

“Cerita Corona” Application as Learning Media

Dase Erwin Juansah¹, Ade Husnul Mawadah², Ade Anggraini Kartika Devi³

¹ Universitas Sultan Agrng Tirtayasa, Indonesia; daseerwin77@untirta.ac.id

² Universitas Sultan Agrng Tirtayasa, Indonesia; adehusnulmawadah@untirta.ac.id

³ Universitas Sultan Agrng Tirtayasa, Indonesia; adekartikadevi@untirta.ac.id

ARTICLE INFO

Keywords:

Mobile learning;
Android application;
Learning media;
Online learning;
Cerita Corona

Article history:

Received 2022-02-06

Revised 2022-04-12

Accepted 2022-07-02

ABSTRACT

Online learning during the Covid-19 pandemic triggered the acceleration of the digitization of learning media. Media digitization could be done in the form of mobile learning applications that were in accordance with today's lifestyle. Learning media in the form of applications on mobile phone were expected to provide a meaningful learning experience so that students were not bored and the learning objectives were achieved maximally. However, in reality, not all teachers were ready and able to independently create digital learning media. This study aimed to develop a children's storybook application with the theme of Covid-19 to help children and teachers obtained learning media whose content was in accordance with current issues. This study used the Educational Design Research (EDR) model. The educational design research (EDR) model has stages 1) analysis and exploration; 2) design and construction; and 3) evaluation and reflection. From the results of expert validation, practitioners, and trials, a children's story book with the Covid-19 theme, named "Cerita corona" was successfully developed and met the eligibility criteria.

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Corresponding Author:

Dase Erwin Juansah

Universitas Sultan Agrng Tirtayasa, Indonesia; daseerwin77@untirta.ac.id

1. INTRODUCTION

The problem of learning quality is an interesting topic to be discussed and to be found its concrete solutions to overcome. Usually the problems that arise are in the implementation of learning, such as how strategies, methods, media, or learning materials are applied varietively, creatively, and effectively. In addition, not all students have high learning motivation, so teachers must be good at dealing with it. The problems do not stop there, the corona virus (Covid-19) pandemic has added a major influence on the implementation of learning. The learning process must adapt to the pandemic conditions.

Starting from March 2020, from elementary school to university level, learning must be done in an online way. Educators have to change the face-to-face learning method directly to online learning, even without really proper preparation. Actually, online learning is a necessity that has been socialized for a

long time that it will definitely be implemented. However, the current Covid-19 pandemic has accelerated its mass adoption. Even junior high school has to participate in online learning.

Based on online learning that has been done, there are several problems that arise, especially in Indonesian language lessons. First, teachers have not been able to prepare materials, or learning media that can be used digitally. Besides, the free content from various sources is still incomplete and appropriate with the needs of students and competencies in the curriculum. Second, the limited ownership of online learning support devices, such as Android-based mobile phones, laptops or computers, and internet access. Third, the use of internet quota that is too big to access video conference, e-learning portals, or online learning media that require an internet network. Fourth, the learning application features that are too complicated and difficult to be used by both teachers and students. Fifth, teacher's competence in using software to design learning activities and deliver learning without face to face activity. Sixth, the decrease in enthusiasm for learning caused by students who are bored with the tasks given through the Whatsapp group, while there is no refreshment of material from the teacher. This makes students more bored and less interested in learning Indonesian language.

These six problems will certainly still be faced by schools because in facing the new normal period in the new academic year 2020/2021, a blended learning approach that combines face-to-face meetings and online will be a strategic choice. For this reason, realistic solutions are needed to minimize the problems as described above which have not been fully resolved until the sixth month of the Covid-19 pandemic.

The use of media is a part that must get the attention from the educators, because it can minimize these problems. The use of media in learning can generate new desires and interests, increase motivation and stimulation of learning activities, and even affect students psychologically (Hamalik, 1986:24). Based on that, the idea comes to develop an electronic book for children's stories with the Covid-19 theme equipped with attractive visuals. Visual or graphic media is media that convey messages in visual communication symbols (Sadiman, 2014: 28). Image media have a concrete nature that serves to attract attention, clarify the presentation of ideas, and illustrate facts that tend to be quickly forgotten if they are not described (Sadiman, 2014: 8-29). Children often choose stories that are equipped with visual images compared to plain text, because visual-based texts offer the appearance of images as well as words and dialogues that make the text not just something to be read, but seen as a whole, such as reading and watching a movie in one time (Weiner, 2004: 115). So, researchers chose to develop an electronic book for children's stories with the Covid-19 theme as an effort to overcome problems and mainly to achieve the expected learning goals.

2. METHODS

This research was focused on developing a children's story book with the theme of Covid-19 with an electronic version. Therefore, this research was a development research using the Educational Design Research (EDR) research model. Educational Design Research (EDR) was a series of approaches with a goal to generate new theories, artifacts, and practical models that explain and potentially give have an impact on learning (Barab and Squire in Van den Akker et al., 2006:5). According to Plomp (2013), educational design research was research that used to systematically design learning systems, plan, and evaluate educational interventions (products, programs, teaching materials, learning strategies and systems) as solutions to complex problems that occur in educational practice. In accordance with the research objective, there was the development of an electronic book for children's story with the Covid-19 theme, the design that adapted and used was a design research model from Reeves.

