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# Designing Moral and Character Education Animation with Frame by Frame Approach

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#### **Abstract**

Moral principles and character development play a pivotal role in our daily lives. In light of this, the author has conceptualized a 2D animation within the action genre to effectively communicate these values to the audience. Employing the frame-by-frame technique as the primary foundation for crafting this 2D animation allows for more imaginative and expressive movements, enhancing the characters' expressiveness. Each frame serves as a key element in constructing a compelling narrative, reinforcing the moral values the author seeks to impart. Consequently, the animation serves as both a source of entertainment and a potent medium for delivering moral messages, creating memorable characters for the audience. The research methodology applied in this study follows the MDLC (Multimedia Development Life Cycle), encompassing six stages: concept, design, material gathering, production, testing, and distribution. The culmination of this research is a 2D animated video designed to convey moral values and character development, complemented by a captivating storyline.

# **Keywords:**

Animation, MDLC, Moral Values

#### Introduction

Animation serves as a creative communication medium, allowing animators to express creativity in both movement and visual aspects [1]. It involves a rapid display of images, creating an illusion of motion and change [2]. Animation breathes life into images by presenting them in a sequence [3]. Notably, anime, a popular animated genre, incorporates colored visuals and narrates diverse stories produced in Japan [4]. Anime series, particularly those in the action genre, captivate contemporary audiences due to their compelling visual graphics, sound effects, and engaging storylines.

The frame-by-frame technique is an animation method that combines a collection of different images to create a seamless animation [4]. The smoothness of the animation depends on the number

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of frames per second used, with more frames yielding smoother results, while fewer frames may result in a less fluid and choppy animation.

Moral values, integral to humanity's actions, pertain to individuals' ethical conduct in life [5]. Moral values are crucial for fostering harmonious and peaceful relationships among people, forming the foundation of human life [6]. Therefore, moral education is deemed essential, particularly for early childhood development [7].

The broad audience reach of animated series, spanning from children to adults, reflects a collective fondness for animation with diverse motivations. Regardless of individual reasons for watching animation, a careful understanding of the characters and their messages can yield moral and character values. The impact of animated series is significant, embedding moral values and character traits within storylines, character personalities, and more. For instance, action anime often instills values such as perseverance in pursuing one's dreams, discipline in the journey to success, loyalty in all circumstances, and more.

#### **Literature Review**

In a previous study conducted by [8], the focus was on the character education values in action-genre anime. The aim was to identify these character education values within the anime. The method employed was a qualitative descriptive approach. The research revealed that in one action-genre anime, various character values such as confidence, discipline, hard work, independence, religiosity, friendliness, resilience, social concern, and responsibility were evident.

Another study by [9] involved the development of a 2D animated video using the Multimedia Development Life Cycle (MDLC) method. The outcome of this research was a 2D animated video featuring the story of Malin Kundang.

[10] conducted a study on the perceptions of 10-year-old children regarding the animated film Upin and Ipin. The research employed a descriptive qualitative approach, and the results indicated that children in this age group enjoyed the film due to its engaging storyline and moral messages. Values such as loyalty, social concern, discipline, and collaboration presented in the film were well-understood by the young audience.

[11] explored the enhancement of cognitive learning outcomes through the use of Aurora 3D Animation Maker in a Genetics course for Biology Education students in IKIP Budi Utomo Malang. The qualitative approach utilized in the study demonstrated that applying Aurora 3D Animation Maker improved the cognitive learning outcomes of the Biology students.

Subsequently, [12] conducted a study developing a 2D animation based on motion graphics as a learning medium for the Professional Ethics course, using the MDLC method. The outcome was the creation of a 2D motion graphic-based animation for the Professional Ethics course.

In this research endeavor, the author aims to craft a 2D animated video using the Multimedia Development Life Cycle (MDLC) method, drawing inspiration from previous studies conducted by [9], [12] and [13]. The thematic focus revolves around exploring the moral values depicted in 2D animations, echoing the works of [8] and [10].

#### **Research Methods**

This research will commence with a literature review where the author will seek sources from various types of articles and journals to serve as references for the study. Following that, the author will formulate the problem to be addressed in a more detailed and structured manner. The subsequent stage involves the development process using the Multimedia

Development Life Cycle (MDLC) method. In this phase, the author will design a 2D animated video concerning the moral values and characters of action-genre animated series. After completing the development stage, the author will conduct a qualitative approach test on the 2D animated video, distributing questionnaires to 30 animation enthusiasts. Subsequently, the author will analyze the collected data based on the aforementioned stages. Data analysis will entail summarizing questionnaire responses from animation enthusiasts who have watched the designed 2D animated video. All activities undertaken will then be documented in the report.

