah et al., (2021) are as follows:

1. Decide in advance what theme will be made, in this stage it is adjusted to the interests of the maker himself. Because, this popup book has an interesting visualization with movable three-dimensional elements.
2. Then the next stage is the design process, which at this stage has several design processes to make a popup book. The first stage was carried out by creating a design using a storyboard, then continued with making a prototype for making material, after that, the next stage was the editing process using the Adobe Photoshop software application as a media editor. The third stage is the assembly process, at this stage cutting and folding is carried out and the popup pops out.
3. The final stage is the creation results, after going through the stages of the design creation process, then the computerized editing process, after that start with folding and gluing, the popup book is ready to be used as a very interesting learning medium.

Method

Data analysis is said by (Sugiyono, 2017: 244) that data analysis is the process of systematically searching and compiling data obtained from interviews, field notes and documentation, by organizing data into categories, breaking it down into units, carrying out synthesis. , organize into patterns, choose what is important and what will be studied, and make conclusions so that they are easily understood by yourself and others.

The type of research used for this research is using the R&D (Research and Development) method, which can be interpreted as the research method used to produce certain products, and test the effectiveness of these products. According to (Sugiyono, 2017: 297), Research and Development is a research method used to produce certain products and test the effectiveness of these products. According to (Sugiyono, 2017: 297), Research and Development is a research method used to produce certain products and test the effectiveness of these products. Meanwhile, another opinion expressed by (Sukmadinata, 2012) is that development research is a process or steps to develop new products or improve existing products, which can then be accounted for. Based on the explanation above, it can be concluded that the R&D method is a research method used to produce a product, and can perfect a product in accordance with the references and criteria of the product to be made, thereby producing a new product. In this case there are many stages and product validation or testing. Therefore, do research first so you can collect the data that will be needed, then develop the system and carry out testing and evaluation of the system you want to create.

The research model in this research which will be a support in developing products is using the ADDIE model, which is said by (Tegeh, et al, 2014: 41) to be a systematic learning design model. This ADDIE model uses a pre-programmed structure with systematic activity sequences in an effort to solve learning problems related to learning resources that suit learning needs and characteristics. This ADDIE model has several steps, namely: (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation. In the ADDIE model it can be used as a form of development that produces products in the form of models, learning methods, learning media, teaching materials, and can also be used as a learning strategy. The reason researchers chose this development model was because the system's work procedures were systematic in every step. This can make the step refer to the previous step which has been corrected, after which an effective product is obtained.

Result and Discussion

Based on the results of the research, it is stated in this section that it presents a discussion of

the results of research on learning media that have been developed. The media that has been developed is in the form of popup book learning media where this media is arranged based on the needs of students in elementary schools, as follows:

1. At the development stage which includes validation from three expert lecturers, namely: material experts, media experts, and linguists. In this case it is known that the validation results from material experts are 91% (very good), the validation results of media experts are 99% (very good) and the validation results of linguists are 98% (very good). So, it can be concluded from these results that the popup book learning media that has been developed is feasible to be used as a learning medium in schools.
2. In addition, at the implementation stage it can also be seen that the student practicality test results were 87% (very good). The test results with students as a whole showed a very good response to use.

The process of learning and teaching interaction does not have to be from direct experience, but starting with the type of experience that best suits the needs and abilities of the group of students being faced by considering the learning situation. Direct experience will provide information and ideas contained in that experience, therefore it involves the senses of sight, hearing, feeling, smell and touch. Visual stimuli lead to better learning outcomes for tasks such as remembering, recognizing, and reassociating facts and concepts. The description of the explanation above is in line with the description that has been made by Edgar Dale. Dale estimates that acquisition of learning outcomes through the senses of about 30%. Based on this theory, it can be concluded that popup book (visual) learning media can help the learning process of students because the popup book display contains material and pictures about the material being studied.

Before Revision



After Revision





Conclusion

Based on the results of research on the development of popup book learning media, it can be concluded that this development produces a product in the form of popup book learning media. The stages taken to produce popup book learning media are as follows: in the first stage, namely the analysis stage, which is the stage to find out the needs and problems that exist in the school related to the learning process. This stage is carried out by carrying out direct observations at the target elementary school. After the observation results are obtained, they are summarized and the deficiencies in the learning process are analyzed.

The second stage, namely the planning stage (design), is the planning stage and process of creating product designs or learning media. At this stage the product or media is designed or planned by adjusting the needs data that was obtained during the observation. At this stage the media or product is designed with the help of the Microsoft Word application to make it easier to create the product.

The third stage, namely development, is the stage of creating, testing and evaluating the product or media that has been developed. At this stage the product will begin to be assessed by 3 (three) experts, namely lecturers who are competent in their fields.

The fourth stage is the implementation stage by carrying out students' practicality tests to get responses regarding the product being developed. The last stage is the evaluation stage. At this stage product revisions are carried out, product revisions are carried out for improvement in actual conditions. Based on the validation of material experts, media experts and finally language experts, it can be seen that the material expert validation results are 91% (very good), the media expert validation results are 99% (very good), and the language expert validation results are 98% (very good). In addition, it can also be seen that the results of the student practicality test were 89.8% (very good). The results of trials with students as a whole showed a good response to the use of popup book learning media in thematic learning. With the average valid instrument results, the developed media can be said to be suitable for use in the learning process.

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