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Interactive PowerPoint Media on Thematic Learning in Primary School

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ABSTRAK

Seiring dengan kemajuan teknologi yang mengglobal telah terpengaruh dalam segala aspek kehidupan baik di bidang ekonomi, politik, kebudayaan, seni dan bahkan di dunia pendidikan. Oleh karena kurangnya penggunaan media pembelajaran berbasis teknologi mendorong dilakukannya pengembangan media interaktif powerpoint yang bermanfaat di Kelas IV Sekolah Dasar. Jenis penelitian yang digunakan adalah peneltian pengembangan (R&D) dengan model pengembangan ADDIE. Tahapan pada pengembangan ini meliputi tahap analisis, perancangan, pengembangan, penerapan, dan evaluasi. Pengumpulan data menggunakan lembar validasi yang diisi oleh ahli materi, ahli bahasa dan ahli media dan praktikalitas yang diisi oleh guru dan peserta didik. Subjek uji coba pada penelitian ini adalah peserta didik kelas IV Sekolah Dasar. Hasil penelitian menunjukan tingkat validitas 92% untuk materi, 90% untuk kebahasaan dan 95% untuk media dengan kategori sangat valid dengan rata-rata 92%. Tingkat kepraktisan media menunjukan kategori sangat praktis dengan hasil angket respon memperoleh presentase kepraktisan 96%. Sedangkan hasil angket respon peserta didik dengan presentase kepraktisan 93%. Berdasarkan hasil data tersebut, PowerPoint interaktif pada pembelajaran tematik di Sekolah dapat digunakan di lapangan karena sudah dinyatakan valid dan praktis.

ABSTRACT

Along with global technological advances, it affected all aspects of life, both in the economy, politics, culture, art and even in the world of education. Due to the lack of technology-based learning media, encouraging the development of useful PowerPoint interactive media in Grade IV Elementary Schools. The type of research used is development research (R&D) with the ADDIE development model. This development includes the analysis, design, development, implementation, and evaluation stages. Data collection uses a validation sheet filled out by material experts, linguists, and media experts and practicalities filled out by teachers and students. The test subjects in this study were students in grade IV Elementary School. The results showed the validity level was 92% for material, 90% for language and 95% for media, with a good category with an average of 92%. The level of practicality of the media shows an efficient category, with the results of the response questionnaire Obtaining a practicality percentage of 96%. While the results of the student response questionnaire with a practicality percentage of 93%. Based on the results of these data, interactive PowerPoint on thematic learning in schools can be used in the field because it has been declared valid and practical.

1. INTRODUCTION

Technology has been a bridge between engaged students and positive classroom environments. Appropriate technology can be hugely helpful in providing students with tools to become productive learners and assist in creating a learning environment that allow active student engagemen (Tarbutton, 2018; Wirantini et al., 2022). Today technology fills an essential role in pedagogy. Developmental technology in education can streamline and hasten the learning process through learning media (Primasari et al., 2019; Sagri et al., 2018). In order to effectively impart the concepts and messages taught, media can encourage stimulus responses between students and teachers (Ghavifekr & Rosdy, 2015; Sclerotinia &

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Andreea-ioana, 2013). The right technology may be incredibly beneficial in giving students the resources they need to become productive and help create a learning environment that encourages active student engagement. Learning media is a tool that can help encourage learning intentions following the initial focus of learning and can communicate messages or information that will be conveyed (M. E. Putri & Reinita, 2020; Raditia et al., 2022; Widiana, 2022). Therefore, educational media is a crucial component of the learning process.

But there is a gap between the adjustments to the times and what happened in the field, especially in elementary schools. Based on the results of interviews with the homeroom teacher of class IV SDN 11 Ampang, information was obtained that students' motivation in learning was still lacking, students found it difficult to focus and not concentrate on learning, children were often bored studying and were not interested in learning if there was a lot of reading text, this can be seen from the low interest in reading students. The teacher added that when the Internship learning activities used media in the form of images, students were a little more interested because there were colorful pictures. However, not every image media material is used; this is due to the limited time in making learning media, and teachers stutter in the use of technology, so there is no development of interesting technology-based learning media that makes children interested in participating in learning. So in the interview the researcher knows that in learning activities students tend to prefer text accompanied by pictures that are interesting, fun, easy to understand. However, it was found that the material delivered was still textbook-oriented and student involvement in learning was low because the teacher was still the centre of learning. In other words, they still use teacher-centred learning (Ranting & Citra Wibawa, 2022; Reinita et al., 2019). Seeing this, educators must use learning media in a more inventive and creative way to encourage student participation in the learning process. When teachers use learning media in their classrooms, technology-based media will be able to attract students' attention and improve effective learning methods (Hibra et al., 2019; Lari, 2014; Saragi & Tegeh, 2021). According to previous emphasized that determining needs is the first step in selecting learning media (needs assessment) (Iqbal et al., 2018; Kustianingsari & Dewi, 2021). This determination of needs is based on the criteria used to select media, including research on student characteristics, expected abilities, and characteristics of teaching materials. In addition, other elements that need to be considered are the availability of media, limited resources, school facilities, costs and time. Because each student has different features, it is important to have media that suits their needs to overcome these learning challenges.

