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DEVELOPMENT OF CANVA-BASED INTERACTIVE PPT LEARNING MEDIA ON THE MATERIAL OF SKELETON, JOINTS AND MUSCLES TO LINK INTEREST AND MOTIVATION ELEMENTARY STUDENTS

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Abstract: This study aims to design learning media with an interactive PPT base through Canva in IPAS subjects by focusing on material related to the skeleton, joints and muscles. This research utilizes the research & development (R&D) method with the application of the ADDIE model. The subjects of this study included students of grade VI elementary school. The research data were collected using three main methods, namely observation, questionnaires and tests and then analyzed descriptively in quantitative and qualitative approaches. This study provides results that the learning media developed has high validity on the average score of validation with a large 89% given by media experts and teachers. The application of this learning media in the classroom succeeded in increasing student learning motivation from 67% to 85%. In addition, the average student score on the test also increased, from 68 on the pretest to 85 on the posttest, indicating an increase of 25%. The developed learning media is expected to be an innovative solution for teachers in increasing students' interest, motivation, and understanding.

Keywords: Interactive PPT, Canva, IPAS, Skeleton, Learning Motivation

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INTRODUCTION

Education is the main pillar in the development of a country. In the era of the industrial revolution 4.0, education is expected to continue to adapt to the rapid development of technology (Fricticarani et al., 2023). This adaptation is not only limited to administrative aspects, but also includes learning methods and media used by educators. Learning media is an important part of the educational process because it plays a role in conveying information effectively and is able to increase students' knowledge of the material being taught. One of the learning media that is now increasingly in demand is technology-based interactive media, which is proven to be able to attract interest and increase student motivation. In this case, the utilization of technology, such as graphic design applications, allows teachers to present material in a more dynamic and interesting way.

In IPAS learning, teachers often face challenges in teaching abstract material to make it easier for students to understand. Materials such as the human skeleton, joints and muscles, for example, require detailed explanations and interesting visualizations to be well understood (Zuhaida & Yustiana, n.d.). The material is often considered difficult and boring by students, so an innovative approach is needed to increase their interest in learning (Aldwinarta et al., 2024). Unfortunately, existing learning media is sometimes not enough to meet these needs, so better learning media innovation is needed (Widianto, 2021).

Canva as a platform that can be used to create interactive learning media (Lubis et al., 2023). As a graphic design application, Canva offers a variety of features, from presentation creation to infographics, with additional interactive elements such as links, videos, and animations (Sirajuddin & Wahditiya, 2024). This platform is very helpful in creating interesting and interactive PowerPoint (PPT) presentations, which can increase student engagement in the learning process. Based on research (Fadhila et al., 2024), the use of Canva in the learning process to increase active student participation up to 85% and provide a more understandable and enjoyable learning experience.

Motivation and interest in learning are two factors that are interrelated and greatly influence the success of learning. Dunn & Zimmer (2020) states that there are 2 types of learning motivation, namely intrinsic and extrinsic motivation. Intrinsic motivation arises from within students, for example curiosity, while extrinsic motivation is influenced by external factors such as grades or awards. Canva-based learning media can trigger students' intrinsic motivation by presenting interesting and relevant learning experiences, while extrinsic motivation can increase through presenting material that is easy to understand and ultimately able to help students achieve better learning outcomes.

This research was conducted with the aim to develop interactive learning media based on powerpoint (PPT) by modifying it using Canva platform. In addition, this research also focuses on evaluating the effectiveness of the media in increasing students' interest and motivation to learn. The approach used in this research is the Research and Development (R&D) method, adopting the ADDIE model. This model includes five main stages, namely analysis, design, development, implementation, and evaluation, which provide systematic guidelines for designing and measuring the effectiveness of learning media based on student needs.

This research is expected to make a significant contribution in creating innovative learning media, as well as offering practical guidance for teachers to utilize technology in the learning process. The findings in this study are in line with previous research showing that the use of technology in learning can improve student learning outcomes. For example, research conducted by Azizatullatifah et al. (2024) showed that the application of Canva in thematic learning can improve student understanding by up to 90%. Therefore, the development of Canva-based media in PPT format is expected to be an effective solution to overcome various challenges in IPAS learning, especially in material related to the skeleton, joints and muscles.

Along with the increasing need for technology-based learning, this research is also expected to inspire educators to continue to innovate in creating meaningful learning experiences. On the other hand, this media development supports the government's efforts in improving the quality of basic education in Indonesia. As part of digital transformation, the use of Canva in learning is a strategic step to answer the challenges of the modern era while shaping a creative, innovative and future-ready young generation. Technology is not only a tool to improve the learning process, but also a means to open up new opportunities for students in developing 21st century skills, such as critical, creative, and collaborative thinking.

