

DEVELOPMENT OF POP-UP BOOK MEDIA IN THEMATIC LEARNING IN GRADE III SDN 101921 BERINGIN

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ABSTRACT

This study aims to: (1) produce Pop-Up Book learning media in the Thematic learning of food production technology development material in grade III SD Negeri 101921 Beringin, (2) find out the feasibility and practicality of Pop-Up Book learning media in the Thematic learning of food production technology development material in grade III SD Negeri 101921 Beringin which is valid from the results of feasibility validation by material experts, media experts, learning experts, and student responses. This research is a type of Research and Development (R&D) research with a 4D model developed by Thiagarajan (1974) which includes four steps, namely: the stages of define, design, development, and disseminate. The instruments used to collect data are interviews, documentation, and questionnaires. Based on the assessment of the validation results by material experts, 96% scores, media experts get 97.3% and learning experts get 93.3%, resulting in Pop-Up Book products that are very suitable for use for third grade elementary school students. Therefore, from the data from the validation results of the three validators, it can be concluded that the Pop-Up Book media in the Thematic learning of the Food Production Technology Development material was declared valid and there was no revision by experts, so it was declared very suitable to be used as a teaching material in learning.

Keywords: *Learning Media, Pop-Up Book, Thematic, Development of Food Production Technology.*

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Introduction

Learning is a fundamental process in the implementation of education at every level, which plays a major role in determining whether or not the achievement of educational goals is successful or not. Teachers, as educators, are required to develop learning media that are in accordance with the demands of the curriculum so that the teaching and learning process becomes more effective. Learning media plays an important role in supporting learning activities, especially in creating two-way communication that actively involves students.

At the elementary school level, especially for students who are in the concrete operational stage, interesting and interactive learning media is needed to support their intellectual development. One of the effective media in this regard is the Pop-Up Book, a book with three-dimensional elements that can grab students' attention and stimulate their interest in the material being taught.

However, based on observations at SDN 101921 Beringin, it is known that teachers have not used interesting learning media in Thematic learning, especially in Theme 7 Technology Development Subtheme 1 Food Production Technology Development. Learning in the classroom tends to be centered on lecture methods and the use of textbooks only, which makes students less actively involved and have difficulty understanding the material. The results of interviews with grade III homeroom teachers showed that the Pop-Up Book learning media had never been used before, and the media development carried out by teachers was not optimal due to limited time and creativity. Previous research shows that the use of Pop-Up Books can increase students' understanding of the material, increase students' enthusiasm for learning, and encourage their creativity.

Several relevant studies from Prasetyo (2019) said that there is an influence of student learning outcomes that are likely to increase through the development of learning media in line with research by Mujiyanti Hidayat et al. (2020) developing Pop-Up Book Peripanca media for PPKn learning in elementary school. Using R&D methods using the Borg and Gall model, this study found that the media developed was very valid and feasible to use. Second, research by Muhammad Sholeh (2021) developed a Pop-Up Book based on local culture for fourth grade elementary school students. This research also uses the R&D method, but with the ADDIE model. The results show an excellent level of validity, making the media suitable for use in learning. Third, research by Diyah Rahmawati (2019) developed a Pop-Up Book for material on changing the form of objects for deaf students. This study uses an R&D method with a 4D model and shows that the media developed is feasible to use with good validation results.

Based on the description above, this study aims to develop Pop-Up Book learning media in Thematic learning in grade III of SDN 101921 Beringin, with the hope that this media can be a solution to increase learning effectiveness and student engagement

Literature Review

Thematic Learning

Some experts who provide understanding of thematic learning, including T. Raka Joni, who interprets thematic learning as a learning system that allows students, both individually and in active groups, to seek, explore and discover scientific concepts and principles in a holistic, meaningful and authentic way. Thematic learning will occur if authentic events or theme exploration become the controller in learning activities. By participating in the exploration of the theme, students will simultaneously learn about the process and content of several subjects in unison Trianto. (2009).

Several subjects are sought for overlapping concepts, attitudes, and skills to be combined into one. The first teacher's activity selects concepts, values and skills that are closely related to each other from various subjects. The advantage of this learning model for students is that it is easier to relate learning materials from various subjects. This model was developed as integrated thematic learning in the 2013 Curriculum.

The scope of thematic learning includes all core subjects at Elementary School/Madrasah Ibtidaiyah, which includes; Religious Education, Indonesian Language, Mathematics, Science, Social Sciences, Civic Education, Cultural Arts and Skills, and Physical Education, Sports, and Health, Rusman. (2012)

Technological Material

Food production technology is the use of science and technology to process food products. With food technology, it can make food last for a long time so that it does not rot easily and food technology also produces new food for Shah, Dahrul. (2012).