Within animated series, there are several aspects that make them exciting and engaging, one of which is the intriguing storyline. However, in action-genre animated series, many individuals are often unaware of the moral messages and characters conveyed in these animations. Addressing this issue, the author will design a 2D animated video summarizing and explaining the moral values and characters present in action-genre animated series using the Multimedia Development Life Cycle (MDLC) method. Following the development phase, the author will conduct qualitative testing with 30 animation enthusiasts.

To conduct this research, the author will employ the Multimedia Development Life Cycle (MDLC) method, comprising six sequential stages: concept, design, material collection, creation, testing, and distribution. In the concept stage, the author will design a 2D animated video regarding the moral values and characters in action-genre animated series, aiming for the audience to comprehend the moral messages and characters effectively. During the design stage, the author will craft a storyboard to ensure a structured and organized 2D animation design process. In the material collection stage, necessary materials such as background music and sound effects will be gathered to enhance the appeal of the designed animated video. In the creation stage, the author will produce a 2D animation using Adobe Fresco, followed by editing the video using Adobe Premiere Pro to incorporate background sound and sound effects. During the testing stage, the author will perform data testing using alpha testing methods, evaluating if the animation runs smoothly, if the animation shots align with the designed storyboard, and if the video playback on computer/smartphone applications proceeds seamlessly. In the distribution stage, the completed video animation will be exported in MP4 format and subsequently uploaded to the digital platform YouTube.

After distributing questionnaires to 30 animation enthusiasts, the author will analyze the obtained data using content analysis, summarizing responses to measure the effectiveness of the 2D animated video concerning the moral values and characters of action-genre animated series on the understanding of animation enthusiasts regarding the moral messages and characters within action-genre animated series. The following is a collection of questions to be posed in the questionnaire.

No.	Question
1	Is the presentation of animation within the designed video captivating?
2	Do you believe that this animated video successfully conveys the moral messages and characters embedded in the storyline? Please elaborate!
3	Can you identify specific moral values conveyed through this animated video?
4	Do you have any additional perspectives you would like to share regarding this animated video?

5	Do you feel more inspired by the characters in the story after watching this animation?
6	Would you recommend this animated video to your friends, family, or acquaintances?

#### **Results and Discussion**

#### **Data Collection**

Based on the results of the data collection conducted, the presentation of animation in this video is highly engaging, and the animated character movements are fascinating to observe. The color choices made are also very appealing. The designed 2D animation is considered successful in conveying moral messages and character traits because the main characters and storyline clearly depict moral values. The main character in the story also exhibits character traits such as hard work and discipline in training. With a perfect harmony between thrilling actions and profound moral and character messages, this animation is deemed to be an effective medium for conveying moral values and character traits. Several strong moral values are identified in the designed 2D animation, with courage being one of them. This value is embodied by the main character, who displays extraordinary courage in facing challenges and conflicts. Additionally, the main character exhibits a resilient spirit when facing failures in training until eventually succeeding. The animated video succeeds in creating a comprehensive experience. Besides the entertaining aspects of spectacular actions, the animation provides a deep reflection on moral values and character. It integrates moral messages into the storyline without compromising the integrity of the actions, striking a captivating balance between entertainment and education. The characters portrayed in this animated video are highly inspiring due to their admirable qualities, such as resilience during challenging times and discipline in their pursuits. According to the opinions of animation enthusiasts, the designed animated video is very satisfying, with well-crafted visuals, audio, and storyline. Consequently, they would recommend this animated video to their friends, relatives, and acquaintances.

## **Analysis Results**

In the design phase, a storyboard will be created to serve as a guide for designing the animated video.



Picture 1. Storyboard 1

Animated intro with a view of grass being blown by a gentle breeze.



## Picture 2. Storyboard 2

Then it continues with a scene of the two main characters preparing to fight their enemy.



## **Picture3. Storyboard 3**

In the next scene, it continues with a scene of the main character fighting his enemy.



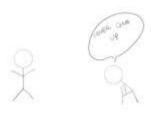
Picture 4. Storyboard 4

Then, we enter a scene where the main character loses unexpectedly.



## Picture 5. Storyboard 5

Then, the main character remembers his past which gives him more power.



Picture 6. Storyboard 6

Followed by a scene where the main character, who never gives up, rises again to face his enemy.



**Picture7. Storyboard 7** 

Continue to the scene where the main character fights again with his enemy.



## Picture8. Storyboard 8

Then it ends with a scene where the main character succeeds in defeating his enemy because of his tenacity and unyielding nature.

At the creation stage, the author will display views of the 2D animation results that have been designed.



Picture1. Scene 1

In the video intro, it starts with a view of grass being blown by a gentle breeze.