METHOD

This study uses a Research and Development (R&D) approach to develop interactive learning media in the form of Canva-based PowerPoint (PPT). This method is considered relevant because it can produce learning products that are valid, practical, and easy to implement by teachers and students. The main purpose of this research is to utilize modern technology to support the learning process while increasing student participation in understanding the material being taught (Sugiyono, 2013). The ADDIE model (Analysis, Design, Development, Implementation, Evaluation) was used in this development, as it is

well-known as an effective framework in creating quality learning media. This model provides systematic guidelines for designing, developing, and evaluating media in a structured manner, in accordance with the opinion of (Branch, 2010) which states that ADDIE provides a clear structure for each stage of development.

In the first stage, an analysis was conducted to identify students' learning needs (Kristanti et al., 2024). This step involved interviews with grade VI teachers and filling out questionnaires by students to get an overview of learning problems, especially on the material of the skeleton, joints and muscles. This analysis aims to determine the criteria for learning media that are in accordance with the needs of students and the applicable curriculum. The results of this stage become the basis for designing optimal learning media to achieve learning objectives.

The next stage is design, where Canva-based learning media is designed in an interactive PPT format. The design process includes storyboarding to illustrate a systematic presentation flow and ensure the material can be easily understood by students (Azizatullatifah et al., 2024). The selection of visual and interactive elements, such as images, animations, and graphics, was done to effectively support student understanding. This design also ensures that the media developed is in accordance with curriculum standards and can adapt to the diverse learning needs of students.

In the development stage, the designed media is equipped with interactive elements using Canva. Elements such as animations, hyperlinks and visualizations are added to make learning more interesting and interactive (Azizatullatifah et al., 2024) . The finished media was then validated by media experts and teachers to ensure its quality and feasibility. The validation includes an assessment of the visual design aspects, interactivity, compliance with the curriculum, and relevance to student needs.

The implementation stage was conducted by testing the learning media on grade VI students in one of the elementary schools. This trial took place in two cycles to evaluate how effective the media is in improving students' understanding and motivation. Feedback from students and teachers is very important in this stage to improve the learning media to better suit user needs.

The last stage is evaluation. Formative evaluation is conducted at each stage of development to monitor the quality of the media, while summative evaluation is conducted after implementation to measure the success of the media in increasing student motivation and understanding (Kristanti et al., 2024). The purpose of evaluation is to ensure that the

developed media is not only able to improve students' understanding but also attract their attention during the learning process.

Data collection in this study was conducted through three main methods: observation, questionnaire, and test. Observation was used to monitor student activities during the learning process with interactive media, while questionnaires were used to measure changes in student motivation before and after using the media. The test was used to assess the extent to which students understood the material that had been delivered. The data collected were analyzed descriptively with quantitative and qualitative approaches to evaluate the effectiveness of the learning media developed.

The research subjects consisted of grade VI elementary school students who were selected using purposive sampling method. The selection of these subjects was based on the level of active student involvement in the learning process as well as their need for more innovative and interesting learning media.

FINDING AND DISCUSSION

This research produces interactive PowerPoint-based learning media (PPT) using Canva, which is designed to increase the motivation and interest in learning of grade VI elementary school students in IPAS subjects. The main focus of this media is material about the skeleton, joints, and muscles. The development of learning media is carried out by applying the ADDIE model, which consists of five stages: analysis, design, development, implementation, and evaluation. Each of these stages contributes significantly to the success of learning media, as explained in the research results (Torang Siregar et al., 2023).

Based on the validation results, Canva-based interactive learning media obtained an average score of 89% from media experts and teachers, indicating an excellent level of validation. This assessment includes visual aspects, interactivity, relevance to the curriculum, and suitability to the characteristics of grade VI students. The attractive visual design, systematic delivery of material, and Canva's ability to insert interactive elements such as animations and links provide a more effective learning experience (Agung Muliaman Anas, 2019). In addition, the use of colors and designs that are in accordance with the psychology of elementary school children adds to the attractiveness of this media. Teachers also recognize that this media is very helpful for them in delivering abstract material, such as the mechanism of action of joints and muscles.

