DEVELOPMENT OF E-FLIPBOOK BASED LEARNING MEDIA ON SOLAR SYSTEM LESSONS FOR GRADE VI ELEMENTARY SCHOOL STUDENTS

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ABSTRACT

This research uses development research using the ADDIE development model. The instruments used are questionnaires and documentation. Questionnaires consist of media experts, material experts, and individual trials. The data analysis technique uses quantitative descriptive. The results of the feasibility level research for the material scored 93%, the media was 94% and the individual trial was 91%. So it can be concluded that e-flipbook-based learning media on learning the solar system is very feasible to use in learning. Which means that e-flipbook-based learning media on solar system learning is very interesting or very feasible to use as teaching material during the learning process.

Keywords: E-Flipbook, Learning Media, Solar System

ABSTRAK

Penelitian ini menggunakan penelitian pengembangan dengan menggunakan model pengembangan ADDIE. Instrument yang digunakan angket dan dokumentasi. Angket terdiri dari ahli media, ahli materi, dan uji coba perorangan. Teknik analisis data menggunakan deskriptif kuantitatif. Hasil penelitian tingkat kelayakan untuk materi mendapatkan skor sebesar 93%, media sebesar 94% dan uji coba perorangan 91%. Sehingga dapat disimpulkan bahwa media pembelajaran berbasis e-flipbook pada pembelajaran sistem tata surya sangat layak digunakan pada pembelajaran. Yang artinya media pembelajaran berbasis e-flipbook pada pembelajaran sistem tata surya sangat menarik atau sangat layak digunakan sebagai bahan ajar saat proses pembelajaran.

Kata kunci: E-Flipbook, Media Pembelajaran, Sistem Tata Surya

A. Introduction

The development of education is very significant along with the development of science and technology. Education is one form of manifestation of human culture that is dynamic and developmental. Improving the quality of education, the learning process at school is the main highlight (Mustaqim & Kurniawan, 2022). The development of technology is an asset for teaching staff to be able to develop knowledge so as to improve the quality of education (T. M. Sari et al., n.d.).

The development of science and technology in this era is also one

of the solutions to the emergence of various learning problems in the world of education. According to (Dewi & Handayani, 2021) technology in this era has many impacts, one of which can foster innovation in various fields oriented towards technology that can facilitate a job such as current learning (Singgih, 2024). Learning is essentially the interaction of students with educators and learning resources. Achieving educational goals and keeping pace with developments in the world of education, educators are required to develop learning with innovative and creative learning methods by including the development of learning technology in the learning process in the classroom, in order to improve the quality of education. One aspect that must be considered to achieve learning objectives is the use of appropriate learning media (Safitri, 2024).

Learning media is an important component in learning, in addition to being a source of reference for material delivered from educators, learning media is also an inseparable part of the teaching and learning process in order to achieve educational goals. According to (Suryani, 2016) in the learning process the existence of learning media has an important meaning because the media in a lesson can help clarify material that is still vague and poorly understood by students (Darul & Bandar, n.d.). So far, there have been very many learning media in the form of print and non-print, but there are not many learning media in the form of multimedia learning which is more complex in terms of content and usefulness and in accordance with the developing curriculum on the principle of utilizing IT (Mauliddiyah, 2021).

The Flipbook application is one of the applications that supports as learning media that will assist in the learning process because the application is not only in the form of writing but there are also motion animations, videos, photos and audio (Maya et al., 2022). So that the flipbook application can make an interesting interactive learning media so that learning becomes not monotonous. So e-modules using the Flipbook application can be accessed offline and do not have to spend a lot of money because they are in the form of softfiles (Silfia, 2020).

Science subjects, especially Solar System material, the media used are print-based media such as

science print books and modules. Educators have never developed electronic learning media, more precisely have not utilized today's technological advances (Nurfadillah et al., 2021). The purpose of this research is to increase students' understanding and interest in reading and it is necessary to make changes in the learning process such as developing learning media using the Flipbook application. In the application there are features that are so interesting, so that when learning takes place, students do not feel bored and bored (W. N. Sari & Ahmad, 2021).

Based on the description above and the results of observations, it is necessary to conduct research entitled "Development of Flipbook-based Learning Media on Solar System Lessons for Grade V Students".

