
Development of Powtoon Learning Media for Student Learning Activities in Theme 2 Clean Air For Health Class V SDN 064954 Medan Amplas

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Abstract

This study aims to: (1) develop Powtoon learning media for student learning activities on theme 2 clean air for health for grade V SD, (2) determine the feasibility of developing the Powtoon application in SD thematic learning. This research is a type of Research and Development (R&D) research with the ADDIE model which includes five steps including: analysis, design, development, implementation, evaluation. The subjects in this study were media expert validators, education practitioners, material experts, namely fifth grade teachers and fifth grade elementary school students. The research instruments used in data collection were questionnaires, observation, and documentation. The results of this study indicate that Powtoon learning media in Thematic Learning Theme 2 Clean Air for Health Class V SD "Very Eligible" with details of the eligibility percentage given by Media Experts in sub-theme 1 of 71.6% in the "Decent" category, media sub-theme 2 86.6% in the "Very Eligible" category, 88.3% in subtheme 3 media in the "Very Eligible" category. Material experts on media sub-theme 1 are 76% in the category "Appropriate", sub-theme 2 are 88% in the "Very Eligible" category, sub-theme 3 is 90% in the "Very Eligible" category. In Education Practitioners, the media subtheme 1 is 90% with the category "Very Eligible", subtheme 2 is 90% with the category "Very Eligible", subtheme 3 is 90% with the category "Very Eligible", Individual Trials are 90.8% with category "Very Feasible" and Student Learning Activities by 80% with the category "Very Feasible". Therefore it can be concluded that the Powtoon learning media for student learning activities on theme 2 clean air for the health of class V SDN 064954 Medan Amplas is "very appropriate" to be used with students during the learning process.

Keywords – Development; Powtoon Media; Thematic



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1. Introduction

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves and society. The implementation of education must also continue to keep abreast of the times, because if the implementation of education in a community group does not keep up with the times, that community group will be left behind. Technological advances can make it easier to improve the quality of learning, one of which is found in learning media (Musofa & Janattaka, 2019).

Learning media is anything that can convey messages through various channels, can stimulate students' thoughts, feelings, and willingness so that they can encourage the learning process to add new information to students so that learning objectives can be achieved properly. The use of learning media can also assist in providing learning in elementary schools, where the learning system uses thematic learning. Thematic learning is learning that uses themes by linking several subjects so as to provide meaningful learning to students. This agrees with what was stated (Kadir & Hanum (2020), which says that thematic learning is a combination of subjects in which there are themes, sub-themes, and learning. So it can be concluded that thematic is a combination or combination of several subjects which are combined into a theme Thematic learning in elementary schools is learning that combines various subjects with the students' everyday environment as a source of learning. Thematic concepts are always related to the everyday environment. Therefore, many phenomena can be used as sources in thematic learning in the environment. the fact is that in the field, students still experience difficulties in understanding thematic learning concepts. The media used by the teacher is only limited to the pictures in thematic books and a learning media in the form of Styrofoam containing pictures, then pasted on by students as display media. teacher ti not using a variety of media, often using the lecture method and reading material only, so students look engrossed in other activities

such as talking with their peers, playing, disturbing friends who focus on learning in ongoing learning.

According to (Apriliani & Maksum, 2021) the learning process will be more effective if there is use of learning media in it. To increase the enthusiasm of students, the latest and most interesting learning media is needed, namely electronic-based learning media. The development of electronic-based learning media needs to be carried out by educators, with the aim of increasing the enthusiasm of students in participating in the learning process. Learning media that attracts attention and is unique enough to be used in the learning process, one of which is powtoon. Seeing the current situation, powtoon learning media needs to be developed. Powtoon video media has high potential in attracting students' attention (Lestari et al., 2018). Because later in Powtoon you can vary the format of writing, moving animation, sound, and various colors so that it can trigger students' interest in their learning activities and make it easier for educators to provide material during the learning process and help make it easier for students to understand the material. Powtoon has interesting animations and is familiar to editor users. Powtoon is an online application program that exists on the internet and functions as a video-making application for presentations and learning media.