Picture 2. Scene 2

Then in the next scene, the figure of the enemy in the animated story appears, accompanied by eerie music.



Picture3. Scene 3

Followed by the appearance of the main character in the main story accompanied by eerie music.



Picture 4. Scene 4

Then, we enter a scene where the characters are taking up fighting stances accompanied by eerie music.



Picture 5. Scene 5

Continue to the scene where the fight is taking place and the main character is fending off blows from the enemy.



Picture6. Scene 6

Then, we enter a scene where the main character is unexpectedly cornered by his enemy.



Picture 7. Scene 7

Continues to a scene where the main character suddenly remembers his past where he always tried hard to continue practicing.



Picture8. Scene 8

Then, we enter the scene where the main character gets back up and fights the enemy again.



Picture9. Scene 9

Then we enter the final scene where the main character is finally able to defeat his strong enemy because of his persistence.

#### **Conclusions**

Based on the conducted research, the author can conclude that 2D animated videos serve as a medium for conveying messages such as moral values and character traits. 2D animated videos not only provide entertainment but also serve as a platform for delivering implicit messages. Moreover, the utilization of animation as a medium for message delivery is deemed more captivating for viewers. The presentation of character movements becomes more engaging, accompanied by creative visual effects. Consequently, it can be inferred that the animation successfully creates a more satisfying viewing experience and holds the potential to attract a broader audience.

### References

- [1] G. L. A. K. Putra and G. P. P. A. Yasa, "Estetika Karakter Animasi Pada Media Komunikasi Sosial Dengan Kategori Audience Remaja," *J. Bhs. Rupa*, vol. 4, no. 1, pp. 10–16, 2020, doi: 10.31598/bahasarupa.v4i1.576.
- [2] B. Syahputra, "Pengembangan Videografi Makanan di Pasar Malam Taiwan Berbasis Research and Development," *J. Inf. Syst. Technol.*, vol. 3, no. 3, p. 28, 2022, doi: 10.37253/joint.v3i3.7330.
- [3] A. W. Sari, I. G. P. Sindu, and K. Agustini, "Pengembangan Media Pembelajaran Animasi 2 Dimensi Mata Pelajaran Bahasa Inggris Kelas X," *Kumpul. Artik. Mhs. Pendidik. Tek. Inform.*, vol. 10, no. 2, p. 100, 2021, doi: 10.23887/karmapati.v10i2.31525.
- [4] W. Pramono, M. Suyanto, and A. Fatah Sofyan, "PERBANDINGAN METODE FRAME BY FRAME DAN EXPRESSION DALAM PEMBUATAN ANIMASI DUA DIMENSI."
- [5] M. Prawiro, "Nilai Moral: Pengertian, Jenis-Jenis, dan Contoh Nilai Moral," Jan. .
- [6] Z. Westri and R. Pransiska, "Analisis nilai-nilai agama dan moral anak usia dini pada film," *J. Golden Age*, vol. 5, no. 02, pp. 221–232, 2021, [Online]. Available: https://doi.org/10.29408/jga.v5i01.3497
- [7] M. Khaironi, "Pendidikan Moral Pada Anak Usia Dini," *J. Golden Age*, vol. 1, no. 01, p. 1, 2017, doi: 10.29408/goldenage.v1i01.479.
- [8] M. Abdillah and L. Septia Dewi Br Ginting, "NILAI PENDIDIKAN KARAKTER DALAM FILM NARUTO," vol. 7, no. 2, 2022.
- [9] N. Putra Tanuwijaya *et al.*, "Perancangan Video Animasi 2 Dimensi Cerita Rakyat Malin Kundang dengan Aplikasi Toon Boom Harmony," 2020.
- [10] E. A. I.; D. S.; R. Susanti, "1246-Article Text-3547-1-10-20220114," 2022.
- [11] R. Riyanto and L. Susilawati, "PENERAPAN MEDIA AURORA ANIMASI 3D MAKER UNTUK MENINGKATKAN HASIL BELAJAR KOGNITIF MAHASISWA BIOLOGI IKIP BUDI UTOMO MALANG," *Edubiotik J. Pendidikan, Biol. dan Terap.*, vol. 4, no. 01, pp. 52–57, Jul. 2019, doi: 10.33503/ebio.v4i01.438.
- [12] A. N. T. Mardiyah Dwi Nastiti , Mustaziri, "Animasi 2D (Motion Graphic) Sebagai Media Pembelajaran Mata Kuliah Etika Profesi," vol. 3, no. 1, pp. 2527–6336, 2021.
- [13] pratama jimmy and Juliantio, "Produk Turunan Kelapa, Video Dokumenter, Ekspor, Kelapa.," vol. 10, no. 3, 2022.