

Analysis of Learning Media Needs for 2d Animation Video on Cube and Block Material in Grade V Elementary School



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ABSTRACT: The research and development of 2D animation video media for cube and block material is motivated by the problems that exist in SD Negeri 3 Kalianda in class V, namely the lack of use of mathematics learning media and student learning difficulties and the lack of student motivation in studying cube and block material, so it is necessary to develop media 2D animation as attractive as possible so that it can increase student learning motivation. This study uses a needs analysis method which consists of seven stages. The subject of the study was a mathematics teacher and the data was carried out using observation, documentation and interviews. The student's response to the application of the 2D animation learning media for cubes and blocks in mathematics is very good. The conclusion obtained from this research is the use and utilization of learning media such as 2D animated videos can be applied by teachers so as to create an effective teaching and learning process. It can also be concluded that the 2D animation learning media for cube and block material in class V mathematics subjects is said to be successful or very positive in supporting the learning process by giving very good responses. With the use and development of 2D animation learning media is expected to have a positive impact on students. And with the existence of 2D animation learning media, this is very much needed in schools because it can be a medium that can assist teachers in delivering learning materials.

KEYWORDS: Development, Learning Media. Animated Video Media, Cubes and Blocks

INTRODUCTION

Currently the development of education continues to grow along with the pace of development of the times. Various efforts to improve the quality and quality of education are increasingly being carried out, namely by optimizing work for all learning components. One of the learning components is the teacher. Teachers have an important role in the growth and success of student learning activities and form characters who are ready to face the realities of life in students' future. The role of the teacher will still be needed, even with the times and increasingly advanced technology. In an effort to build a more optimal and fun learning atmosphere for students, innovative creativity from teachers is needed (Mashuri & Budiyo, 2020). The teacher is a learning leader in the school. As a learning leader, he has full responsibility for the existence of the learning that is carried out. Teachers must be able to design, implement, and of course practice their learning effectively. In fact, being responsible for learning is able to encourage students in learning activities so that in the end they become lifelong learners. So far, some teachers or schools are still trapped in a tradition that restricts students' creativity. By creating an atmosphere of learning and teaching that is effective and efficient, it is able to provide a stimulus for student motivation in learning. However, the article (Megawati, 2021) reveals that being a teacher is not an easy thing, it can even be said to be difficult. A teacher is not only armed with knowledge but also must have a sense of compassion, sincerity, never give up, creative, innovative and attractive. It is not only the teacher who plays a role in the development of the learning and teaching process in the classroom. The interaction and cooperation between teachers and students can create an effective and efficient teaching and learning process.

In the midst of the current Covid-19 outbreak, the government issued Circular No. 15 of 2020 concerning Guidelines for Organizing Learning from Home in an Emergency Period for the Spread of Covid-19. The circular states that the application of learning from home aims to ensure the fulfillment of the rights of students to obtain educational services during the Covid-19 emergency, protect educational units from the adverse effects of Covid-19, prevent the spread and transmission of Covid-19 in education units and ensure the fulfillment of psychosocial support. for educators, students and parents/guardians. However, the application of distance learning is still not effective. Due to many inhibiting factors, one of which is elementary school students in areas where the availability of technology is not evenly distributed and adequate. This means that the application of distance learning is not yet fully effective. This causes students to get bored quickly and lack motivation.

However, according to the President's instruction on limited face-to-face lessons implemented by implementing 50% capacity in the classroom and reduced learning duration, teachers must optimize the teaching and learning process. Coupled with the lack of student learning motivation after distance learning. So that the concept of learning can still be conveyed and the

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learning objectives are achieved, a teacher must be able to think innovatively and creatively. Teachers must be able to plan the learning process as well as possible using innovative media by considering the needs of students in the classroom.

One of the teacher's efforts to increase student learning motivation is the use of learning media (Fadillah, 2018). The source of the article (Tafonao, 2018) states that the role of learning media in the learning and teaching process is very important for educators today, because the role of learning media can be used to channel the sender's message to the recipient and through learning media can also help students to explain something conveyed by the teacher. The use of media in addition to helping students understand the material can also increase learning motivation. Feelings of pleasure and enthusiasm can encourage students to read, write, speak and imagine. Thus the learning media will make the learning atmosphere more interesting which can increase students' interest in learning (Aprilla, 2020), and establish a good relationship between teachers and students. For this reason, the selection of learning media must be considered to be appropriate, requiring consideration of factors/criteria and steps for selecting media (Sungkono, 2008). The criteria that need to be considered by teachers or educators in choosing learning media according to Nana Sudjana (1990: 4-5) in the book on learning theories for teaching are, 1) the accuracy of the media with the purpose of teaching; 2) support for the content of learning materials; 3) easy access to media; 4) the skills of the teacher in using it; 5) available time to use it; and 6) according to the child's level of thinking.