The purpose of powtoon media is to use images that attract the attention of students so that students feel happy and enthusiastic in following the learning material delivered by the teacher. Powtoon media contains subjects that are interconnected in thematic learning. Powtoon media serves to explain a condition, symptom, and an activity in living things. Powtoon media makes it easier for teachers to convey lessons and helps students understand material through narration or stories in powtoon. Powtoon media is supported by a combination of text, animation, audio and visuals packaged in the video.

According to (Sukmwarti et al, 2022: 202) learning is needed in order to prepare students to face the industrial revolution era 4.0 which demands 21st century skills, namely creative thinking, critical thinking, communication, and

collaboration. (Rangkuti & Sukmawarti, 2022). A good learning process begins with wise planning. In learning, students not only interact with teachers, but students also interact with learning resources used to achieve the desired learning outcomes.

According to (Sukmawati and Hidayat, 2020) the 2013 Curriculum Development is a follow-up step towards Competency-Based Curriculum Development which was pioneered in 2004 and the 2006 KTSP which emphasizes the attainment of attitude, knowledge and skills competencies in an integrated manner. According to (Hidayat and Khayroiyah: 2018) to reduce the emergence of learning barriers, teachers need to prepare appropriate learning tools. Learning innovations that require educators and students to think creatively and be able to adapt to the times to produce students who are active, creative, innovative and of course have noble character (Sukmawati et al., 2021). According to (Hidayat, et al: 2021) in this modern era, technology is developing in various fields, such as education, including at the basic education level.

2. Method

This research uses the research and development method (Research and Development/R&D) which is a research method used to produce a particular product, and test the effectiveness of the product (Sugiyono, 2017). The development model used by researchers is the ADDIE development model, which consists of 5 stages of development including: (1) Analysis, (2) Design, (3) Development, (4) Implementation, (5) Evaluation. The research and development carried out is to produce a product in the form of a powtoon learning media for student learning activities on theme 2 clean air for the health of class V SD.

The population in this study was students of SD Negeri 064954 Medan Sandpaper. The subjects in this study were Powtoon learning media development media in elementary school thematic learning Media expert lecturers, material expert lecturers and teachers. The time for the research to be conducted is in 2022 with an estimated research schedule, namely in the 2022/2023 academic

year at SD Negeri 064954 Medan Amplas, which is in Kel. Sitirejo II Kec. Medan Sandpaper Medan City, North Sumatra.

The data collection instruments used by researchers in the Powtoon media development research to obtain valid data are questionnaires, observation and documentation.

3. Result and Discussion

Researchers used the ADDIE model, using 5 stages, namely: the analysis stage, the design stage, and the development stage, the implementation stage, and the evaluation stage. Researchers analyzed learning tools in class V SDN 064954 Medan Amplas. The learning tools used by teachers are syllabus, lesson plans, absence books, assessment books, and teaching materials. Media assessments were obtained based on media experts, material experts, educational practitioners, individual trials, practicality tests, effectiveness tests and student learning activities. The media validation recapitulation from each stage can be seen in the following table.

Table 1. Media Validation Recapitulation for Each Stage

| Validator | Result of validation | | |
|-------------------------------|----------------------|------------|---------------|
| | amount | Percentace | categor |
| Media Expert | | | |
| Subtheme 1 | 43 | 71.6% | Worthy |
| Subtheme 2 | 52 | 86,6% | Very worth it |
| Subtheme 3 | 53 | 88,3% | Very worth it |
| Education Practitioner | | | |
| Subtheme 1 | 54 | 90% | Very worth it |
| Subtheme 2 | 54 | 90% | Very worth it |
| Subtheme 3 | 54 | 90% | Very worth it |
| Material Expert | | | |
| Subtheme 1 | 38 | 76% | Worthy |
| Subtheme 2 | 44 | 88% | Very worth it |
| Subtheme 3 | 45 | 90% | Very worth it |
| Individual Trial | 409 | 90,8% | Very worth it |
| Practicality Test | 45 | 90% | Very worth it |
| Effectiveness Test | 2580 | 86% | |
| Student Learning Activities | 48 | 80% | Worthy |
| Category | | | Very worth it |

The table shows the percentage of eligibility so that it is categorized as "very feasible" in media validators, education practitioners, subject matter experts and student respondents (individual trials, practicality tests, effectiveness tests). In this study using Research and Development (RnD) type of research. In the development model that researchers used, namely using the ADDIE Analysis, Design, Delevoment (Development), Implementation, Evaluation model.