Implementation was carried out on grade VI elementary school students who were selected through purposive sampling technique. The questionnaire results showed an increase

in student motivation from an average of 67% before using this media to 85% afterwards. The following is a table of student learning outcomes before and after using Canva-based media:

Table 1. Student learning outcomes before and after using canva-based media

Assessment Aspect	Before (pretest)	After (post-test)	Improved
Average test score	68	85	25%
Learning motivation (%)	67%	85%	18%
Student engagement (%)	70%	90%	20%

This table shows that the implementation of Canva-based media significantly improved student learning outcomes, both in terms of test scores, learning motivation, and level of engagement in learning. This improvement underscores the importance of interactive media in creating meaningful learning experiences (Muthi & Latifah, 2024). The test results showed that the average student score increased from 68 in the pretest to 85 in the posttest, with an increase of 25%. This finding not only reflects the effectiveness of the learning media but also confirms the success of the ADDIE model in developing media that meet the needs of students (Mawarni et al., 2024).

The results of this study also emphasize the importance of technology integration in education. The use of Canva as a platform for interactive media development provides various advantages, such as attractive design, easy accessibility, and features to insert interactive elements that increase student engagement (Understanding et al., 2024). Previous research (Fadhila et al., 2024) shows that Canva-based media can increase students' active participation while creating a more enjoyable learning experience. Observations during implementation also showed that students became more active in participating in learning. One of Canva's excellent features is its ability to insert interactive elements such as joint movement animations, dynamic diagrams, and short quizzes (Kurniawan et al., 2024). Students seemed enthusiastic exploring the material and gave positive responses to the more visual and interactive media. The level of student engagement increased from 70% before implementation to 90% afterwards (Fadhila et al., 2024). This finding supports the theory of multimedia learning by (Booth, 2006), which states that the integration of text, images, and animation can improve students' understanding while maintaining their engagement.

In IPAS learning, especially on skeletal, joint and muscle materials, visual and interactive elements play an important role. Abstract concepts such as the function of bones, types of joints, and the mechanism of muscle action become easier to understand when

conveyed through animations and interactive diagrams. For example, the animation of joint movement in this media provides students with a direct illustration of how joints work, which is difficult to explain only through static images or verbal explanations. This finding is consistent with the theory of (Booth, 2006) , which states that multimedia learning that combines text, images and animation can improve students' conceptual understanding and help them remember information longer. This media also allows students to learn independently through additional links that direct them to other sources of information. This finding supports research (Fadhila et al., 2024), which found that Canva-based media can increase student understanding by 90%.

Students' increased motivation after using Canva-based media is also in line with the theory of learning motivation by (Dunn & Zimmer, 2020). They explained that students' intrinsic motivation can grow when learning is relevant, interesting, and provides a fun experience. This media allows students to actively participate in learning, for example through interactive questions in PPT or exploration of links to view videos supporting the material (Azmi et al., 2024). Thus, learning becomes more interesting and meaningful for students.

The success of this media also shows the importance of applying the ADDIE model in the development of learning media (Heraya & Husnaya, 2024). This model provides systematic guidance in designing and evaluating media, ensuring the resulting product is relevant to the needs of students. (Branch, 2010) states that ADDIE is one of the most effective development models for creating innovative learning media that fit the needs of modern education.

In terms of design, Canva offers advantages over traditional presentation software such as Microsoft PowerPoint. Canva provides a variety of professional templates and visual elements that are easily customized to suit learning needs. In addition, Canva's online collaboration feature allows teachers to work together with peers or students in developing learning media. Research (Azizatullatifah et al., 2024) also shows that Canva is very effective for developing interactive learning media, especially in elementary schools.

The results of this study confirm the importance of technology integration in the development of learning media at the primary school level. Teachers need to be given adequate training to utilize platforms such as Canva to create innovative learning media that meet students' needs. In addition, support from the school and education office is needed, especially in providing technological infrastructure that supports the implementation of technology-based learning media.

Overall, this study shows that the development of Canva-based interactive PPT learning media is very effective in improving students' interest, motivation and learning outcomes. This media not only makes it easier for students to understand abstract concepts, but also creates a more interesting and meaningful learning experience. Therefore, this research makes an important contribution in encouraging the development of technology-based learning media in elementary schools, as well as being the first step towards the transformation of digital learning in Indonesia.

CONCLUSION

This study shows that the development of Canva-based interactive learning media in PowerPoint (PPT) format is effective in increasing the interest, motivation, and learning outcomes of grade VI elementary school students in Natural and Social Sciences (IPAS) subjects, especially on skeletal, joint, and muscle material.

The results showed that this learning media received excellent validation from media experts and teachers, with an average score of 89%. Factors such as attractive visual design, interactivity, and compatibility with the curriculum are the main determinants of the success of this media. The implementation of the media in the classroom showed an increase in student motivation, from 67% to 85%, as well as a 25% increase in students' average score from pretest to posttest. These results indicate that the learning media developed is very effective in supporting the improvement of student learning outcomes.

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