The benefits of food technology are very significant, including making food less perishable, free from diseases caused by food that has been spoiled, more practical to eat, and able to produce new types of food. Food technology can extend the shelf life of food in several ways. First, packaging, which is a coordinated system for preparing goods to be ready for transportation, distribution, storage, sale, and use. Second, storage, which involves procedures for arranging, storing, and maintaining dry and wet foodstuffs, as well as recording and reporting storage status. Once eligible foodstuffs are received, they should be taken to a storage room, warehouse, or cooling room immediately. Third, preservation, which is a method to make food have a long shelf life and maintain the physical and chemical properties of

food. In the preservation process, it is important to consider the type of food being preserved, the state of the food ingredients, the way of preservation, and the attractiveness of the resulting product. Examples of food products produced from food technology include soybeans which are processed into tofu, tempeh, and soy sauce; cow's milk processed into milk powder, butter, and cheese; and beef processed into sausages and meatballs. Therefore, tofu, tempeh, soy sauce, milk powder, butter, cheese, sausages, and meatballs are examples of foods produced by food technology.

Learning Media

According to Munadi, defining learning media as "everything that can convey and channel messages from sources in a planned manner so as to create a conducive learning environment where the recipients can carry out the learning process efficiently and effectively in Nurdiansyah, (2019)

According to Gurning and Lubis, the word "medium" comes from Latin and is the plural form of the word "medium" which literally means intermediary or introduction. Thus, the media is a vehicle for distributing learning information or distributing messages. The media is also said to be all forms and channels used by people to channel Gurning's messages/information, (2017)

So it can be concluded that media is everything that can be used to channel messages from the sender so that it can stimulate the thoughts, feelings, attention, and interest and attention of students in such a way that the teaching and learning process occurs.

Based on the opinion above, the researcher defines that learning media is anything that can be in the form of tools or objects used to convey learning information to students in the learning process in order to stimulate students' thoughts, interests and attention.

The use of the right media in the learning process will greatly help the effectiveness of the delivery of learning materials so that learning objectives can be achieved with maximum results. Prasetyo (2020) By using learning media, students will be easier to understand and learning will not be boring and the learning process can take place effectively.

Media Pop Up Book

Pop-Up comes from English which means "pop out" while a book Pop-Up can be interpreted as a book that contains notes or three-dimensional picture paper that contains interactive elements when opened as if an object appeared from inside the book.

"Pop-Up Book is a book that can show a three-dimensional shape when the page is opened and has a movement that can be created using paper as a material for folds, rolls, shapes, or wheels."

Based on some of the opinions above, researchers can conclude that Pop-Up Book media is a learning media that has 3-dimensional elements in the form of books or printed media in which there are pictures or folds of paper that when the page is opened will appear or move, Pop-Up Book media is considered to have its own attraction for students because it is able to present visualizations with forms made so as to provide surprise and admiration for students when opening each page. Soepriyanto, Y. (2018).

Methods

This research uses the Research and Development (R&D) method to develop Pop-Up Book media as an innovation in thematic learning, especially in the material of Technology Development in grade III of elementary school. The development model used is a 4D model consisting of four main stages: Define, Design, Develop, and Disseminate. This research aims to develop new products that are attractive and in accordance with the needs of students and test the feasibility of the product through validation by material experts, media experts, and learning experts, followed by product trials on students.

The research procedure begins with the analysis of product needs and design, followed by the development and validation of Pop-Up Book media, as well as the dissemination and testing of the product to measure its effectiveness. The instruments used included observations, interviews, and questionnaires, with 28 test subjects of grade III elementary school students. The data collected through the instrument is used to assess the feasibility and practicality of the Pop-Up Book media developed in supporting thematic learning in elementary schools.

Discussion

Based on the presentation of the problem formulation, the points that are the objectives of the development of Pop-Up Book learning media have been obtained, namely: The development of Pop-Up Book learning media uses the Research & Development (R&D) method. Research & Development (R&D) consists of several stages, namely: Define, Design, Development, and Dissmination.

The first stage is the definition stage. In definition, there are 2 stages. Needs Analysis is in the form of an analysis of field conditions and the collection of material references that will be used as a subject in media development. The results of information about the learning process, student characteristics and the development of learning media obtained from the observation activities carried out.

As a result of the analysis of the curriculum, 1 Basic Competency (KD) was selected as the target of development. The main material of the basic competencies is about the material on the Development of Food Production Technology in Thematic learning.