The first stage in this research is analysis. At this stage what is done is to do a needs analysis, analysis of learning devices, materials, and analysis of students. At the analysis stage, the researcher analyzes a problem that occurs so that it is necessary or not to develop learning media and analyzes the feasibility and requirements for development.

The second stage is the design stage. At this design stage, it is the planning stage of Powtoon learning media by designing product display designs that are in audio-visual form starting from combining text, sound, images and animations according to product designs and specifications in using the Powtoon application. The planning stage carried out by the researcher was compiling lesson plans, storyboards and material content design.

The third stage is the development stage. At this stage, it is the stage where creating and developing a Powtoon application becomes a learning medium. The learning media uses the powtoon application in accordance with the thematic subject matter theme 2 Clean Air for Health for class V SD starting from cover, basic competencies, learning objectives and learning materials in accordance with the theme Clean Air for Health. After the creation of the media has been developed, the researcher then validates the learning media to media experts, material experts, and education practitioners and gets a good predicate, so the product is continued to the next stage, namely the implementation stage.

Then the fourth stage is the implementation stage. This implementation stage aims to determine student responses to the Powtoon Application learning media. Therefore the researchers conducted a trial, this trial was carried out for individuals.

The final stage is evaluation. The evaluation carried out was in the form of an evaluation of the development and feasibility evaluation of the Powtoon Application learning media product. Evaluation of development is carried out by media experts, material experts, educational practitioners, individual trials, practicality tests and effectiveness tests. The final result of the evaluation states that the powtoon learning media is appropriate for use in learning in elementary schools to attract attention in learning.

Based on the explanation above, it is in accordance with previous research conducted by (Wulandari et al., 2020) with the title "Development of Powtoon-Based Video Media in Science Learning Subjects in Class V at SDIT Mandiri", (Donna, et al: 2021) with the title " Development of Powtoon-Based Interactive Multimedia in Thematic Learning in Elementary Schools" states that using the ADDIE model can develop powtoon learning media that is suitable for use in learning in elementary schools. The feasibility of powtoon learning media was obtained from the results of feasibility trial data by media experts, material experts, education practitioners, practicality tests, effectiveness tests and students (individual trials).

The data obtained from the validation results of media expert Said Iskandar Al Idrus, S.Sc., M.Sc. The first validation stage was carried out on November 12 2022 face-to-face on Sub-theme 1 media to get a score of 39 out of a maximum score of 60 with an eligibility percentage of 65%. so that it is categorized as "Appropriate", Sub-theme 2 gets 51 out of a maximum score of 60 with an eligibility percentage of 85%, so it is categorized as "Decent", Sub-theme 3 gets a score of 51 out of a maximum score of 60 with an eligibility percentage of 85% so that it is categorized as "Decent". However, revisions have been made so that the media developed is better. Furthermore, the second validation was carried out on December 15, 2022 on the Sub-theme 1 media, obtaining a score of 51 out of a maximum score of 60 with a percentage of 85%, so that it can be categorized as "Very Eligible". Media Sub-theme 2 gets a score of 52 out of a maximum score of 60 with an eligibility percentage of 86% so it is categorized as

"Very Eligible". Media Sub-theme 3 gets a score of 53 out of a maximum score of 60 with an eligibility percentage of 88.3% so it is categorized as "Very Eligible".

The data obtained from the results of the expert validation of education practitioners by Mr. Sujarwo, S.Pd., M.Pd which was held face-to-face on November 18, 2022 at RPP Sub-theme 1 by obtaining a score of 37 with a maximum score of 50 with an eligibility percentage of 74% included in the category " Worthy". In the RPP Sub-theme 2 by obtaining a score of 38 with a maximum total score of 50 with a feasibility percentage of 76%, it is included in the "Decent" category. Furthermore, the lesson plan for Sub-theme 3 by obtaining a score of 38 with a total score of 50 with a feasibility percentage of 76% is included in the "Decent" category. Furthermore, the second validation was carried out on December 27, 2022 on the Sub-theme 1 media, obtaining a score of 54 out of a maximum score of 60 with a percentage of 94%, so that it can be categorized as "Very Eligible". Media Sub-theme 2 gets a score of 54 out of a maximum score of 60 with a feasibility percentage of 94% so it is categorized as "Very Eligible". Media Sub-theme 3 gets a score of 54 out of a maximum score of 60 with a feasibility percentage of 94% so it is categorized as "Very Eligible".