Therefore, one solution that can be done is for teachers should put more effort into managing thematic learning in Elementary Schools (SD) using active and innovative technology. Thematic learning is learning that applies several lessons packaged in one theme so that students get real experience (Parmawati et al., 2022; Reinita, R. & Wahyuni, 2020). Teachers must be able to develop media that can convey the material in this thematic learning following the learning objectives that have been set. Learning media plays an essential role during the learning process. This was also found by other studies state that learning media is essential in improving the quality of the learning and learning process (N. P. S. Dewi et al., 2022; Reinita et al., 2020). Learning media is a tool for applying methods that provide solutions in the learning process and provide complete and extensive information (An, 2019; Tafonao, 2018). Learning media can channel and convey messages and stimulate students' thoughts, feelings, concerns, and interests to encourage the creation of a learning spirit in students. One of the various types of learning media that the teacher innovates is interactive media. Some research was done about interactive media previously had a good impact on learning: multimedia interactive in the learning process will be an alternative that can be used by the teacher in developing and innovating learning so as to improve student learning outcomes (N. M. A. K. Putri & Suniasih, 2022; Sulistyo & Kurniawan, 2020). According to previous study android-based interactive multimedia is feasible to use to improve quality learning because it has many advantages compared to other types of media needed in learning education (Septiana et al., 2022). Learning by using multimedia Interactive shows good results and is suitable for use as a learning resource (Rohmah & Tegeh, 2022; Syawaludin et al., 2019). Based on these findings it can, it is said that interactive multimedia is proven to have a positive impact on student learning outcomes. It's just that in previous studies, there were no studies that specifically discussed this PowerPoint Interactive Multimedia.

PowerPoint in education uses one of the most preferred features making it easy to use the relatively shallow learning curve required for basic level use (Jones, 2003; Lari, 2014). Interactive PowerPoint is a PowerPoint that can create an interactive atmosphere through media that makes students and teachers interact during learning. By activating freely usable features such as hyperlinks, text, graphics, images and animations (R. S. Dewi & Aini, 2020; Mudasih & Subroto, 2019). Based on previous research, this interactive PowerPoint is a tool to facilitate learning and teaching, as one of the essential goals in using new ways of teaching to promote motivation for student development towards learning (Zedan et al., 2015). This interactive PowerPoint method is easier and cheaper to use as more and more textbooks are packed with PowerPoint slides produced (R. S. Dewi & Aini, 2020; El Khoury & Mattar, 2012). Interactive PowerPoint

can explain things that are summarized and packaged in PowerPoint slides. Using this media makes students not easily bored and makes it more accessible for them to understand the subject matter (Mudasih & Subroto, 2019; Nugroho et al., 2022).

The research results that have been done are: The development research conducted by previous study resulted in learning interactive PowerPoint media being declared effective as a learning medium (Praheto et al., 2020). However, the PowerPoint media developed by researchers has not yet been tested for validity by validators who are experts in their field. The PowerPoint media created by other study should give more attention to the media content being developed because this area contains information that students should study, particularly regarding learning resources, example problems, and information tailored to the objectives met (Putra et al., 2019). The results of subsequent research developed media PowerPoint showed effective results indicated by an increase in the average score of learning outcomes 80.34 students with the percentage of completeness of student learning outcomes reaching 100% (Marfiana & Ramadan, 2021). However, this interactive PowerPoint media requires a practical test.

In this study, researchers intend to create interactive PowerPoint multimedia in integrated thematic learning based on Problem-Based Learning Models in elementary schools. This was done based on the problems the researchers found from previous research on developing PowerPoint media. The uniqueness of this research is how to take advantage of technological advances to create interactive PowerPoint media, which is digital learning content that adapts to the needs of 21st-century learning. PowerPoint interactive media created using a problem-based learning framework will require students to solve a customized problem actively. Based on the observations conducted at SD Negeri 11 Ampang, researchers found a problem: the lack of use of technology-based learning media. Learning is carried out with a lack of interaction between students and students and students and teachers at the time of delivery of learning materials. The use of inappropriate learning models and teacher-centred learning makes learning passive. Therefore, the researcher developed a breakthrough interactive PowerPoint media on Thematic Learning in Elementary School.

