



## Utilization of interactive multimedia in learning english about different kinds of fruits for elementary school children

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### ABSTRACT

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English language lesson in elementary schools plays a crucial role in the development of children's English language and critical thinking abilities, as well as their creativity and self-assurance. The teaching and learning process at school or online now heavily depends on technology, including digital learning media that continue to expand and supplant traditional media such as books. Using interactive multimedia is one way to improve the efficacy of English learning, so the purpose of this study is to develop learning media with English material for the introduction of fruit vocabulary for elementary school students, which will facilitate the delivery and absorption of learning materials. To attract the attention of elementary school pupils, the interactive multimedia development method employs the Model Development Life Cycle (MDLC) with a minimalist and straightforward concept. The overall test results indicate that interactive multimedia learning English, particularly material about fruits, can be an option for students and instructors to support learning at school, and that the composition of the material is consistent with the school's curriculum. Having access to alternative learning media enables elementary school students to learn independently, enhance their skills, and meet school learning objectives.

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## 1. INTRODUCTION

English language instruction in primary schools serves a crucial role in the early development of English language skills. English is an international language used in many countries around the world; therefore, proficiency in English can increase future opportunities and competitiveness (Mutiarra et al., 2022; Rofi'i & Susilo, 2022). Additionally, learning English helps children develop abilities in critical thinking, creativity, and self-confidence. In early infancy, English is taught through memorization

and the development of vocabulary through observation and imitation. Additionally, this issue is affected by other factors, such as the teaching and learning process. According to (Liyana & Kurniawan, 2019; Merla, 2017b), the effectiveness of English language learning in early childhood is significantly influenced by the teacher's ability to make the teaching and learning process engaging and enjoyable for the students (Ichsan et al., 2023; Mahrani et al., 2023).

The process of teaching and learning activities both at school and online is now inseparable from the implementation of technology. Technology is one of the supporting factors that is useful for helping the teaching and learning process and can improve the quality of education (Kardini et al., 2023; Madjid, 2020). Although technology has helped teaching and learning activities, there are many things that need attention. One of them is the role of digital learning media which until now continues to develop following technological developments so that it can be used anytime and anywhere. The role of digital learning media that has spread is now displacing the role of conventional learning media such as print media, namely books.

One way to increase the effectiveness of learning English is to use interactive multimedia. Interactive multimedia is a technology that combines various forms of media such as text, audio, video and animation that can be accessed interactively by users (Aditama et al., 2021; Kwintiana et al., 2023). This technology can help children understand and remember learning material more easily because the various forms of media used can enrich the learning experience of elementary school students. Utilization of interactive multimedia is supported by research (Abdullah, Poetri, et al., 2023; Abidin et al., 2023) which explains the role of interactive multimedia in object visualization for children, other research (Anyan & Setyawan, 2022; Arifin et al., 2023) explaining interactive multimedia can be a tool in learning with objects that are difficult to explain, as well as research (Aditama, Pandawana, et al., 2022; Widianto et al., 2022) which explains the effectiveness of interactive multimedia in supporting the teaching and learning process.

There are several urgent problems related to learning English in elementary schools, namely when delivering material, especially introductory material for fruit vocabulary by the teacher, students easily get bored. Students shift their focus to other things, such as chatting with their closest friends, rather than listening and listening to the teacher's presentation of material (Merla Madjid, 2016; Setyawan & Anyan, 2022). English teachers who teach have also tried to deliver material through digital learning media that are widespread, one of which is on the YouTube website. However, the digital learning media that is spread on the YouTube website is not based on the revised 2013 curriculum national learning syllabus (Basril & Kamal, 2022; Tutiasri et al., 2020). So that sometimes learning comes out of the syllabus that should be taught, while on the other hand teachers who teach are required to provide material following the national syllabus circulated by the government.

Based on the problems that occur in this study aims to make learning media with English material on the introduction of fruit vocabulary for elementary school children, which is useful for helping the delivery and absorption of learning material. In learning English about various types of fruits, interactive multimedia can be the right choice to attract children's interest (Anyan et al., 2020; Sudipa et al., 2022a). Fruits are an interesting topic because children can recognize different types of fruits and their health benefits. By using interactive multimedia, learning about fruits can be presented in an interesting and interactive way. Interactive multimedia can be used in various forms such as animated videos, educational games, and multimedia presentations. Animated videos can display various types of fruits in an interesting and interactive way so that children can more easily understand and remember the types of fruits. There is a menu of assignments and quizzes that can be used to practice children's English skills in a fun

and interactive way. Apart from that, multimedia presentations can also be used to present information about fruits in an interesting and interactive way.

