Media Pendidikan Gizi dan Kuliner

Development of Audiovisual Educational Media Based on Animated Videos about Food Sanitation Hygiene for Catering Food Handlers

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A B S T R A C T S

Food safety refers to the safe handling, processing and distribution of food ingredients to prevent food borne illness. One aspect related to food safety is food sanitation hygiene. So that the handlers food needs to have knowledge related to food sanitation hygiene. Food sanitation hygiene is an effort to control factors that cause disease through food. Thus, it is important to educate food handlers about food sanitation hygiene, one of which is through the media. Media that can be used in education include animated videos. The aim of this research is to develop audiovisual educational media based on animated videos about food sanitation hygiene for food handlers in catering. Research and Development level 1 is used as a research method in developing this media. This research was conducted to produce animated videos that went through the stages of media design, media development, and validation through three aspects, namely media aspects, material aspects, and language aspects. The results of this research are in the form of an animated food sanitation hygiene video which has been validated by experts who stated that the media developed is suitable and can be used for catering food handlers. Recommendations for future researchers are that food sanitation hygiene animation media can be tested on food handlers in catering.

A R T I C L E   I N F O

1. INTRODUCTION

Food borne diseases are food poisoning caused by microbes or bacteria that enter the body through the food eaten (Mustika, 2019). Data on extraordinary incidents (KLB) of food poisoning that occurred in Indonesia in 2022 amounted to 3,515 cases and the causes of food poisoning outbreaks were mostly caused by ready-to-eat processed food, food services, etc.

Food ranks second in causing food poisoning, namely 18.7 percent (657 cases) (Arlinta, 2023). Food processing does not pay attention to hygiene, it can increase the risk of food borne disease (Siyam & Cahyani, 2018).

Food poisoning cases occur due to lack of attention and knowledge of food handlers in processing food safely and hygienically (Marsanti & Widiarini, 2018). Lack of knowledge about food sanitation hygiene often occurs among food handlers in catering. Food Sanitation Hygiene (HSM) is a health and hygiene effort to control factors in food, people, places and equipment that can cause disease/health problems or poisoning (RI Minister of Health Regulation No. 1096, 2011). Meanwhile, according to (Public Health, 2023) catering/food service handlers are people who are directly related to food and equipment starting from the preparation, cleaning, processing, transportation to serving stages in the catering industry.

Efforts that can be made to increase knowledge are providing education to food handlers about food hygiene and sanitation, this is in line with what was stated by Nildawati, et al (2020) that increasing knowledge can be done in various ways, including education and socialization both through print and non-print media. Audio visual media can be defined as a tool that can display images and produce sound. One example of audiovisual media is animation (Prasetya, 2016). According to Febriani et al (2019), applying animation media as a new media in the education process to the public can provide modifications to the delivery of messages so that the process of providing education is not monotonous and the messages conveyed can be well received.

Social media can be an alternative in disseminating information to the public because with social media the information that will be conveyed is easy to reach and easy for the public to use (Fitriani, 2017). The social media that has become a forum for disseminating animated media about food sanitation hygiene for food handlers in catering is YouTube. Milo (2022) states that YouTube as a media channel for disseminating news and information is an effective step, by simply uploading videos that can be watched by anyone and anywhere.

2. METHODOLOGY

The research used in this research is the lowest type of research and development (level 1) where this research is carried out to produce a design but is not followed by conducting field testing. In this case, the research carried out only produces product designs, and these designs are validated internally (expert and practitioner opinions) but are not produced or tested externally (field testing). Participants in this research consisted of three experts, namely media experts, material experts and language experts. Data analysis in this research used two validation sheets as instruments, namely the animation media storyboard validation sheet and the animation media validation sheet to validate

whether or not the animation media storyboard and animation media created are appropriate. The procedures carried out in this research are as follows:

1) Potential and Problems

   The potential and problem in this research is that there are many cases of poisoning in Indonesia which are caused by a lack of knowledge about food hygiene and sanitation among food handlers.

2) Information Collection

The information gathering stage in this research was carried out by conducting a literature review regarding food hygiene and sanitation to study the theoretical basis that was the basis for the development of the media created.