1. Analysis and Exploration Stage

Researchers identified problems regarding the availability of learning media that could be used digitally, especially in story material. Next, the researchers analyzed the topic of the Covid-19 pandemic to be used as a story theme. In addition, researchers also analyzed character education guidebooks in order to integrate Covid-19-themed stories with character education.

2. Design and Construction Stage

Based on the analysis and exploration stages, an electronic storybook with the theme of Covid-19 was designed. The Covid-19-themed electronic storybook is a blueprint as an answer to the problems that have been described at an early stage. The content of the electronic storybook application includes stories that carry the Covid-19 theme, questions, and games. The Covid-19 themed story was constructed using the short storygram method. Furthermore, stories and questions were packed for the content of the Covid-19 themed electronic storybook application. The Covid-19 electronic storybook application was named "Cerita corona". In order to make it easier to be arranged, a storyboard was prepared that contains detailed application specifications. The next step was to create a navigation structure which was an arrangement of menus or the flow of the Cerita corona application program. The navigation structure model used was a hierarchical or branching model. The concept of hierarchical navigation started from the main page (homepage) to the next branch which could be seen on the following picture.

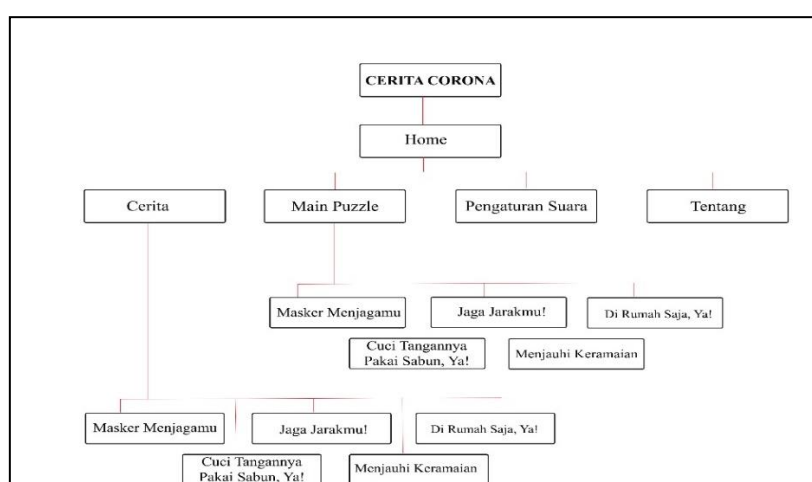


Figure 1. Cerita Corona Navigation

3. Evaluation and Reflection Stage

The design that had been developed was translated into an electronic book product for children's stories with the theme of Covid-19. Children's story books with the theme of Covid-19 were produced in the form of an interactive book application that could be installed on Android-based mobile phones. Products were evaluated and revised by practitioners and experts so that they were ready to be used. As for reflection, it was used to find out the possibility of weaknesses or deficiencies in the product. Thus, the product could be improved so that it could make a significant contribution to the world of education.

3. FINDINGS AND DISCUSSION

1) Cerita corona Application

The research conducted had resulted in an e-book application that could be installed on Android-based mobile phones. The application was named Cerita corona. The Cerita corona application contains five Covid-19 themed stories with the titles "Masks Protect You", "Wash Your Hands With Soap, Okay!", "Keep Your Distance!", "Stay Away from Crowds", and "Stay At Home, Okay!". The five story titles were based on the government's advice on the 5-M health protocol, such as wearing mask, maintaining distance, washing hands, avoiding crowds, and reducing mobility. Cerita Corona application does not only contain stories, but also questions and games.



Figure 2. User Interface Main Menu Cerita corona Application

The Cerita Corona application was created as a learning media that could be used both independently or with teachers and without using the internet network constantly. The Cerita Corona application also aimed to provide a quality learning experience so that the creation of the user interface was designed to be attractive, fun, and not confusing (navigating the application easily). The main screen of the Cerita Corona application was divided into four sections: story menu, puzzle game, sound setting, and an about page.

A. Story Menu

The Cerita corona is centered on the activities of Tita and Dika family during the Covid-19 pandemic who obeyed the 5-M health protocol, so that the story was divided into five different titles. The title "Masks Protect You" tells the use of personal protective equipment in the form of mask as a preventive measure that can limit the spread of the virus. Title "Wash Your Hands With Soap, Okay!" tells the story of a character who performs sanitation actions by cleaning his hands using running water and soap to break the chain of germs. The title "Keep Your Distance" features story characters who can still play with their friends during the pandemic, but still keep their distance. The title "Stay away from the crowds" tells about my father's desire to jog in the square, but in the end his father jog in the neighborhood to avoid the crowds. The title "Stay at Home, Okay" tells about Tita's family who do not go to their hometown to reduce their mobility so they don't get infected from one place to another.



Figure 3. The display of Story Menu

Users can follow the storyline of Tita and Dika's family with the choice of to be read or reading independently. Both options can support the user's language skills. To develop reading skills, users can choose to turn off the narrator's voice, while to develop listening skills, users can turn on the narrator's voice by pressing the button.

