

ANALYSIS OF MATHEMATICS CONCEPTS IN THE VIDEO “LEARN NUMBERS WITH DR. PANDA”

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Abstrak

Penggunaan teknologi dalam menyampaikan materi pembelajaran sangat bagus. Seperti Media pembelajaran berbasis video sangat membantu dalam pembelajaran. Karena dalam video pembelajaran yang ditampilkan dilengkapi dengan suara, gambar dan animasi yang dapat membantu peserta didik lebih termotivasi dalam pembelajaran. Penelitian ini bertujuan untuk menganalisis isi dari video animasi “Learn numbers with Dr. Panda”. Motivasi peserta didik dalam penelitian ini ditinjau dari penggunaan video belajar oleh pendidik dalam pembelajaran. Apakah dalam animasi tersebut terdapat pembelajaran mengenai matematika, apakah animasi tersebut dapat mengedukasi anak-anak. Penjumlahan dan pengurangan dalam matematika yaitu operasi bilangan merupakan materi dalam pembelajaran matematika yang ada pada tingkat sekolah dasar sejauh ini peserta didik hanya diperkenalkan dengan materi yang diajarkan guru melalui papan tulis lalu dicatat dan diberi tugas tanpa tau apa yang dipelajari. Sehingga hasil belajar siswa menurut karena tingkat pemahaman peserta didik yang rendah. Untuk mengatasinya maka diterapkannya multimedia interaktif karena multimedia interaktif adalah salah satu pemanfaatan teknologi yang menggunakan gambar, suara, audio dan berbagai animasi menarik. Melalui multimedia interaktif siswa dapat mencari tahu sendiri materi yang akan dipelajari dan lebih mudah dipahami oleh peserta didik dan dapat lebih memahami konsep materi yang sulit dimengerti. Serta media pembelajaran berbasis video juga sangat praktis untuk mudah dipahami oleh peserta didik. Penelitian kali ini menggunakan pendekatan kualitatif dengan metode analisis isi. Sumber dari data penelitian yaitu video animasi “Learn numbers with Dr. Panda”. Hasil dari penelitian ini menunjukkan bahwa video animasi Dr. Panda dapat menjadi tontonan yang mengedukasi untuk anak-anak dan di dalam animasi juga terdapat pembelajaran matematika mengenai penjumlahan, pengurangan dan mengajarkan kerja sama serta saling berbagi.

Abstract

The use of technology in delivering learning materials is very good. As video-based learning are very helpful in learning. Because the learning videos shown are equipped with sound, images and animations that can help students be more motivated in learning. This study aims to analyze the contents of the animated video “Learn Numbers” by Dr. Panda. Student motivation in this study was viewed from the use of video lessons by educators in learning. Does the animation contain learning about mathematics? Can animation educate children? Addition and subtraction in mathematics, namely number operations, is a material for learning mathematics at the elementary school level. So far, students have only been introduced to the material taught by the teacher through the blackboard and then recorded and given assignments without knowing what was learned. So that student learning outcomes according to the low level of understanding of students. To overcome this, interactive multimedia is applied because interactive multimedia is one of the uses of technology that uses images, sound, audio and various interesting animations. Through interactive multimedia, students can find out for themselves the material to be studied and it is more easily understood by students and can better understand the concept of material that is difficult to understand. And video-based learning media are also very practical to be easily understood by students. This research uses a qualitative approach with content analysis methods. The source of the research data is the animated video “Learn Numbers with Dr. Panda”. The results of this study indicate that Dr. Pandas can be an educational show for children and in the animation there is also mathematics, learning about addition, subtraction and teaching cooperation and sharing.

INTRODUCTION

Education is an important factor in supporting a child's way of thinking. In order to create a nation that is smart, peaceful, open and democratic. Ki Hajar Dewantara defines education as an effort to advance a child's mind so that it is in harmony with nature and society. Mathematics is one of the strong drivers of learning in the world. Mathematics must be given to various levels of education in order to think logically, systematically and critically, the ability to acquire and manage mathematics in order to survive in changing circumstances. Mathematics is formed from human experience empirically. Everyday life is very dependent on mathematics because the ability to use mathematics is an important requirement for mankind. This mathematical concept plays an important role in solving problems in human life. Mathematics is not only about counting but also activities in solving problems and studying patterns and relationships. Mathematics has a very important role to help solve problems in everyday life. The concept is an aspect contained in learning mathematics. If students do not understand the concept, it will be difficult for them to go to a higher learning process. Understanding the concept is one of the keys to learning. The ability to understand mathematical concepts is an important part of learning mathematics.

Learning media is very important to support the learning process. One of these learning media is animated videos where video media is usually used by teachers to support the material to be delivered. With animated videos it is hoped that it can influence students' understanding of the material to be discussed and affect student assessments. Animation is a moving image of a collection of objects whose movement time has been set. In today's era, most children already have cell phones and are able to use social media such as YouTube and Instagram. Therefore we need an educational show for children. Parents need to choose shows that are appropriate and educational for children. Television or YouTube that children watch can influence the formation of children's character, for this reason it is necessary to monitor what children watch.

