



BENEFITS OF AUGMENTED REALITY TECHNOLOGY TO INCREASE STUDENT CREATIVITY IN LEARNING ARTS AND CULTURE IN CLASS 2 SD 1 GAMONG

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Abstract

Technology is now increasingly seeping into the realm of life, including the world of education, a challenge to remain relevant with increasingly urgent developments. Augmented Reality (AR) technology has emerged as an interesting and innovative tool for exploring the creativity of elementary school children. This research is expected to provide in-depth insight into the potential of using AR in increasing children's creativity through arts and culture learning. This research uses qualitative methods which are carried out using a case study strategy, data collection techniques in this research are through observation and interviews. The data that has been collected will be analyzed qualitatively to find themes and patterns related to the use of Augmented Reality (AR) technology in increasing student creativity. The results of data analysis will be interpreted to find out how AR technology can increase student creativity in arts and culture learning. Augmented Reality (AR) provides benefits to students through arts and culture learning, namely: providing stimulation of student creativity, providing a pleasant learning experience, increasing systematic and analytical thinking skills, increasing motivation and interest in learning. Augmented Reality (AR) in education has great potential to improve the quality of learning, especially in arts and culture subjects. By using AR, students can interact directly with digital objects projected into the real environment, improve systematic and analytical thinking skills, and increase motivation and interest in learning.

Keywords: *Technology, Augmented Reality, Arts and Culture education, Elementary School*

INTRODUCTION

Technology is now increasingly seeping into the realm of life, including the world of education, a challenge to remain relevant with increasingly urgent developments. Education is the most important foundation in forming a future generation that is strong and has quite high

competitiveness, however, education is no longer about where knowledge is transferred from teacher to student, but also about creating a creative and innovative learning environment. According to (Annisa, 2022) Education is an effort to create an atmosphere of learning and learning so that students actively develop their potential to have

religious spiritual strength, self-control, personality, intelligence, noble morals and the skills needed by themselves and society. According to (Dodi, 2019) Education is a means to advance all areas of social life in Indonesia, including the economy, society, technology, security, skills, noble morals, prosperity, culture and national glory.

In this context, it is important to recognize the role of arts and culture learning in the development of elementary school children's creativity. The role of arts and culture learning can improve students' abilities to become creative, innovative and independent people. Because in creativity, students are introduced to all kinds of ways to make the learning process easier and more enjoyable (Agustin, 2021). Arts and culture are not only tools for developing artistic skills, but also as means for broadening world views, increasing empathy, and stimulating imagination. However, with the development of technology, conventional approaches to teaching arts and culture may no longer be attractive enough for a generation growing up in the digital era.

Augmented Reality (AR) technology has emerged as an interesting and innovative tool for exploring the creativity of elementary school children. Because Augmented Reality (AR) has unique abilities that can influence students' learning experiences with augmented technology, especially when teachers teach abstract concepts, reality takes precedence, this Media (AR) is expected to attract students' interest (Nirwanto et al., 2021). Augmented Reality (AR) is a technology that combines two-dimensional (2D) or three-dimensional (3D) virtual objects into a real three-dimensional environment and then projects these virtual objects in real time (Sari et al., 2022). According to (Anila & Adri, 2022). Augmented reality is the exploration of 3D objects and a combination of virtual reality and the real world. Make virtual objects into two dimensions (2D) or 3 dimensions (3D), as if they look real and are integrated with the

real world. Meanwhile, according to (Wiharto, Aries Budihartanti, 2017). Augmented Reality combines the real world with digital elements, creating an immersive and interactive learning experience. AR is two types of interactive technology and is registered in 3D and combines real and virtual objects. By leveraging AR technology, schools can create inspiring learning environments, allowing students to explore art and culture in new and exciting ways.

In this article, writer will explain the benefits of Augmented Reality (AR) technology to increase student creativity in arts and culture learning in class 2 of SD 1 Gamong. Writer will discuss in depth how AR technology can enhance student learning experiences as well as increase student creativity, provide examples of practical implementation, and evaluate the long-term benefits of this approach on children's overall development. It is hoped that the results of this research will provide in-depth insight into the potential for using AR in increasing children's creativity through arts and culture learning in elementary schools, as well as providing practical guidance for teachers and policy makers in integrating this technology into the elementary school curriculum.

METHOD

This research uses a qualitative method which is carried out using a case study strategy, data collection techniques in this research are through observation and interviews. Observations were carried out to monitor students' interactions with Augmented Reality (AR) media and how they used this technology in the learning process. Interviews were conducted with teachers and students, to understand their experiences regarding the use of AR in arts and culture learning in grade 2 at SD 1 Gamong. The data that has been collected will be analyzed qualitatively to find themes and patterns related to the use of Augmented Reality (AR) technology in increasing student creativity. This analysis will help in understanding how AR

technology can increase student creativity in arts and culture learning. The results of data analysis will be interpreted to find out how AR technology can increase student creativity in arts and culture learning. This interpretation will help in determining whether AR technology is effective in increasing student creativity and how AR technology can be further applied in arts and culture learning.