Based on the results of preliminary observations that have been carried out at SD Negeri 3 Kalianda, information is obtained that teachers often use textbooks as a primary learning resource as a support. This is the cause of students looking less enthusiastic and unmotivated in receiving math lessons, this is also evidenced by students who are cool to chat with their friends while learning is in progress. The school has provided learning media facilities such as LCD projectors, but the utilization by teachers is not optimal. Furthermore, the teaching and learning activities are less able to attract students' attention to focus on the material to be taught. Therefore, learning media is needed that can attract enthusiasm that is tailored to the needs of students. Several alternative learning media in an effort to arouse students' interest and motivation in learning mathematics subjects, especially cubes and blocks, are using 2D animated video learning media. Video media is a learning media that is not listed in student books and teacher books (Agustiningih, 2013), but is very effective in helping the student learning process. Especially when combined with animation will increase student interest and motivation. Animation is a still object that is projected into a moving image that seems to live according to the characters made from several sets of images that change regularly and alternately according to the design, so that the videos displayed are more varied and interesting (Agustien et al., 2018).

In a study conducted by (Aziz et al., 2019) revealed that the increasing use of technology in special education, animation has received great attention recently and is found to be an effective instructional tool to improve the learning process of individuals with special needs. Furthermore, according to (Wahyuni et al., 2021) the development of 2D animation learning media aims to assist the learning process, to increase students' understanding and motivation to learn. From several previous studies on the development of 2D animation, it can be seen that 2D animation can convey and explain information in a simpler way in the form of visual and audio media. Based on the problems that occur, it is necessary to have media to support the learning process of cube and block mathematics using 2D animation learning media because of the characteristics of elementary school students who tend to like to observe and are more interested in pictures/new things that they have never seen before.

METHODS

This research was conducted using the needs analysis method. The purpose of the needs analysis is not only to find the gaps that occur, the identification of the causes of the gaps is also carried out to find out the root of the problem, so that the actual needs can be identified. This is what makes researchers use the needs analysis method as a reference for research procedures. Needs analysis research is needed to meet the needs of a teacher and student in supporting an effective and efficient teaching and learning process in the classroom. The subject of this study was the fifth grade teacher of SD Negeri 3 Kalianda as a reference for this study to determine the causes of learning difficulties and lack of student motivation. Data collection techniques were carried out using observation, documentation and interviews.

RESULTS AND DISCUSSION

Based of a literature review conducted by researchers, it was found that 2D animated video is one of the learning media as an act of the teacher's efforts in motivating student learning and being a way out of student learning difficulties. In research conducted by (Mashuri & Budiyo, 2020) stated that animated video is one of the new alternative media that is expected to be able to make learning meaningful and fun. This is also proven in previous research (Ayu et al., 2021) which states that students are helped in the learning process, students are not bored when participating in learning, it is easier for teachers to bring learning materials, and this learning media is used as a student learning guide, so that it can improve students' learning outcomes. concentration, motivation, and interest in student learning. Research (Wahyuni et al., 2021) mentions the advantages of using this 2D animated video learning media, namely 1) Learning flexibility makes it easier for teachers to carry out the learning process 2) Material in the form of animation attracts the attention of students in the learning process and 3) Examples- The examples given are explained

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in detail and illustrated. In addition, the 2D animated video also received a positive response from students so that the learning process of mathematics, especially on cube and block material, runs more effectively.

Based on research on a 2D animation learning media in mathematics subject matter of cubes and blocks for class V at SD Negeri 3 Kalianda, it was obtained data that there are still many students who have difficulties in learning mathematics, especially on cube and block material, causing students to be less enthusiastic, feel bored and less motivated. motivated in learning. Researchers found data that teachers still apply traditional learning more using handbooks/package books provided from schools as learning materials. This is because teachers still have difficulties such as using LCD Projector media and the limited number of learning media and are constrained at the time when using learning media takes a long time and is not optimal. So that teachers often use handbooks / textbooks to support learning. Data also obtained that students often have difficulty understanding the formulas of cubes and blocks and difficulties in comparing the properties of cubes and blocks.



Figure 1. Research Documentation

Based on information from teachers at SD Negeri 3 Kalianda, there are still many who have not developed their own learning media. Therefore, it is necessary to develop the media itself in order to achieve the delivery of information and the teaching and learning process. The media that is made must be interesting so that it can increase the motivation of students. So it can be concluded that the media needed is a 2D animated video. The concept of developing 2D animation video learning media based on the results of interviews with teachers as follows: 1) Learning media in the form of 2D animated videos, 2) The media is very effective and efficient in conveying information on cube and block material for class V Elementary School, 3) Complex flow and clear, 4) Using characters that are known to students and choosing colors that can arouse students' learning motivation and 5) Animated videos discussing the material for cubes and blocks for class V Elementary School.

CONCLUSION

The conclusion obtained from this research is the use and utilization of learning media such as 2D animated videos can be applied by teachers so as to create an effective teaching and learning process. It can also be concluded that the 2D animation learning media for cube and block material in class V mathematics subjects is said to be successful or very positive in supporting the learning process by giving very good responses. With the use and development of 2D animation learning media is expected to have a positive impact on students. And with the existence of 2D animation learning media, this is very much needed in schools because it can be a medium that can assist teachers in delivering learning materials.

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