CHARACTER DESIGN OF 2-DIMENSIONAL ANIMATION ABOUT NATURAL DISASTERS FOR 10-12 YEARS OLD

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ABSTRACT

This research aims to design a 2-dimensional animation that focuses on education about natural disasters, especially for elementary school children aged 10-12 years. By utilizing design principles, this animation is developed to provide information that is easy to understand and attracts children's attention. The design method involves a literature study on the types of natural disasters, learning characteristics of elementary school children, and animation principles. After that, the storyboard process and character development were carried out in accordance with the needs of children's education about natural disasters. The result of this research is a 2-dimensional animation designed creatively and informatively, presenting material about natural disasters such as the types, and how to take shelter. This animation is expected to increase elementary school children's understanding of the dangers of natural disasters, as well as provide basic knowledge about actions that can be taken to reduce the risk and damage caused by natural disasters.

Keywords: *Animation, Natural Disaster, Character Design, Mitigation, Elmentary School.*

INTRODUCTION

Indonesia is located on the 3 main plates of the world, namely the Eurasian Plate, the Indoaustralian Plate and the Pacific Plate, the position of Indonesia's location is known as the Ring of Fire region (Pacific Ring of Fire) stretching for 40,000 Km. (Utomo, Purba, 2019) The Ring of Fire is one of the aspects that can make Indonesia have a very beautiful nature, the Ring of Fire is an area formed from a series of 452 volcanoes with high seismic activity. The zone passed by the Ring of Fire is known to be very prone to natural disasters (Mawuntu, 2020). Natural disasters that occur in Indonesia consist of several categories, namely earthquakes, volcanic eruptions, floods, landslides, tornadoes, and tsunamis. Based on the magnitude of the impact of natural disasters on people's lives, community preparedness must be realized immediately so that community anticipation of the impact of natural disasters can be carried out. (Pudjiastuti, 2019) Therefore, learning natural disaster mitigation in elementary school children is very strategic to be implemented. This is because knowledge of natural disaster

mitigation that is taught from an early age increases the ability of these children to be vigilant before natural disasters, to save themselves during natural disasters, and to know activities that can and cannot be done after natural disasters (Qurrotaini, 2020). However, the material provided to elementary school children aged 10-12 years has not been able to increase good understanding. This is because the educational media used is not interesting enough.

Media in an educational perspective is a very strategic instrument in determining the success of the teaching and learning process. Because its existence can directly provide its own dynamics to students. The word learning media comes from the Latin "medius" which literally means "middle", intermediary or introduction. In Arabic, media is an intermediary or messenger from the sender to the recipient of the message. (A Arsyad, 2010).

The use of media technology that can have a positive impact, in other words, the use of multimedia or animation as a means of learning and a means of a teacher in carrying out the activity process. Thus interactive

multimedia or animation, the process of activities in the classroom becomes more interesting and children can play while learning. The benefits of animation in the activity process, animation is like other media that has a role in the field of education, especially to improve the quality of an activity process, the benefits of animation include first being able to convey messages thoroughly with visual and dynamic, second animation is able to attract children's attention very easily, third animation can present more fun media, fourth visually and dynamically provided by animation technology is able to facilitate the introduction process by demonstration. (Maghfiroh, Suryana, 2021).

Based on the questionnaire respondents that I have distributed to children aged 10-12 grades 5-6 SD regarding natural disasters, it shows that there are still many children aged 10-12 years who do not know very well about natural disasters, from the percentage it is known that 64.2% (77/120 respondents) do not know what is meant by natural disasters while 35.8% (43/120 respondents) already know what is meant by natural

disasters. Based on the research conclusions, it can be emphasized that children in the age range of 10-12 years need learning related to natural disasters delivered through media that can be easily accepted by them. There are various types of learning media that can be applied to children, and one of the prominent choices is the use of 2-dimensional animation media. Based on the background, the problem that arises in this research is how to design a 2-dimensional animated character design about natural disasters for children aged 10-12 years.

METHODOLOGY

The author uses a combination research method according to Subagyo (In Indrawan and Jalilah, 2021) The combination research method is a type of research from two research methods that are combined including quantitative and qualitative research. combined include quantitative and qualitative research. This research can also be said as research with data analysis, then integrated in the form of findings and finally drawing a conclusion.

The qualitative method involves interviews, while the quantitative

method uses questionnaires. To identify the problems collected through both methods.

Interview

The primary data collection that the author did was to conduct interviews with several sources related to the title of the author's design related to natural disaster learning and also the animation that will be used in this design.

Questionnaire

The author distributes questionnaires to elementary school students aged 10-12 years or grades 5-6. The data taken is used to find out how much the elementary school students understand about natural disasters and how interested the elementary school students are in learning through animated learning media. This data collection was carried out by distributing questionnaires in the form of a student's Whatsapp group googleform shared by the elementary school principal and also shared by the author through social media.

Observation

In this design, the author also directly observes the learning methods of elementary school children. This is useful to find out how much

understanding if elementary school children are given material through animated video learning media.

RESULTS AND DISCUSSIONS
Visual Concept

In this design, the author uses a flat image style, which is the result of data research and questionnaire collection that the author has done. The choice of this image style is because the image style gives a simple, modern impression and can be seen clearly.

Visual Concept of Character Design

In the design of a 2-dimensional animation entitled "Berlinduuuung! Ada Bencana Alam" has 2 characters that will fill the storyline of this 2-dimensional animation. The following is a visual reference for the characters:

1.) Bara

Bara's character in this 2-dimensional animation is inspired by the visual of a child actress and model named Muhammad Radja Nasution. Bara is described as having a vibrant, brave, and smart character. Bara also has the special ability to move quickly.

Picture 1. Bara's visual reference

2.)   Ranu

Ranu is a character who has a role as Bara's best friend. Ranu's character in this story is depicted with a white cat, where Ranu is described as having a curious, cheerful, and timid personality. The mixture of white anggora cat and Disney cat character named Marie Katie Guppy Aristocat is the right description and inspiration with the personality of Ranu's character.
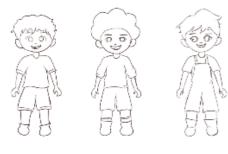

Picture 2. Ranu's visual reference

Character Design

Character design is a process where the illustrator assembles the appearance, aesthetics, personality, and physical appearance of a character. These characters can take the form of humans, animals, monsters, and so on and can later be used to work on other media such as comics, games, or movies. (Hahury and Wahyudi, 2022).

The following is a visual depiction of the character designs that have been made from the visual references that have been made:

1.) Bara Character Design

Bara's character design produces 3 alternative characters and also 1 selected character. Bara's character design has visual characteristics that have brown hair, wear shirts and shorts, this adjusts the situation in the storyline that is about adventure.
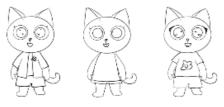

Picture 3. Alternative Bara character

Picture 4. Bara's selected character

2.) Ranu's Character Design

Ranu's character design resulted in 3 alternative characters and also 1 chosen character. Ranu has visual characteristics that have blue eyes, white fur, and wears human-like clothes.

Picture 5. Alternative Ranu character

Picture 6. Ranu's selected character

CONCLUSION

Based on the results of observation and also data search, has a visual result of 2 character designs that will fill the storyline of 2-dimensional animation "Berlinduuuung! Ada Bencana Alam". With the characters that have been selected, it is hoped that they can help provide good material delivery and can also attract the attention of the audience.

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