RESULT AND DISCUSSION

In the current education and learning process, Augmented reality technology plays an important role in conveying information through interactive learning media with visual displays supported by audio and video (Aditama et al., 2021). Interactive Learning Media is an integration of digital media which includes a combination of electronic text graphics, moving images and sound, into a highly structured digital environment that can make people interact with data for the right purposes (Arindiono & Ramadhani, 2013). Meanwhile, according to (Ramadhani et al., 2023). interactive learning media is learning that combines computer technology or electronic devices to present learning content to students. Because the existence of interactive media or combining learning with technology can increase students' enthusiasm for learning, one of which is the application of Augmented Reality in arts and culture learning.

The application of Augmented Reality (AR) in learning has advantages, including: as a tool for educational media that has a big impact. Where students can learn the material more easily and more fun than just using the lecture method (Nistrina, 2021). The application of Augmented Reality (AR) in arts and culture learning in elementary schools can bring a fun and impressive learning experience for grade 2 students at SD 1 Gamong. For example, students can use the Augmented Reality (AR) application to explore works of art or regional arts such as dances, traditional musical instruments, etc. straight from

their class. They can manipulate virtual objects, such as changing colors, or adding elements according to their creativity and imagination. Apart from that, Augmented Reality (AR) can also be used to enrich cultural arts performances in the form of theater or dance. For example, kids can choreograph a traditional dance and use AR to add a virtual background that matches their dance theme. This not only enhances their creativity but also gives them the opportunity to understand and appreciate cultural heritage.



Figure 1: Augmented Reality Traditional Musical Instrument Angklung

They can recognize and describe what the angklung musical instrument is, where it comes from, how to play it, etc., through an application on a smartphone



Figure 2: Augmented Reality Traditional Musical Instruments

Here they can also learn augmented reality via smartphone about other musical arts, such as gamelan, ketipung, saluang and many more.



Figure 3: Augmented Reality
Traditional Dance

Apart from musical instruments, they can also learn traditional Indonesian dance through Augmented Reality via smartphone, such as knowing the name of the dance and the region it comes from and so on.

Augmented Reality (AR) can provide benefits to students through arts and culture learning, namely:

1. Providing stimulation of student creativity

Augmented Reality (AR) can provide an interactive and immersive platform for students to express their creativity. Benefits of Augmented Reality technology in learning activities media combined with other types of media is able to make learning activities more interactive and fun because it can accommodate three different learning styles (Gunawan, 2020). They can create their own works of art or adapt existing works of art to their liking.

2. Provide a fun learning experience

Compared to conventional methods, the use of Augmented Reality (AR) technology can provide more interesting learning for students. Because they are actively involved in learning here, they can increase information retention for students. Even though Augmented Reality (AR) is not included in virtual technology, it can be connected to the real world. This allows students to stay connected to the surrounding reality while learning to explore diverse arts and culture concepts. The application of Augmented Reality technology in learning activities can be

used to train students' skills in using media Latest information and technology (Vari & Bramastia, 2021).

3. Improve Systematic and Analytical Thinking Ability

AR can help improve students' systematic and analytical thinking skills in a more interactive and interesting way. This can improve students' abilities in analyzing and solving complex problems, because students interact directly with digital objects projected into the real environment. This interaction can increase student engagement and increase their awareness of the material being studied.

4. Increase motivation and interest in learning

Attractive and lively visuals through Augmented Reality (AR) can foster students' curiosity about a particular field. Or at least, they will find that the subject area is no longer boring. Teachers will be greatly helped by learning assisted by Augmented Reality technology because they don't need to bother telling students to study. A high sense of curiosity is more than enough for students to diligently study continuously.

Although the potential of Augmented Reality (AR) in arts learning is very promising, there are also several challenges that need to be overcome. One of them is device accessibility. Because not all elementary schools have sufficient equipment to widely adopt this technology. Apart from that, teacher training is also needed so that they can integrate Augmented Reality (AR) into synchronization effectively. Teachers need to learn and understand Augmented Reality (AR) technology and how to integrate it into their curriculum. This may require additional training and time to master the necessary technology skills. Because in this digital era, teachers as educators must be able to answer future challenges. Teachers are required to have digital competence with optimal mastery

in order to balance students in this digital era with their various characteristics (Sitompul, 2022). The aim is so that the learning process can run more effectively and efficiently because teachers are able to teach more creatively using technology. Additionally Integrating AR into the curriculum requires careful thought to ensure that its use is relevant and supports learning objectives. Teachers need to be able to adapt Augmented Reality (AR) content to the subject matter being taught.

CONCLUSIONS

Augmented Reality (AR) in education has great potential in improving the quality of learning, especially in the subject of arts and culture. By using AR, students can interact directly through digital objects projected into a real environment, improve systematic and analytical thinking skills, and increase motivation and interest in learning. AR can also help students understand and appreciate cultural heritage in a more interactive and fun way. However, to integrate AR into the curriculum, teachers need to learn and understand AR technology and how to integrate it into their curriculum, as well as ensure that its use is relevant and supports learning objectives.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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