This study is significant because it seeks to innovate in the development of media that adapts to the times by utilizing technology, making it simpler for teachers to convey learning with media that is valid and does not require costs. Educational facilities often include interactive powerpoint materials that can assist students and serve as a guide for educational tasks both inside and outside the classroom. Interactive PowerPoint presentations can be used in a two-way learning process as both a teaching aid and a learning tool for students.

2. METHOD

The type of research in this article is development research. Research and development or Research and Development (R&D) is research that develops and produces a product in the form of strategies, media, learning materials and tools to overcome problems in learning (Tegeh et al., 2015). The ADDIE model has five stages: analysis, design, development, implementation and evaluation (Daulay, 2018). The subjects in this study were the fourth-grade students of SD Negeri 11 Ampang, totalling nine people. The research was conducted for two days in learning 3rd and fourth, theme 8, sub-theme 1. The validity and applicability of the created interactive PowerPoint media were assessed through this research. Three experts: material, linguists, and media experts, used a validity document to conduct the media validation test. Meanwhile, using a practicality sheet, one teacher and nine study subjects conducted the practicality test (Saputri et al., 2015). Validity is a metric that reveals the degree of the produced media's validity. Scores obtained from the Likert scale evaluation categories on the learning media validity questionnaire can be seen in Table 1.

Table 1. Questionnaire Rating Scale

Score	Category
4	Very Good
3	Good
2	Good Enough
1	Less Enough

The calculation of the total data for evaluating the results of validity uses a formula (Pratama, 2019). The purpose of validation in creating learning media is to evaluate the viability, validity, and unreliability of the learning media under development. The learning media that will be created will undergo revisions and improvements to be better and more accurate in light of the findings of the validation as well as the advice and feedback offered. Experts in the media, content, and language experts made up the

validator test subjects. Validation instruments are used to gather information and gauge the degree of validity created by learning media. Researchers employ a validation form as their validation instrument. According to previous study (Firdawela & Reinita, 2021), a questionnaire is an instrument that collects data by asking respondents to answer a sequence of written statements or questions. The Likert scale is the measure that researchers employ. The Likert scale is a benchmark used to assess a person's or group's degree of attitudes, views, and mindset (Budiaji, 2013).

The goal of practicalization in the creation of educational media is to evaluate the usefulness and utility of the created learning resources. Data on the use of developed materials are gathered using practical instruments. The practical tools used are: 1) Teacher answers a questionnaire about the practicality of learning media. 2) Questionnaire to students regarding the practical suitability of learning media (Firdawela & Reinita, 2021). In measuring the level of practicality, it is carried out using the formula. Practicality value scale is show in Table 2.

Table 2. Practicality Value Scale

Range %	Category
75.01% - 100.00%	Very Practical
50.01% - 75.00%	Practical
25.01% - 50.00%	Less Practical
00.00% - 25.00%	Not Practical

The practicality of learning media instruments helps collect data in the form of the practicality of the developed learning media. A media can be practical if it has been field tested and can be assessed through practicality sheets by users. Media is practical if its implementation is included in the excellent category.

3. RESULT AND DISCUSSION

Results

The novelty of this research is that researchers develop digital learning media that adapt to the demands of 21st-century learning, utilizing technological developments and developing Interactive Powerpoint Media. Interactive Powerpoint media was developed based on the Problem-Based Learning model, which will make students play an active role in solving a problem that is adapted to students' daily life so that students can think critically. *Kurikulum 2013* served as the basis for the development of PowerPoint interactive multimedia. The 2013 curriculum was designed by combining several subjects into a theme as the main focus, known as the thematically integrated method.

Based on the objectives and development model that the researcher uses, the results obtained are: In the analysis phase, the researchers conducted a needs and curriculum analysis. A needs analysis was conducted by observations and interviews with fourth-grade teachers at SD Negeri 11 Ampang. As for curriculum analysis, to find out what curriculum is used and the use of KI, KD, indicators and objectives in learning design. Next, the researcher prepared the materials needed to design interactive PowerPoint media. The materials include KI, KD, indicators, learning objectives, materials, learning videos, LKPD and evaluation questions. Interactive PowerPoint media display is show in Figure 1.

Figure 1. Interactive PowerPoint Media Display

Development stage, interactive PowerPoint media that have been designed are tested for validity by material experts, linguists and media experts using a modified validity sheet (Anggraini & Reinita, 2021). Expert validity test results is show in Table 1.