Video media tends to make it easier for students to remember and understand lessons because it does not only use one type of sense, because video is media that uses audio-visual or media that uses the senses of eyes and ears to see and hear. Interesting learning videos can attract students' attention because videos are suitable for explaining abstract or difficult events to describe. The development of videos with animated structures through a contextual approach as a complete teaching material medium is quite effective and efficient with the hope that it will increase students' understanding of mathematical concepts. The animated video contains funny and colorful pictures so students are happy and focused on learning material. Teachers can also play an important role in building the character of children in schools through educational media. where this video learning media really helps the teacher to convey the material well. Video is an electronic media that can combine visual and audio technology together to produce interesting shows. The choice of video as a medium for disseminating something new can be packaged in various forms, for example using text and music

This time the researchers discussed an animated video entitled "Learn numbers Dr. Panda math concept" which relates to number operations to find out whether the animated video is educational or not for children to watch. In the presentation of the material above, problem solving is needed, namely innovative and creative animated videos. The results of the study state that learning through animated videos is effectively used in the learning process because it is easier for students to understand. Learning with the help of animated video media has higher success because students directly capture material through 2 senses namely seeing and hearing.

RESEARCH METHOD

This research uses a descriptive method. The method used is "content analysis". The main source of data for this research is an animated video entitled "Learn numbers with Dr. Panda" which aired on the YouTube platform. There are two variables studied, namely (1) the use of learning videos (2) the learning outcomes of students after watching the videos.

RESULTS AND DISCUSSION

Results Of Research

In this era, with the existence of increasingly advanced technology, learning media is also increasing and is widely used in the world of education. The use of learning media used in education is very helpful for teachers in conveying material, one of which is the media used is YouTube videos to make it easier for students to understand the material. Computer-based learning media or videos played on YouTube are called learning multimedia. Learning multimedia is an element that is combined into a single unit that is useful for learning. According to Robin and Linda in Darmawan (2013) stated that Multimedia is a presentation that combines images, video, audio and animation. Multimedia learning media really helps learning where multimedia can integrate media into other communication media that are similar to interactive media.



Discussion

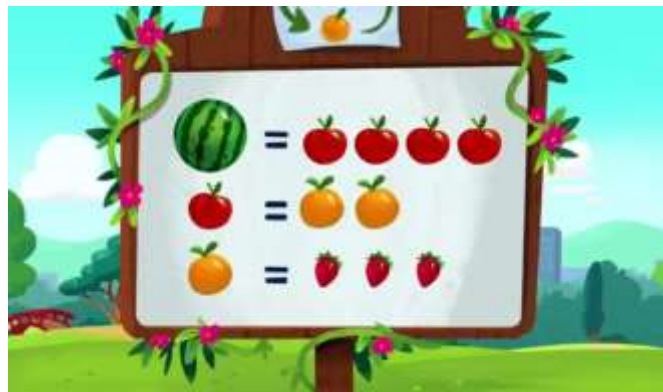
This chapter discusses the research methods and phenomena that we got from the animated videos that we analyzed together. In this animated video entitled "Learn

Numbers With Dr. Panda " it discusses number operations, namely addition and subtraction.

a. Opinions of students and teachers on the use of learning videos

With the learning videos of students and teachers it is very helpful in learning activities and conveying material and students can also more easily understand problem solving in questions. Video learning media is also learning through a base learning approach where learning activities are assisted by projects as the medium. Using learning media through animated videos is very useful for improving students' cognitive learning outcomes. Based on the observations we made, we saw that listening skills in delivering material were not optimal because the learning media were still too simple, such as discussions and lectures. From the journals that we analyze, students are more easily motivated and easier to understand material if the delivery of the material is through something interesting, students will find it easier to focus on what the teacher is conveying because the learning media used is creative and interesting . This learning media can also be done online or offline, but it can be constrained if students and parents don't know how to access these learning videos and there is a lack of facilities in the form of cellphones and computers to help access learning media on the internet.





b. Improved learning outcomes for learning videos

Learning media developed in the analysis of learning videos entitled "Learn Numbers WithDr.Panda". This learning animation video media can improve children's cognitive development so that it is easier to understand the material because the material is conveyed through something interesting so that students solve the problems given more easily and actively. According to smaldino , Lowther & Russel (2012: 7) the media used in learning greatly contributes to learning.Because the media used is a medium of communication and information that is important to help deliver the material.The source of information is the teacher's role in conveying information and students as recipients of information.Therefore the learning media used plays an important role in increasing the creativity of students in learning.Harison& Hummel (2010: 21) argued that animated videos can add insight and competence of students to various kinds of teaching materials.Animated videos have the advantage of helping students understand abstract concepts.Because students at the elementary level are styl I at the concrete operational level where students will more easily understand information that is concrete than abstract.

In addition, animated videos can also be used as a medium for building children's character because in learning animation videos there is a lot of knowledge and learning that is beneficial for the development of children's knowledge. Learning with animated video media involves the emotional development of children so that students are expected to be internalized in the affective and psychomotor aspects of students which are part of the student's personality. That way the attitudes and knowledge of children will develop properly and encourage students to be responsible, so that they have the power to help characterize a child's behavior.

Animated video learning media has two positive and negative impacts. The positive impact that can be taken is that students can more easily understand the material presented. And students' understanding is easier to develop for testing in problem solving and teachers will be helped by the presence of additional media as projects used. Students will get a lot of understanding and development in the video learning that is used, one of which is the development of children's character and

cognitive. The negative impact of using videos on YouTube is very influential on the development of child psychology, namely children will become more irritable and will become addicted to gadgets. In elementary schools, children's development will be fast, so parents and teachers must better regulate children's internet use without adult guidance. Children will use gadgets in other ways, such as online games.

CONCLUSION

Based on the results of the research that has been done, it can be seen that the animation "learn numbers with Dr. Panda "There are lots of lessons that can be taken such as learning to share and help each other as well as learning mathematics such as addition, subtraction and exchange. These animations are great for children to watch as they educate and help children learn.

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