Development Learning Media Interactive Powerpoint Integrated Thematic Learning

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Abstract: This research is motivated by the problem that in the learning process the teacher has used media, but only uses improvised media in the form of books and blackboards as well as media in the form of pictures, thus making students passive during the learning process, this situation is caused by the use of learning media in the learning process only as books and blackboards. Based on these problems the researchers developed interactive powerpoint media in integrated thematic learning. The development model used is the ADDIE model which consists of 5 stages, namely, analysis, design, development, implementation, and evaluation. Based on the results of interactive powerpoint media validation on integrated thematic learning in grade IV elementary schools, it was declared very valid with a validation value range of 3.54, from the results of the practicality test, educators stated that it was very practical with a percentage of 93.37% for learning 1 and learning 2, while the practicality test for students it is stated to be very practical with a percentage of 89.04% for learning 1 and learning 2. So it can be concluded that the development of interactive powerpoint media in integrated thematic learning in grade IV elementary school is very valid and very practical.

Keywords: Integrated Thematics; Interactive powerpoint; Learning Media

Introduction

Education is very important in the development of a nation (Boisselle, 2016; Reckendorf et al., 2023). Education has a role in mastering knowledge (cognitive), social skills, work skills and character growth. To achieve learning objectives, it is necessary to develop existing abilities by utilizing various innovative methods and equipment. Current learning is related to the curriculum. Curriculum components consist of objectives, methods, teaching materials, media, and others (Aprilia, 2020).

Curriculum is part of the elements that contribute to realizing the process of developing the potential quality of students (Helda & Syahrani, 2022; Noaman et al., 2017). The 2013 curriculum is based on competencies that are very necessary as instruments to direct students to become quality human beings who are capable and proactive in responding to the challenges of the ever-changing times; educated human beings who have faith and devotion to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent; and democratic, responsible citizens.

According to Muslihudin & Arumita (2016) the education and learning process is to create planned goals, educational and learning situations that enable the achievement of the education and learning process. In this way, the education and learning process is an interaction between learning components (Carrillo & Flores, 2020), creating a teaching and learning atmosphere which is expected to achieve the planned goals, thus the learning process is a learning activity between educators and students during teaching.

In the teaching and learning process in class, educators apply subject matter using thematic books (Hanannika & Sukartono, 2022), so that students find it difficult to understand what is being taught by using books and media in the classroom environment. Thematic books are a learning resource, educators are also expected to be able to apply material that is suitable
for using various media as learning resources. Learning media is expected to be available to support learning outcomes through the learning process.

In the teaching and learning process the use of media is very important (Jannah, 2020; Puspitarini & Hanif, 2019). In line with the opinion of Wulandari et al. (2023), namely: the use of learning media can facilitate and improve the learning process and outcomes, the use of learning media also increases and directs children's attention so that it can create motivation to learn, the use of learning media allows interaction between educators and students (Nursyaida & Hardiyanti, 2020; Ramadhani & Aristiawan, 2023; Yuliani, 2021).

Based on observations carried out on September 18 2021 at SDN 03 Simpang Haru, a problem was found that during the teaching and learning process, educators used media, but the media used was only basic media in the form of books and blackboards and media in the form of pictures which lacked variety. so that students do not focus during learning when listening to the teacher's explanation. SDN 03 Simpang Haru is a school with facilities and tools to support learning, especially the availability of infocus, but the use of infocus in teaching is rarely used because in learning activities the media displayed only uses a blackboard and books. This has an effect on students, namely that students lack focus and get bored during the learning process.

From these problems, a resolution or solution is needed for the problems above, by developing a learning media. The media that will be designed is tailored to the characteristics of students who are interested in images, color and an attractive appearance. So researchers chose interactive media as an alternative in solving this problem. One of the interactive learning media is interactive PowerPoint media (Lorensius et al., 2023; Novriandami et al., 2023; Wirawan & Gading, 2022). As we know, PowerPoint learning media can combine images, text, animation and video which can be used as interactive learning media which can stimulate activity and make it easier for students to understand the lesson. The reason researchers chose PowerPoint as software to develop this media is because this software is very familiar with the world of education (Mafiana, 2021; A. Rosmiati et al., 2020). Powerpoint is generally used in presentations, Powerpoint has facilities for creating interactive learning multimedia (Shatri & Shala, 2022). Through the development of the use of PowerPoint, we can include reading, sound, photos and videos at once. Slides are also applied with buttons that will be used to operate PowerPoint. The following is data on the learning outcomes of Class IVb Tema 1 SDN 03 Simpang Haru students. There are still many students who have not completed and have not achieved the KKM score of 80.

From the learning results of class IVb SDN 03 Simpang Haru, there are still students who have not reached the KKM, so the existence of learning outcomes is also a supporting factor in making researchers develop learning media, namely interactive powerpoint media, therefore the existence of this media can help students understand with the material and also helps previous learning outcomes improve after using interactive PowerPoint media.