B. Research Methods

This study uses a type of Research and Development (R&D) development research using the ADDIE development model which consists of 5 stages, namely the analysis, design, development, implementation, and evaluation stages (Waruwu, 2024). The model used is to produce a product and test the effectiveness of the product so that it can function in general in elementary schools. This research focuses on developing flipbook learning media on solar system material (Hardani et al., 2020).

This research uses 5 stages. First, the analysis stage where at this stage the researcher analyzes what learning difficulties are experienced by students and what is the right solution. In addition, researchers also analyzed the curriculum used and analyzed the material. Second, the design stage at this stage the researcher has found the right solution and designed the flipbook media that will be given to suit his needs. Third, the development stage at this stage the researcher provides updates in the media. In addition, at this stage media expert and material expert validation is also carried out. Fourth, the implementation stage at this stage the media can be used in elementary schools and implemented to grade IV students. Fifth, the evaluation stage at this stage the researcher receives all input so that the flipbook media made is better in the future.

The data processing technique uses primary data on questionnaire sheets which include media validation questionnaires, material validation, and student responses by calculating the score on each aspect of the indicator and then analyzing and drawing conclusions related to the feasibility of flipbook learning media to be used on grade V solar system material.

C. Research Results And Discussion

The development of learning media flipbooks of solar system material for grade VI elementary schools was carried out through observation, filling out questionnaires, documentation, and interviews with grade V educators and students in elementary schools. Before researchers conducted teaching practices with the media that had been developed, researchers had conducted previous studies related to flipbook media. The first stage of making flipbook media, namely making a storyboard or initial design to be made. Second, processing appropriate material and suitable text so that students can understand more easily and not get bored because there is too much text. Third, collecting animations that match the content of the material so that students can be helped by their imagination with these images when reading the text. Fourth, combining the animated images made

and editing one by one in Canva so as to produce beautiful work. Fifth, inserting each page that has been made in canva through a website link on google so that it can be used as a complete flipbook.

After the flipbook media has been made, the next step is to validate 2 experts, namely media expert validation and material expert validation. Media expert validation plays a role in providing an assessment of the flipbook media that has been made. While the material expert has a role to assess the material in the flipbook whether it is in accordance with the grade level or not.

Table 1. Presentation of Filpbook Media Product Trial Results

No.	Test Subject	Results	Qualification	Ket
1.	Media Expert	94.00	Very good	Very suitable for use without revision
2.	Material Expert	93,00	Very good	Very suitable for use without revision
3.	Individual trial	91,00	Very good	Very suitable for use without revision

Based on the table above, it is obtained that flipbook media is developed and assessed by media experts, material experts, and individual trials with an overall value that has very good qualifications and

is suitable for use without having to revise. At the media expert test stage there are several comments that researchers will later develop even better. The final results of this study are flipbook learning media as follows:

This research produces flipbook learning media products that have been tested for validity. In addition, this media is also feasible to be practiced with students. This flipbook media is said to be suitable for use in elementary schools because first, learning with media can increase student motivation and enthusiasm for learning, this flipbook media is also one of the uses of media that has used technology so that this media is not monotonous only writing, but also many animated images are available.

The design and selection of colors in this media are also interesting and do not interfere with

the existing material so that students can still enjoy learning smoothly. The selection of images in this flipbook media is also in accordance with the content of the text so that it can fulfill students' imagination of the existing material.

Second, this flipbook media is suitable for practice in elementary schools because it can make it easier for students to understand the material to be achieved. This flipbook media can also stimulate student skills. The right media selection can improve memory for students. Based on the results of the validity and trials that have been carried out by researchers, this flipbook media can improve

student skills, especially on solar

system material for science learning.

D. Conclusion

Based on the results of data analysis and discussion, it can be concluded that the research on the development of learning media flipbooks of solar system material for grade VI elementary schools uses the development model (R&D) with the ADDI method 5 stages which include: analysis, design, development, implementation, and evaluation. This

flipbook media has been tested 2 validity which includes media expert validity tests and material expert validity tests with very good qualifications. Thus it can be concluded that the development of e-flipbook-based learning media on solar system lessons for grade vi elementary school students is valid for use in learning activities.

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