Table 1. Expert Validity Test Results

No	Researcher	Aspect Scored	Score	Exp.
1	Material Validator	Material	92%	Valid
2	Language Validator	Language	90%	Valid
3	Media Validator	Media	95%	Valid
Average			**92%**	**Valid**

Based on Table 1, it can be concluded that the developed media can be said to be valid with a 92% validity level and is ready to be tested in the field.

The next stage is the implementation stage. The learning media validated by experts is tested in the fourth grade of SD Negeri 11 Ampang, which consists of 9 students. The trial was carried out on sub-theme 1, learning 3 and 4, after doing the learning by distributing a practical questionnaire sheet. After that, it was also tested on the fourth-grade homeroom teacher. The results obtained show that the media developed is very practical. The scale practicality is show in Table 3.

Table 3. Scale Practicality

Range	Category
81 – 100	Very Practical
61 – 80	Practical
41 – 60	Quite Practical
21 – 40	Less Practical
0 – 20	Impractical

As for the score from the practicality sheet filled in by the teacher gets 23 out of 24 maximum scores. Thus, interactive PowerPoint media get a convenient category with a percentage of 96%
Evaluation stage is the final stage of the research implementation. The evaluation was carried out the results of the implementation of the media, namely through a questionnaire for the student's responses and teachers.

Discussion

Researchers develop interactive powerpoint media that adapts to the demands of 21st-century learning, utilizing technological developments and developing interactive powerpoint media. Following this, interactive powerpoint media can be used by educators to help students understand the material. There are many learning models that can be applied to the design of PowerPoint presentation learning media for classroom teaching.

Interactive PowerPoint media can significantly enhance thematic learning experiences in primary schools by providing an engaging and dynamic platform for students to explore and comprehend various subjects. The incorporation of interactive elements such as clickable links, multimedia, and quizzes not only captures the attention of young learners but also caters to diverse learning styles (Anwar et al., 2020; Praheto et al., 2020). The visual appeal of interactive PowerPoint presentations stimulates the students' interest, making complex concepts more accessible and fostering a deeper understanding of thematic content. Moreover, the interactive nature encourages active participation, allowing students to navigate through the material at their own pace, reinforcing their autonomy in the learning process. The integration of gamification elements, such as educational games or interactive simulations, adds an element of fun, turning the learning experience into an enjoyable adventure. Additionally, interactive PowerPoint media facilitates immediate feedback, enabling teachers to assess student comprehension in real-time and tailor their instruction accordingly. Overall, by leveraging the power of interactive PowerPoint in thematic learning, primary school educators can create an immersive and effective learning environment that not only meets educational objectives but also cultivates a lifelong love for learning (Sarkar et al., 2021; Sobry & Sa'i, 2020).

Based on previous research, proper use of PowerPoint can enhance the learning experience for students, can facilitate presentations in a professional manner, by carefully combining media, presentations can appeal to a number of different learning styles and are created more developed (Hashemi et al., 2012). PowerPoint is a pedagogical tool used to facilitate learning and teaching by using new ways of teaching so as to encourage students' motivation towards learning in English classes (Lari, 2014; Mensah & Nabie, 2021). The effectiveness of using PowerPoint in student learning has been very positive. using PowerPoint is conditionally acceptable as long as the tool serves as a good means to help students gain access to real

knowledge and cultivate human intelligence. The use of PowerPoint as innovative and effective teaching methods with the main objective in the teaching process is to foster students' independent learning abilities and innovative thinking through various means or educational methods (Metalin et al., 2020; Zedan et al., 2015).

Implementation of interactive PowerPoint media can increase student involvement in the learning process. Interactive features such as questions, assignments, and interesting images can make learning more interesting and active for students. Apart from that, by using interactive media, students can have better access to learning content. Animations, videos, and other interactive elements can help students understand difficult concepts in a more visual and practical way. There are limitations in this development research; the interactive powerpoint media produced only reach the validity stage and practicality stage. Material, language, and media are very feasible to use in the learning process. This research is expected to help make it easier for teachers to convey learning material, and students can be assisted in understanding learning material.

4. CONCLUSION

This development research produces a product interactive PowerPoint. The results of the practicality test of learning media in the form of interactive PowerPoint media were stated to be very practical for fourth-grade elementary school students. The results of this practicality test were obtained through teacher and student responses. In its development, it uses five stages: the analysis stage, the design stage, the development stage, the implementation stage and the evaluation stage. Based on the results of the validity test conducted by 3 experts, it shows a reasonable level of validity. So, it can be concluded that Interactive PowerPoint Media Development in Elementary Schools is valid and practical. The interactive powerpoint media developed is not only used during face-to-face learning but can be used anywhere without the need for an internet network so that students can access learning media but must still pay attention to the characteristics and needs of students.

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