Method

The research used is Research and Development (R&D). Sugiyono (2015) said Research and Development is a research method used to produce certain products, and test the effectiveness of these products. Based on this explanation, it can be concluded that (R&D) is a research method needed to be able to develop and produce an existing product by researching, designing and testing the validity of the product being designed (Magistrelli et al., 2022). Thus, the type of research that researchers use to develop a media for interactive PowerPoint learning in integrated thematic learning Theme 2 Subtheme 1 learning 1 and 2 in class IV elementary school is Research and Development (R&D) using the ADDIE model.

The research began to be carried out on 21-24 October 2021 at SDN 03 Simpang Haru, East Padang District, the population in this study were class IV students at SDN 03 Simpang Haru 20 and the sample in this study was class IV Simpang Haru with a total of 24 students, using techniques sampling. The type of research used is the research and development method, Research and Development developed by Dick & Carey (1996), namely the ADDIE model, the stages of research and development in the ADDIE model are: Analysis, Design, Development, Implementation, and Evaluation (Suratnu, 2023).

The stages of development research in the ADDIE model are: Analysis, Design, Development, Implementation, and Evaluation. This model was developed by Dick and Carr (1996) to design learning systems (Mulyatiningsih, 2015). The following is a clearer explanation of the ADDIE research and development model, which is in Figure 1.
Result and Discussion

Based on the stages in the development of ADDIE that have been explained, the explanation of the research results consists of 5 parts, namely: analysis stage, design stage, development stage, implementation stage, and evaluation stage. In this research the researcher tried to develop powerpoint learning media for class IV elementary school Theme 2 Subtheme 1 learning 1 and learning 2.

To achieve the research objectives, the author went through stages of media development, including the material validation stage, language validation, design validation, product trial stage, and practicality test stage. In this discussion, the author will discuss the results of these stages, as follows:

Validation Stages by Material Experts

The results of the validation assessment of the Material Expert who assessed aspects of the material related to the relevance of the material to KD, the material presented systematically, the suitability of the material to the student's ability level, the clarity of the material description, the coverage of the material related to the sub-themes discussed, the images used are appropriate to the material, and the examples provided were appropriate to the material and a percentage of 3.62 was obtained with the criteria very valid.

Validation stages by language experts

Validation assessment results Linguist experts assessed the language aspects in the teaching materials including: the use of language according to EYD, the language used is easy to understand, the accuracy of sentence structures and language, the language used does not have double meanings, the arrangement of sentences in the material is appropriate to the level students' abilities, suitability of sentences in the material according to the level of students' abilities, suitability of sentences in media images, vocabulary terms used are appropriate and obtained by achieving 3.6 "Valid" criteria.

Validation Stage by Design Experts

Results of the validation assessment The design expert assessed the design aspects including: Cover design, selection of typeface, selection of font size, color, supporting images, accuracy of background selection, attractiveness of the image, media size, clarity of description of the material, clarity of instructions, relevance of the image to the material and media design and 3.42 for design assessment with the criteria Very Valid.

Tabel 2. Expert Validation Results

<table>
<thead>
<tr>
<th>Validation Aspect</th>
<th>Achievement Level</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials Expert</td>
<td>4.00</td>
<td>Very Valid</td>
</tr>
<tr>
<td>Design Expert</td>
<td>3.42</td>
<td>Very Valid</td>
</tr>
<tr>
<td>Linguist</td>
<td>3.60</td>
<td>Valid</td>
</tr>
<tr>
<td>Average</td>
<td>3.67</td>
<td>Very Valid</td>
</tr>
</tbody>
</table>

Practicality Test by Educators and Students on interactive Powerpoint media for class IV Theme 2 Sub-theme 1 learning 1 and 2 After the media development stages are complete, the next thing to look at is the practicality of interactive PowerPoint media in theme 2, sub-theme 1, learning 1 and 2. Interactive PowerPoint media has been revised according to advice from experts, then tested on educators and students of class IV SDN 03 Simpang Haru on 21-24 October 2021. The Practicality Test was carried out to determine the practicality of interactive PowerPoint media which was carried out through a questionnaire given to educators and students after using interactive PowerPoint media, the questionnaire consisted of 4 Strongly Agree (TS), with a score of 4, Agree (S) with a score of 3, Disagree (TS) with a score of 2, Strongly Disagree (STS) with a score of 1 (Sugiyono, 2019). The questionnaire uses a Likert scale, namely with 4 answer choices, Strongly Agree, Agree, Disagree and Strongly Disagree The reason for choosing a Likert scale by eliminating the middle answer is to overcome the tendency of respondents to choose safe answers, namely answers that are unsure. The questionnaire given to educators consisted of 13 statements, with a percentage result of 93.37% declared "Very Practical" and the questionnaire given to students consisted of 14 statements given to 22 grade 4 students at SDN 03 Simpang Haru, the results obtained were a percentage of 89 .04% declared Very Practical.
The results of the products that have been designed are interactive PowerPoint learning media. The type of research used by researchers in designing learning media is the type of research development or (R&D) developed (Mulyatiningsih, 2015). Interactive PowerPoint learning media is carried out through 5 stages, namely analysis, design, development, implementation, evaluation (Suaib, 2020).