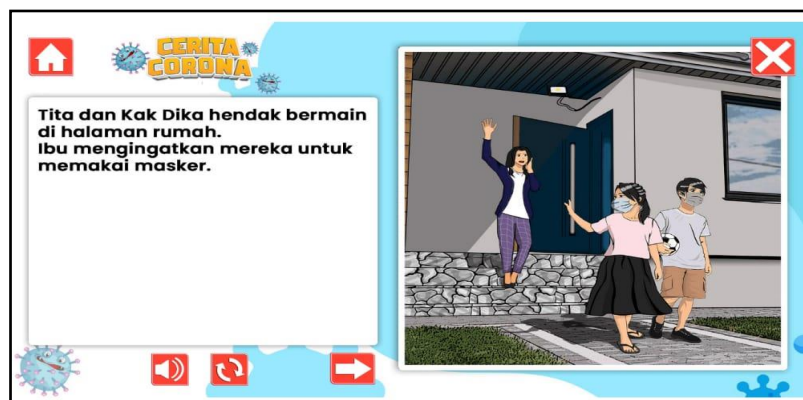


Figure 4. The Display of the Contents on the Story Menu

At the end of each story, questions are presented based on the rules of Higher Order Thinking Skills (HOTS). HOTS is a critical thinking ability that comes from the metacognitive process which includes interpretation, analysis, evaluation, and explanation. HOTS questions can stimulate students' higher-order thinking skills so that students can express what is understood from the stories they have read and give value to the five Corona stories. Furthermore, students' understanding and meaning of the Cerita corona is an effort to overcome the spread and transmission of the Corona virus.



Figure 5. Question Display

B. Game Menu

Cerita corona application is equipped with a game in the form of a puzzle. There are five puzzles that can be played according to the title of the story. Users can play assembling images while remembering the 5-M health protocol message. Puzzle games can improve thinking skills and memory.



Figure 6. Game Menu Display

C. Button Page on Main Menu

The button on the main menu displays the sound settings page. The sound settings page is used to set the theme music and the narrator's voice. Users can choose to turn off or turn on theme music, background music, and narrator voice from the beginning of the application. However, in the content page of the story menu, users can choose to turn on the narrator's voice by pressing the button as shown in the picture.



Figure 7. The display of Sound setting page

Setting the theme and background music that can be turned on or off aims to facilitate users to concentrate more while reading. Music can make users more relaxed and focused. Music can also improve brain function and intellect so as to improve memory of the information read.

D. Button Page on Main Menu

The button displays information about the identity of the storyteller and supporters

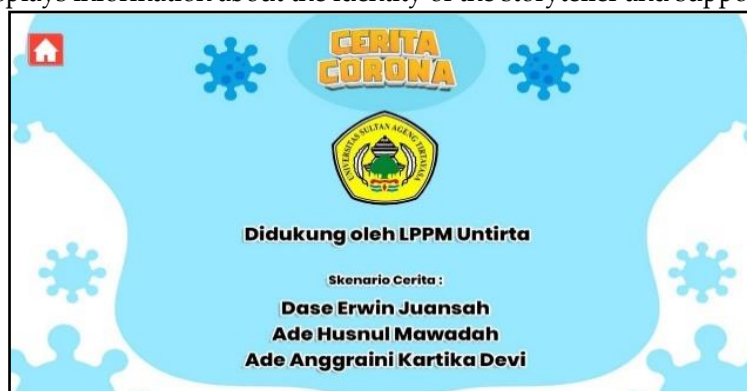


Figure 8. the display of about page button

2. Eligibility of the Cerita Corona Application

Cerita corona application was tested to ensure that the features contained in the application function properly and did not fail. Testing was done by using the functional testing method (black box). The black box method focused on system functions, whether the software was functioning properly and correctly. In this test, it was carried out using an Android OS 10 smartphone, One UI 2.0, 4 GB RAM, and an octa-core processor. The application test results showed that the application ran well.

The Cerita corona application was intended as a learning media so it needed to be validated by materials and media experts. The average value of the Corona Stories application in terms of material is 93.3 including the quality of content related to story content and learning aspects. The results of the validation of the Cerita corona application in terms of learning media had an average value of 90 based on aspects of usability, navigation, visual design, loading time, compatibility, and interactivity.

From the results of expert validation and black box testing, the learning media developed in this study, which was named the Cerita corona, met the eligibility criteria. The Cerita corona application was worthy to be used as a media in the online learning process. Online learning which used digitalized learning media could make students not frustrated, stressed, or bored. The Cerita corona application as a learning media provided opportunities for students to stimulate analytical thinking skills, improve literacy skills, and learning achievements.

4. CONCLUSION

The development of an electronic storybook application with the Covid-19 theme called Cerita corona is considered suitable to be used in learning. The Cerita corona application is useful for improving the quality of learning, providing a fun learning experience, and facilitating educators to obtain learning media according to current issues. In the end, the Cerita corona application can have several benefits, as a learning media, public service advertising media, and game media.

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