The second stage is Design. The design stage is the stage of designing Pop-Up Book learning media which includes the initial design and designing the Pop-Up Book forms that have been designed using Ms. Word. After the media was completed, validation was carried out by lecturers who were media experts and lecturers who were material experts, and learning experts to obtain input on the development accompanied by an assessment instrument for the feasibility of Pop-Up Book learning media.

The next stage is distribution. At this stage, the Pop-Up Book learning media that has been completed is then distributed to the third-grade students of SDN 101921 Beringin, which is further divided into 2 stages, namely limited trials and field trials. This dissemination aims to find out the students' response to the developed Pop-Up Book learning media. From this stage, the practicality of the media developed will be known. Students were then asked to fill out a questionnaire of respondents to provide responses to the Pop-Up Book learning media.

The feasibility of the learning media was obtained from the results of the feasibility test data by material experts, media experts, and learning experts. The acquisition of feasibility data is based on the results of the assessment of material experts with a total score of 96, while the expected score is 100, then the feasibility percentage is calculated with the Feasibility Percentage formula in CHAPTER III. So the feasibility of the material on the learning media is 96%, which in the table is included in the Very Feasible category to be tested for students.

The result of the assessment of media experts with a total score of 97.3, while the expected score is 100, then the eligibility percentage is calculated with the Eligibility Percentage formula in CHAPTER III. So the feasibility of the material on the learning media is 97.3%, which in the table is included in the Very Feasible category to be tested for students.

The result of the assessment of learning experts with a total score of 93.3, while the expected score is 100, then the feasibility percentage is calculated with the Feasibility Percentage formula in CHAPTER III. So the feasibility of the material on the learning media is 93.3%, which in the table is included in the category of Very Feasible to be tested on students.

Results of Respondent Assessment Data Based on the results of a limited trial assessment from 5 third grade students of SDN 101921 Beringin as respondents, the results were obtained with a total score of 254, while the expected score was 275, so the feasibility percentage was calculated with the Feasibility Percentage formula in CHAPTER III. So the feasibility results of learning media according to respondents are 92.36% which in the table includes the Very Feasible category, and the Results of Respondent Assessment Data Based on the results of the field trial assessment from 28 third grade students of SDN 101921 Beringin as respondents obtained results with a total score of 1,435, while the expected score is 1,540, then the feasibility percentage is calculated with the Feasibility Percentage

formula in CHAPTER III. So the feasibility of learning media according to respondents is 93.2%, which in the table is included in the Very Feasible category

The difference with the research conducted by the author with the previous research conducted by Muhammad Sholeh, in the journal *Gentala Pendidikan Elementary* entitled "Development of Pop-Up Book Media Based on Local Culture Cultural Diversity Bangsaku Grade IV Elementary School Students obtained validation results with the results of the material expert test reaching a validity level of 97%, while the research conducted by the author obtained validation results with a material expert test of 96%, For the results of the media expert test, the previous researcher obtained a validity level of 91%, while the research conducted by the author obtained validation results with the media expert test of 97.3%.

Overall, the analysis of these results shows that the Pop-Up Book media developed in this study is very feasible to be used as a learning aid in elementary schools. This media not only meets the validity criteria of various experts, but also gets a positive response from students, which is the main indicator of the success of learning media

Conclusion

Based on the results of the research and development that has been carried out, it can be concluded that the Pop-Up Book media on the Food Production Technology Development material developed by the researcher is declared very suitable to be used as a teaching material in the learning process. This is based on the feasibility of the media assessed by material experts, media experts, and learning experts, as well as the practicality of the media assessed through student responses. The data from the validation results shows that this media meets the necessary criteria to be used effectively in learning.

The use of Pop-Up Book learning media for the Subtheme of Food Production Technology Development has higher implications compared to learning using package books that have been used by teachers. Thus, this learning media makes a decent and practical contribution to the implementation of the learning process, making it easier for teachers to organize learning that has an impact on its effectiveness. The results of the trial also show that the developed teaching materials can be considered for teachers in delivering Thematic subject matter in accordance with the applicable curriculum. Therefore, the suggestion of using the product for students is so that they can use Pop-Up Book media interactively, so that they are more active and enthusiastic in participating in learning. For teachers, it is recommended to use this media as a tool to convey material about the development of food production technology. For readers, it is recommended that they can further develop the Pop-Up Book media in order to produce more innovative products. In addition, the suggestion for the dissemination of this product is so that the Pop-Up Book media can be distributed to the third grade of other study groups, or even to all elementary schools in Beringin district, while still paying attention to the characteristics of students, so that the dissemination of this product produces maximum results.

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