The benefits of research related to learning English about various types of fruits, namely interactive multimedia can also help children to develop their English skills. Through the use of interactive multimedia, children can practice speaking, listening, reading and writing English in a more active and interactive way (Merla M, 2017). In addition, the use of interactive multimedia can also assist teachers in teaching English about various types of fruits in a more interesting and effective way. By using interactive multimedia technology, teachers can present learning materials in a more varied way so as to increase children's learning interest.

## 2. RESEARCH METHOD

The media development method uses the multimedia development life cycle model (Ambarwati & Darmawati, 2020; Mustaghfaroh et al., 2021; Sudipa et al., 2022b), which concretely explains the stages of data analysis to the process of making media. This stage involves identifying user needs related to the prevailing learning methods that still use conventional methods, namely delivering material verbally and in writing. The learning media used are still conventional in the form of books and writing on a board in the middle of the class, so this can bore students during the teaching and learning process so that interactive multimedia is needed to support learning. The design phase is aimed at covering user interface design and determining the concept of interactive multimedia so that it is easily understood by early childhood and is expected to attract early childhood interest. Deployment phase: at this stage, the design and implementation of the application is carried out. Design is done to provide an attractive and easy-to-use appearance. Implementation is done to develop a menu of materials and tasks for students to make it easier to learn English, especially the material of types of fruits. The product testing phase is intended to carry out the application testing process involving several respondents consisting of students, and teachers as material experts related to the suitability of the material in interactive multimedia with the K13 curriculum learning syllabus.

The data in this study were obtained by distributing questionnaires via the Google form (Ibrahim et al., 2023; Sugiyono, 2017) to students and teachers in elementary schools by random sampling in the Makassar area, regarding understanding related to learning English, especially material about introducing fruits and material received in the learning process. This is done to find out the extent to which students understand the material, and can be input regarding material points that can be displayed in the interactive media applications that are made.

### 2.1 Interactive Multimedia

Interactive multimedia is a combination of two or more different media such as text, images, animation, sound and video used in an application or computer program that allows users to interact with the information presented. In the context of learning, interactive multimedia can be used to make learning materials more interesting and interactive (Chen, 2022; Solissa et al., 2023), so as to increase student engagement and interest in learning. In this research, interactive multimedia related to fruit material in English applies text, image, animation, and sound media to support the concept of interactive multimedia in learning. Interactive multimedia technology can also enable students to better understand and remember the information presented in a more effective way (Aditama, Sudipa, et al., 2022; Rofi'i et al., 2022). Interactive multimedia can be used in various fields such as education, entertainment, business, and so on. Based on the notion of multimedia and interactive.

### 3. RESULTS AND DISCUSSIONS

#### 3.1 Analysis Stage

Based on the data collection carried out above, several problems were obtained, such as the applicable learning method still using conventional methods, namely the delivery of material verbally and in writing. The learning media used are still conventional in the form of books and writing on the board in the middle of the class, so this can bore students during the teaching and learning process. Teachers have tried to use digital learning media obtained from websites such as YouTube (Abdullah, Sastraatmadja, et al., 2023), but they have drawbacks. These media cannot meet the requirements and sometimes even extend beyond the material that should be taught following the syllabus of the revised 2013 curriculum. As well as the lack of student focus on the delivery of material provided by the teacher. This problem should be overcome with digital learning media that can attract focus and interest in student learning in the material provided by the teacher. According to (Na'imah, 2022) playing is very important for early childhood activities, even the world of early childhood is just playing. In early childhood play is the center of their pleasure focus, so learning media that are suitable for early childhood must be packaged in a way of playing. This is the basis for research to create animated learning media, which can be packaged in a playful and fun way.

#### 3.2 Design Stage

##### a. Design Concept

This learning media will be realized in the form of a video with a minimalist and simple 2-dimensional animation concept that will guide children to spell so they can mention fruit vocabulary. This animation will use cheerful children's music as a background, so that it is easy for young children to understand and it is hoped that it will attract early childhood interest.