3) Making Food Sanitation Hygiene Animation Media Design

Making an animated media design in the form of a storyboard includes a summary of the story line accompanied by visual, audio, material and language images that will be displayed in an animated food hygiene video and also uses a flowchart as a reference.

4) Design Validation of Animation Media Design Food Sanitation Hygiene

Design validation in the form of a storyboard is carried out by media experts, material experts and language experts to assess whether the design/storyboard about food sanitation hygiene for food handlers is suitable or not. If the design created is not suitable, revisions will be made until the design is suitable and can be continued to the animation media creation stage.

5) Making Food Sanitation Hygiene Animation Media

The stage of making an animated video about food sanitation hygiene for food handlers referring to a storyboard that has been validated. The stages of production include making picture illustrations, making recordings that are used as narration in the video, adding background music and combining everything as a whole until it becomes an animated video.

6) Validation of Food Sanitation Hygiene Animation Media

Validation of food hygiene and sanitation animation media was carried out by media experts, material experts and language experts. At this stage, validators are asked to validate and suggest improvements to the animation media. If the media created is still not suitable, revisions will be made according to the input and suggestions given until the media developed is suitable.

3. RESEARCH RESULT

The development of sanitation hygiene animation media in this research went through several stages, namely animation media design, animation media development and validation of food sanitation hygiene animation media:

3.1. Food Sanitation Hygiene Animation Media Design
3.1.1. Create Flowcharts

The flowchart in this research describes the flow or process that will guide the creation of the storyboard. The flowchart of this food sanitation hygiene animation media flowchart includes the opening, namely the introduction of animated characters, the introduction, namely the introduction of the problem of food poisoning, the content, namely material about food sanitation hygiene, and the closing, namely containing thanks.

3.1.2. Create Storyboards

The storyboard in this research contains visual descriptions and audio explanations of the flow in the flowchart. One column in the storyboard represents one view on the monitor screen. The storyboard for this food sanitation hygiene animation video contains: 1) a sketch or picture of the screen, page or frame, 2) color, placement and size of graphics, 3) page text, 4) color, size, and font type, 5) narration, 6) animation, 7) audio, and 8) duration. This animated video storyboard consists of 4 main frames, namely the opening,

introduction, content and closing. The opening section displays animated characters or characters. The introduction section contains an introduction to food poisoning and cases of food poisoning that will occur in Indonesia in 2022. The content section contains an explanation of the meaning of food sanitation hygiene, the purpose of food sanitation hygiene, the principles of food sanitation hygiene which are divided into six, namely the selection and acceptance of food ingredients. , food storage, food processing, finished food storage, food transportation and food serving. The closing section contains a thank you note.

STORYBOARD VIDEO ANIMASI

" HIGIENE SANITASI DALAM PENANGANAN MAKANAN"

Naskah : Dita Ayu Safitri

Durasi : 7 menit 37 detik

Backsound: Lagu Ten Tower " Time on your side" versi instrumental

No	Deskripsi	Visual	Audio	Durasi
1	Pembukaan (opening slide) perkenalan karakter, menampilkan logo UPI	**Tulisan :** Higiene Sanitasi Dalam Penanganan Makanan (font *concerone, size 47, font color hitam*) **Keterangan :** Animation : pop center Action karakter : standing and talking Ilustrasi : HIGIENE SANITASI DALAM PENGANANAN MAKANAN	Voice over : "Assalamualaikum hai semuanya! Perkenalkan nama saya Chef Rara. Pada video kali ini saya akan membahas higiene sanitasi dalam penanganan makanan. selamat menonton!"	12 detik

Figure 1. Food Sanitation Hygiene Animation Video Storyboard

3.1.3. Storyboard Validation

The animated video storyboard that is created late will then be validated by experts regarding its suitability to the indicators that have been created. The validation process was carried out by three experts, namely media experts, material experts and language experts using design validation sheets/storyboards. The expert who validated the animated video storyboard was Mrs. Dr. Ai Mahmudatussa'adah, M. Si as a media expert as a lecturer in Culinary Education, Mrs. Dra. Sudewi Yogha, M.Si. as a material expert as a lecturer in Culinary Education, and Mr. UU Sudana, SS, M.Hum as a linguist as a lecturer in Indonesian Language Education and Literature, Indonesian Education University. When carrying out validation there were several inputs and suggestions that needed to be improved from the media aspect, material aspect and language aspect. After correcting the validation results of the three experts on the storyboard, the overall results were suitable and could be continued with making an animated video.

