



## DEVELOPMENT OF 2D ANIMATION MEDIA AND CREATIVE SUPPORTING MEDIA FOR BASIC ENGLISH LEARNING FOR ELEMENTARY SCHOOL STUDENTS

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### Abstract:

**Purpose:** Basic English learning in elementary schools still largely uses conventional methods such as textbooks and oral explanations from teachers, making it less engaging for students and not fully suited to the learning characteristics of early childhood, which require visual and contextual media. This study aims to design 2D animation media to support basic English learning for third-grade elementary school students, specifically for the Merdeka Curriculum Unit 7 "Is it the Canteen?".

**Research methods:** The research method used was qualitative, using observation techniques for student responses, interviews with class teachers as subject matter experts, and interviews with media experts. The design process involved pre-production, production, and post-production stages.

**Findings:** The results of the study showed that 2D animation was able to increase student engagement, help with understanding vocabulary and interrogative sentence structure, and was in accordance with the principles of visual communication design for elementary school children.

**Implications:** 2D animation media is considered suitable for use as an alternative learning media that is more interesting, interactive, and contextual in introducing basic English in grade 3 of elementary school.

**Keywords:** animation ; elementary schools ; basic english ; supporting media

## 1. INTRODUCTION

English is an international language that plays a vital role in education, technology, and global communication. However, English proficiency in Indonesia remains relatively low, necessitating more effective learning strategies starting in elementary school. Elementary school-aged children are characterized by a more visual, contextual, and interactive learning style, making conventional methods such as textbooks and verbal explanations often less engaging and less conducive to student engagement.

2D animation media is considered capable of providing a more enjoyable learning experience because it combines visual, audio, and narrative aspects. Research shows that the use of interactive animation in foreign language learning can increase the motivation and engagement of elementary school students, while strengthening vocabulary comprehension through simple visualizations[1]. Furthermore, a digital media-based approach has proven to be more appropriate for the Independent Curriculum, which emphasizes contextual learning and real-world experiences. Integrating visual media into the basic curriculum can help students understand sentence structure and abstract concepts through more concrete representations.[2].



The novelty of this research lies in its focus on developing 2D animation media specifically tailored to the Merdeka Curriculum material, particularly Unit 7 "Is it the Canteen?". This unit demands more complex linguistic and cognitive abilities because students not only memorize vocabulary but also understand and respond to interrogative questions contextually. Thus, this research offers a new approach that integrates visual communication design principles with the pedagogical needs of elementary school children, resulting in learning media that is more relevant, interactive, and in line with the latest curriculum developments.

## **2. RESEARCH METHODS**

This study uses a qualitative approach with a focus on designing 2D animation media to support basic English learning in third-grade elementary school. This approach was chosen because it is able to explore learning phenomena in depth through observation, interviews, and narrative analysis. The research respondents consisted of third-grade students of SD Negeri 3 Buahan as the main users of the media, third-grade teachers as material experts, and a media expert who assessed aspects of visual communication design. The sample was determined purposively, namely based on students' active involvement in the learning process, so that a representative picture of responses to animation media was obtained.

Data collection techniques included classroom observations to assess student engagement when using animation, interviews with classroom teachers to assess the material's suitability to the curriculum, and interviews with media experts to evaluate visual communication design principles. The data obtained were then analyzed using a descriptive-narrative method, emphasizing the interpretation of student responses, teacher validation of the material, and design evaluation by media experts. This analysis aimed to generate a comprehensive understanding of the effectiveness of 2D animation media in supporting basic English learning. Qualitative methods enabled researchers to understand students' interactions with learning media more contextually and in-depth [3].

## **3. FINDINGS**

2D animation is the main work in this research, designed to support basic English learning in third-grade elementary school, according to the Merdeka Curriculum Unit 7 "Is it the Canteen?". This media aims to increase student engagement, strengthen vocabulary comprehension, and train the ability to respond to interrogative questions contextually.

### **Pre-Production Stage**

The pre-production stage serves as the foundation for animation design, including character creation and storyline planning.

#### **1. Sketch**

The main character, Omang, is designed in a simple, expressive, and child-friendly style for easy recognition. Visual characters designed with child psychology in mind can increase emotional engagement in learning [4].

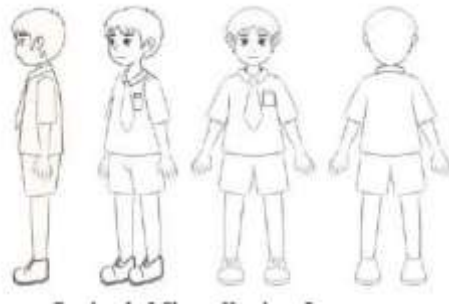


Figure 1. Omang Character Sketch

## 2. Storyboard

Storyboards are created to systematically depict the flow of an animated story, ensuring narrative continuity and alignment with pedagogical objectives. Storyboards in educational animation media play a crucial role in connecting the narrative to pedagogical objectives [5].

### Production Stage

The production phase is the core process in 2D animation development, where the visual and narrative designs prepared in pre-production begin to be brought to life. During this phase, a series of technical activities is carried out, including character coloring, voice recording, and character rigging. Each step plays a crucial role in developing the animation's quality to meet the learning objectives.

#### 1. Character Coloring

Coloring is used to emphasize the visual identity of the characters and make them more appealing to students. The choice of bright, contrasting colors is intended to align with the characteristics of elementary school-aged children, who are more responsive to strong visuals. The use of bright colors in learning media can improve focus and information retention in young children [6].



