

Enhancing Interactivity in 'Diana & Doa Harian': A 2D Animation Linear Product on Daily Supplications

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1. Product Description

Animation is a method in which figures are manipulated to appear as moving images. In animation, images are digitally drawn or hand-drawn on sheets to be photographed and displayed. The story of Diana's daily life that is suitable for children, which applies simple daily supplications such as the supplication after sneezing, wearing clothes, getting out of the house, looking into a mirror, and when someone comes across a problem. 2D animation video approach can be very useful in teaching, and reminding the children on daily supplications. The Production Methodology that consists of pre-production, production, and post-production phases are being used to analyse, design and develop the product. Adobe Animate, and Adobe Media Encoder are among the software that were used to develop the product. A lot of effort and creativity have been placed in the development of this product. However, a linear product such as this 2D animation product can be enhanced into a non-linear product with the implementation of interactivity into the product. This product is a display of a simple interactivity learning process embedded into a linear product. YouTube is being used as its main platform to make it easier for the users to view the video without having to install new application to the smartphone.

2. Innovation Objectives

- a. To identify the issues and the need to develop a 2D animation on daily supplications.
- b. To develop the content, design, and interactivity for the 2D animation product.
- c. To evaluate the impact of the 2D animation product.

3. Problem Statement

- a. Existing 2D animation mainly focus on embedded moral values without the recitation of specific supplications.
- b. Lack of teaching aids that are clear and interesting to provide understanding related to daily supplications.
- c. Most of the 2D animation videos are without any interactivity because they are in a form of linear product.

4. Authenticity / Novelty

- a. Uses Malay language.
- b. Self-produced characters, backgrounds and props design.
- c. Simple, interactive, user-friendly, fun, and easy to learn concept.
- d. Embedded with multimedia elements.
- e. Embedded with principle of animation.
- f. Embedded with simple interactivity.

5. Implementation Level

Table 1: Production Methodology.

NO.	PHASE	TASK
1.	Pre-Production	Create the story, writing the script, design the characters, background, and props, develop the storyboard, choose the right colour palettes, and record the voice-over.
2.	Production	Create the animation by gathering all the created materials together and produce the scenes by applying the principle of animation such as squash and stretch, ease-in and ease-out, staging, appeal, and solid drawings. This includes painting the backgrounds, creating the individual scenes and character activities, making rough animation, cleaning up the animation (tracing), compositing, and exporting with the help of computer software.
3.	Post-Production	Exporting and rendering the animation frames. Create the transitions, compiling, exporting, video file compression, compositing, visual effects, and color correction are done in this stage. Develop the interactivity components. Test the effectiveness of the video interaction towards instructors and respondents.

6. Uses and Applications

- There are five supplications that are being mentioned in the product and that can be practiced daily, which are supplication after sneezing, wearing clothes, getting out of the house, looking into a mirror, and when someone comes across a problem.
- There are five principles of animation that have been used in the product, which are squash and stretch, ease-in and ease-out, staging, appeal, and solid drawings.
- There are three kinds of interactivity components that are being used in this product, which are the Quick Response (QR) code, link in the description, and link in the comment section.

7. Innovation Product/Project Impact

The 2D animation has given promising impacts towards its viewers through the data collected shown in Table 2 with 25 people as respondents.

Table 2: Impact of the Product.

ASPECTS	VERY GOOD (%)	GOOD (%)
Multimedia elements	32	64
Interesting storyline	56	32
Motivates the viewer to watch again	40	48
Provide useful knowledge	56	40
Benefits the user	40	56

Likert scale, 5-point scales: Very Good (5), Good (4), Acceptable (3), Poor (2), and Very Poor (1).

8. Achievements

This 2D animation product was presented in the Final Year Project and achieved an A+ grade.