3.2. Development of Food Sanitation Hygiene Animation Media

3.2.1. Search for Image Sources

This research uses two types of sources, namely image sources created by the researcher himself and image sources obtained from free image provider sites. The stage is to look for illustrative images that match the food hygiene and sanitation animation content. Illustrative images function to clarify the purpose and meaning of a text. With illustrations, writing or text becomes easier to understand, that is what is called picture illustration.

3.2.2. Application of Images and Provision of Animation

The application of images and animation in this research is by inserting images, applying letters and backgrounds according to the storyboard that has been created. The application of images and animation is also intended to make it easier to depict material, attract the attention of the target, and beautify the appearance of the animated video.
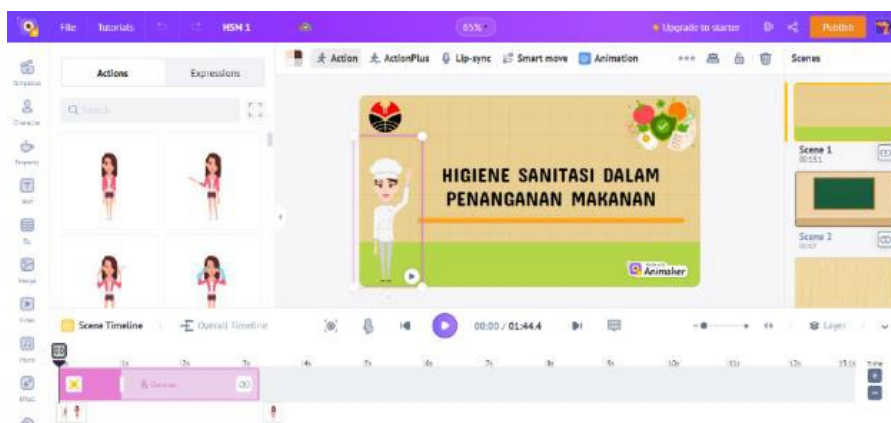

Figure 2. Implementation and Delivery of Animation

3.2.3. Enter Voice Over and Backsound Music

The audio voice over in this animation media uses the original voice of the researcher, while the background sound used in this media uses an instrumental song from ten towers with the title time on your side. The function of voice over is that it can provide an audio description of the text in the animation media so that it can clarify the material being conveyed and can also provide additional information to the audience that is not revealed through visual images, while the background music functions to evoke the atmosphere of the story and as a visual support in animated videos.
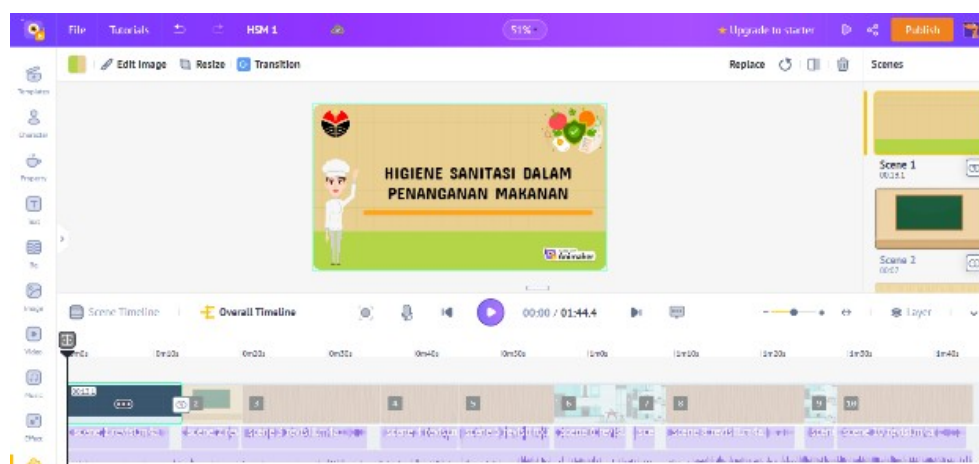