Figure 2. Character Coloring

#### 2. Sound Recording

Audio narration was recorded to support the storyline and strengthen students' engagement with the material. The voice-overs used were clear, friendly, and

appropriate for children. Integrating appropriate audio into educational animations can enhance students' linguistic comprehension [7].

### 3. Character Rigging

Rigging is used to give characters natural movements, making them appear more lively and interactive. This technique allows characters to move naturally, supporting student engagement in following the storyline. Animation with natural movement through rigging has been shown to increase student interactivity and engagement [8].

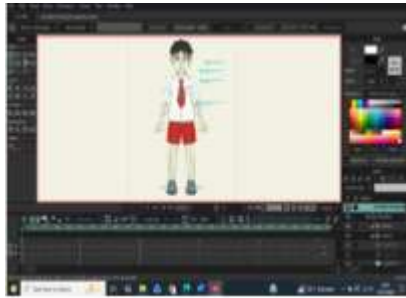


Figure 3. Adding Bones to Characters

## Post Production Stage

Post-production is the final phase in 2D animation development, where all previously produced visual and audio elements are combined into a cohesive work. This process serves not only as a technical refinement but also as a quality evaluation stage to ensure the animation is ready for use in learning.

### 1. Editing

Editing is the first step in post-production. At this stage, each scene is arranged according to the storyboard sequence, transitions between scenes are refined, and the synchronization between the narrator's voice and character movements is carefully checked. Editing also includes adjusting color and lighting, as well as adding simple visual effects to make the animation more engaging for students. Editing in educational animation plays a crucial role in ensuring narrative continuity and the coherence of the visual message [9].

### 2. Rendering

After editing, a test render is performed to review the preliminary results of the animation. The test render serves to detect technical errors such as audio mismatches, broken frames, or suboptimal visual quality. This stage allows for corrections before the animation is finalized. The test render stage in animation production serves as quality control to detect technical errors before finalization [10]

### 3. Final Render

The final stage is the final render, which produces the animation in a ready-to-play format. At this stage, all improvements from the test renders are applied, the video resolution is upscaled to standards, and the animation file is exported in a format

compatible with classroom learning media. Final rendering in educational animation ensures the final product has consistent technical quality and is suitable for use in a learning context [11].

Thus, the post-production stage ensures that the animation is not only technically feasible but also effective in conveying the learning message. Neat editing, test renderings as quality control, and an optimal final rendering make the animation ready to be used as a primary medium to support basic English learning. The post-production stage in educational animation serves to ensure both technical quality and the consistency of the visual message conveyed to students [12].

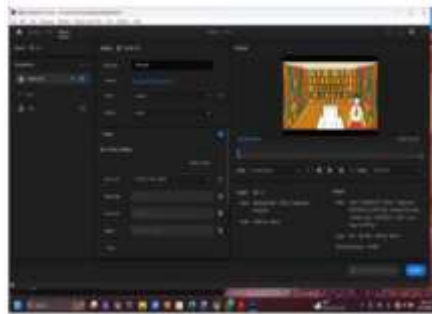


Figure 4. Final Render

## Creative Media

In addition to animation as the main product, this research also produced supporting media in the form of posters, teasers, T-shirts, stickers, and key chains. These creative media serve to expand the learning reach while increasing student engagement with the material.

### Poster

Posters are used to introduce the main characters and themes of the animation. Educational posters designed with visual communication principles can increase students' interest in learning through concise and powerful messages [13]



Figure 5. Poster

### Teaser

Teasers are short audiovisuals that concisely introduce the animated storyline, building students' curiosity. The use of teasers in learning media has proven effective in increasing students' anticipation and motivation to learn [14]



Figure 6. Teaser

### T-Shirt

T-shirts with animated character designs serve as merchandise that reinforces the visual identity of the work. Animated character-based merchandise can strengthen students' emotional engagement with the learning material [15]



Figure 7. T-Shirt

### Sticker

Stickers containing character illustrations and simple English vocabulary serve as visual reinforcement. Educational stickers act as visual reinforcement, helping students remember vocabulary repeatedly [16]



Figure 8. Stickers

### Key chain

Keychains with animated character designs are designed as personal media to strengthen students' connection to the material. Small media like keychains can serve as symbols of learning identity that strengthen student engagement.



Figure 9. Keychains

#### 4. CONCLUSION

This study concluded that the 2D animation media developed as the main work proved effective in increasing the engagement of third-grade elementary school students in basic English learning. The animation, designed through pre-production, production, post-production, and evaluation stages, was able to convey vocabulary and interrogative sentence structure contextually and engagingly. The evaluation showed that students were more enthusiastic about participating in the learning, teachers assessed the material as being in line with the curriculum, and media experts confirmed that the animation met the principles of child-friendly visual communication design.

In addition to the main artwork, supporting media such as posters, teasers, T-shirts, stickers, and key chains also make a significant contribution to expanding the reach of learning. These creative media serve as promotional tools, strengthen visual identity, and reinforce material outside the classroom. Thus, the combination of 2D animation and supporting media successfully delivers a more interactive, enjoyable, and meaningful learning experience for elementary school students.

Suggestions for further research include expanding the development of animated media beyond classroom vocabulary to other themes relevant to students' daily lives. Furthermore, integrating interactive technologies such as mobile-based applications or gamification could be a further step toward improving learning effectiveness. Future research is also recommended to involve larger-scale trials, allowing for cross-school comparisons and providing a more comprehensive picture of the impact of animated media on basic English learning.

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