**Analysis Stage**

The initial stage is analysis, in the analysis stage observations are made at school and analysis of the curriculum and analysis of students, by making initial observations at SDN 03 Simpang Haru by looking at learning and school facilities. At the analysis stage, researchers found that students needed interesting learning, namely using interactive PowerPoint learning media which could help students be more active in appropriate learning activities (Alfiyandri et al., 2023). After that, an analysis is carried out according to the curriculum at school with the material that will be produced through the media.

Student analysis was carried out by looking at the target use of media that would be used in class IV elementary school students aged 9-10 years. According to Piaget's learning theory, at the formal operational stage, the main characteristics of children's development are being able to think abstractly and scientifically logically, having the ability to draw conclusions, interpret and develop hypotheses. Students' abilities like this can be developed well by using the media that will be developed, where in general students at the formal operational stage have a tendency to like contrasting, harmonious but not flashy images and colors which can motivate learning.

**Design Stage**

At the design stage, the design of the product is carried out and the media devices used are selected. The media for this research is interactive powerpoint media for integrated thematic learning in grade IV elementary schools (Putra et al., 2019). Media is created using software, namely Microsoft Powerpoint 2010, which uses hardware, namely a laptop.

**Development Stage**

The development stage contains activities to make the design into a product and test validation of the product. Making media based on learning material, namely integrated thematic learning in class IV elementary school on theme 2, Subtheme 1, learning 1 and learning 2, was created using the Microsoft Powerpoint 2010 application. Furthermore, the media and learning tools that had been designed were validated by 3 validators from University Lecturers Adzkia.

**Implementation Stage**

The next stage is the implementation stage in learning media at SDN 03 Simpang Haru with a total of 24 students and 1 educator. The teacher observes the implementation of the use of interactive PowerPoint learning media as well as students' activities while using this media. The implementation of the use of this media is carried out by practicality testing using a questionnaire given to educators and students. Based on the practicality results for educators, an average score of 93.37% was obtained for the Very Practical assessment criteria. Meanwhile, for students with practicality results, an average score of 89.04% was obtained for the "Very Practical" assessment criteria.

**Evaluation Stage**

Next, at the final stage, namely the evaluation stage, evaluation is carried out by conducting learning outcomes tests. The learning outcomes test was carried out after students applied interactive PowerPoint media by giving questions adapted from the PH SDN 03 Simpang Haru questions. The results obtained from the Learning Results Test were achieved with 95.83% completeness as seen in Figure 2.

![Figure 2. Data on the learning outcomes of Pakistani students](image)

The results of the products that have been designed are interactive PowerPoint learning media. Interactive PowerPoint learning media is carried out through 5 stages, namely analysis, design, development, implementation, and evaluation (U. Rosmiati & Siregar, 2021).

The initial stage is analysis, by making initial observations at SDN 03 Simpang Haru by looking at learning and school facilities. At the analysis stage, researchers found that students needed interesting learning, namely by using interactive PowerPoint learning media, because what was used could help
students be more active in learning activities and appropriate.

At the design stage, the design of the product is carried out and the media devices used are selected. The media for this research is interactive powerpoint media for integrated thematic learning in grade IV elementary schools. Media is created using software, namely Microsoft Powerpoint 2010, which uses hardware, namely a laptop/notebook.

At the development stage, media was created based on learning material and created using the Microsoft Powerpoint 2010 application with integrated thematic material in class IV elementary schools. Furthermore, the media and learning tools have been designed, validated by 3 validators from Adzkia University lecturers. After validation is complete, revisions are made to the media.

The next stage is the implementation stage in learning media at SDN 03 Simpang Haru with a total of 24 students and 1 educator. The teacher observes the implementation of the use of interactive PowerPoint learning media as well as students' activities while using this media. The implementation of the use of this media is carried out by practicality testing using a questionnaire given to educators and students. Based on the practicality results for educators, an average score of 93.37% was obtained for the Very Practical assessment criteria. Meanwhile, for students with practicality results, an average score of 89.04% was obtained for the Very Practical assessment criteria.

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Conclusion

Validation of interactive powerpoint media Theme 2 Always Save Energy Sub-theme 1 Energy sources for Learning 1 and Learning 2 for class IV elementary schools that were developed were declared "Very Valid" with an overall score range of 3.54. Based on the results of these data, it proves that the interactive PowerPoint media developed is the same as the material and correct writing rules, with sentences presented in a simple, clear and similar way to the characteristics of the students so that students are able to understand well. The practicality of interactive powerpoint media Theme 2 Always Save Energy Sub-theme 1 The energy sources for Learning 1 and Learning 2 that were developed were declared "Very Practical" with an overall average percentage of 93.37% while for 89.04% of students with the criteria "Very Practical".

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Author Contributions

The authors of this paper consist of two people. This paper could be completed with the collaboration of Silfi Melindawati and Alfiyandri at every stage.

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Conflicts of Interest

The authors declare no conflict of interest.

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