The data was obtained from the validation results of the material expert, Ms. Ervina Rezki Rahmi, S.Pd. The first validation stage was carried out on December 16, 2022 face-to-face at the Sub-theme 1 media, obtaining a score of 38 out of a maximum score of 50 with an eligibility percentage of 76%, so that it was categorized as "Appropriate". Furthermore, Sub-theme 2 media obtained a score of 44 out of a maximum score of 50 with an eligibility percentage of 88%, so it was categorized as "Very Eligible". Media Sub-theme 3 gets a score of 45 out of a maximum score of 50 with a feasibility percentage of 90%, so it is categorized as "Very Eligible".

Data obtained from the results of individual trials on December 16 2022 with 9 students in class V who received a score of 409 out of a maximum score of 450 with a percentage of 90.8% so that it can be categorized as "Very Eligible". Practicality Data, Based on the results of the teacher's response conducted by

Mrs. Ervina Rezki Rahmi on the learning media for the Powtoon Application Theme 2 Clean Air for Health for Class V SD above getting a score of 45 out of a maximum score of 50 with a percentage of 90% which is categorized as "Very Eligible". It can be concluded that Powtoon Learning Media is Practical.

Data analysis The effectiveness of powtoon learning media based on the results of tests or practice questions tested on fifth grade students at SDN 064954 Medan Amplas by summarizing student learning test scores and these values already meet the minimum completeness criteria (KKM) With a minimum completion criteria of 70 and a total acquisition is obtained value $80 >$, it can be concluded that Powtoon Learning Media for Student Learning Activities in Theme 2 Clean Air for Health Class V SDN 064954 Medan Amplas is said to be effective.

Student learning activity data in Thematic learning on Theme 2 Clean Air for Health gets a score of 47 out of a maximum score of 60 with a percentage of 80% which is categorized as "Good" and some students still don't dare to ask questions during the learning process.

Based on the results of the data above, an average percentage of the feasibility of the Powtoon Application learning media was obtained by 88% in the "Very Feasible" category. This is consistent with previous research conducted by (Wulandari et al., 2020) which states that the interpretation of the percentage of feasibility or validity of the media at an achievement level of 87.1% to 100%, learning media can be categorized as "Very Eligible". So it can be concluded that powtoon learning media for student learning activities on theme 2 clean air for health, "Very Eligible" to be used as a learning medium in the learning process in Class V SDN 064954 Medan Amplas.

4. Conclusion

Based on the results of research and development conducted by researchers, it can be concluded that research and development uses stages with the ADDIE model, thus researchers use 5 stages with the steps of analysis (Analysis), Design (Design), Development (Development), Implementation (Implementation), Evaluation (Evaluation) which has produced a product in the form of Powtoon Learning Media for Student Learning Activities in Theme 2 Clean Air for Health for Class V SD.

Based on the results of the feasibility of the Powtoon Application learning media which has been validated by media experts in sub-theme 1 with a score of 71.6%, sub-theme 2 with a score of 86.6%, sub-theme 3 with a score of 88.3%, and material experts in sub-theme 1 obtained score 76%, sub-theme 2 gets a score of 88%, sub-theme 3 gets a score of 90%, and the responses of education practitioners to sub-theme 1 get a score of 90%, sub-theme 2 gets a score of 90%, sub-theme 3 gets a score of 90%, and student learning activities with a score 80% of the learning media for the Powtoon Application, the Development of Powtoon Learning Media for Student Learning Activities in Theme 2 Clean Air for Health Class V SDN 064954 Medan Sandpaper developed by the researcher is included in the Very Feasible category to be used as a learning medium for fifth graders of SD.

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