Figure 3. Entering Voice Over and Backsound Music

3.2.4. Export files to MP4

At this stage the animated media that has been created will be exported into an animated video using the Animaker application. Animaker is an application that can be used as an alternative for learning media, because it can create movements complete with sounds and transitions, thus giving the impression of learning material that is more interesting.
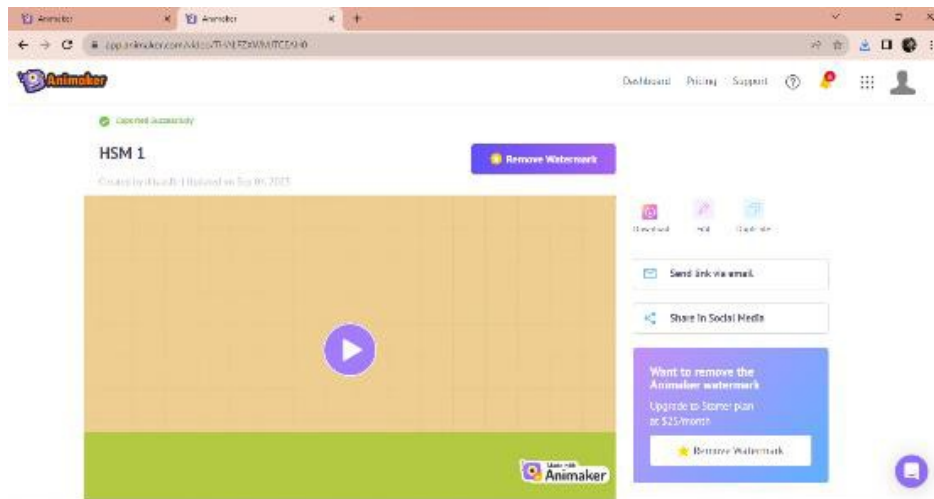
Figure 4. Export Animaker file to MP4

3.2.5. Uploading Animated Videos

Stage of uploading the animated video, after the video has been exported in mp4 format with full HD resolution, the animated video is uploaded to the YouTube application and can be accessed via the following link https://www.youtube.com/watch?v=Gp-kzMls6RA.

Figure 5. Uploading to the YouTube Channel

3.3. Validation of Food Sanitation Hygiene Animation Media

The validation process for this animated video is divided into three validation aspects, namely media aspects, material aspects and language aspects and is carried out by three experts, namely media experts, material experts and language experts. Validation of animation media is carried out using validation sheets assessing media experts, material experts and language experts using the Guttman scale with 2 definite answers, namely "suitable" and "not suitable". Then, this validation sheet also uses the criteria for the final assessment results with three criteria, TS or Not Appropriate, namely the media entering the revision stage as a whole, KS or Not Appropriate, namely the media entering the minor revision stage, and SS or Appropriate, namely the media can be used.

Media validation is viewed from three aspects, namely the media aspect, the visual/display aspect and the audio aspect. Material validation is viewed from three aspects, namely the suitability aspect of the material, the content aspect of the material and the

usefulness aspect. Language validation is viewed from five aspects, namely the language accuracy aspect, the language understanding aspect, the communicative aspect, the conformity aspect with language rules and the use of terms aspect. The results of this validation show that the audiovisual educational media based on animated videos about food hygiene and sanitation that was developed received the title "suitable" and can be used.

4. CONCLUSION

The development of audiovisual media based on animated videos about hygiene, sanitation and food hygiene went through three stages, namely the design stage, development stage, and animation media validation stage. The design stage of developing audiovisual educational media based on animated videos about food hygiene and sanitation by carrying out activities, namely making flowcharts and storyboards which are validated by experts. The development stage of food sanitation hygiene animation media in this research involves several activities that must be carried out. The first activity is to find relevant image sources to use in animation. After that, the images are applied and animated. Next, the third step is carried out, namely inserting voice over and background music to provide further explanation in the animation using the Animaker application. After all development stages are complete, the animation media is exported as an MP4 file. The final step in this process is uploading the resulting animated video to the YouTube platform. Food sanitation hygiene animation media validation is carried out to produce animation media that has been validated by experts. Experts who validate this media are media experts, material experts and language experts. The validation results show that the audiovisual educational media based on animated videos about food sanitation hygiene that was developed is in accordance with existing indicators and can be used.

5. REFERENCES

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