##### b. Synopsis

This learning media begins by bringing up the title and maker information, then transitioning to bring up the main character. This main character will first lead students to spell and name fruits in English. First, the fruit will be mentioned in Indonesian, then it will be spelled in English. After learning to spell, students will be invited to sing together, then play the instrument up and up to the top of the mountain and this character guides students to sing. Bring up the fruit animation in the first verse lyrics. In the lyrics of the second stanza, the main character's animation announces the contents of the fruit, then a climax depicts the animation of the main character sharing the fruit he has. Then this animation will be repeated,

##### c. Interactive Media Menu Flow

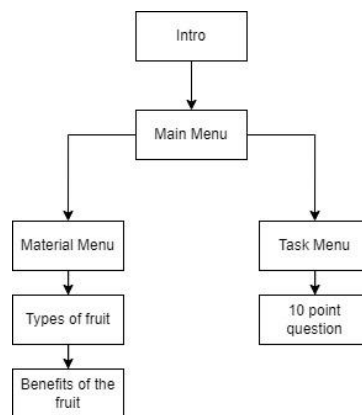


Figure 1. Learning Interactive Multimedia Menu Flow

Based on Figure 1, this interactive multimedia design consists of several parts, namely: (a) Intro: there is a splash screen of interactive multimedia about fruit material in English. the Intro section which contains a start button to start the interactive media will be displayed at the beginning. (b) Main Menu: in the main menu section there is a choice of material menu displaying material, and task menu displaying tasks. (c) Material Menu: If the material menu is pressed it will display a screen related to the material types of fruit and the benefits of fruit equipped with animation and voice narration. Each material can be pressed to see the contents of each material. (d) Task Menu: on the task menu there are 10 questions related to fruit material in English.

### 3.3 Application Implementation Stage

The implementation phase begins with analyzing the needs of the software to support the creation of interactive multimedia. This application uses Adobe Animate, Adobe Illustrator, and Adobe Premiere software. In implementing the interactive multimedia menu flow obtained from the previous design stage through needs analysis from the results of the questionnaire to students and teachers. Next, the menu of the application is arranged. Design and implementation process: At this stage, the design and implementation of the application is carried out. The design is done to provide an attractive appearance and easy to use. Implementation was carried out to develop a menu of materials and assignments for students to facilitate learning English, especially fruit types. The display of the application can be seen in Figure 2 below.

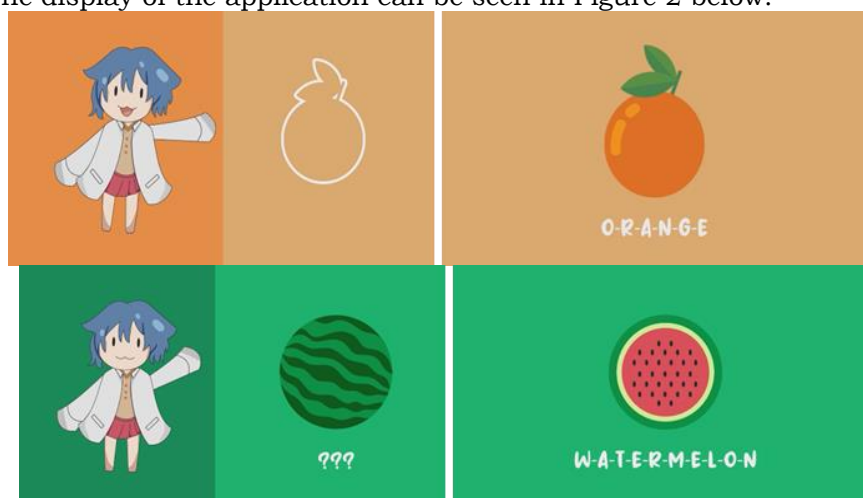


Figure 2. Material Display from the Application

### 3.4 Application Testing Phase

During the application testing process, students and teachers who are experts on the K13 curriculum learning course are asked to answer questions. Based on the results of a survey given to 35 students, it can be seen that 80% of them agreed that the learning media application was easy to use and interesting for the learning process. However, 20% of the students said they used other media to help them learn.

During the discussion about how clear the information was, as many as 85% of the students said they understood the English language material, especially the types of fruits in the interactive multimedia. However, as many as 15% of the students said they would rather not understand clearly how to say the names of fruits in English because of the way the words are pronounced. Based on the results of testing with five teachers who were experts on the subject matter, 87% of teachers said that the content in the learning media application was acceptable, and 13% of experts gave feedback on how to say the names of fruits in English and how to say them. Overall, the test results show that interactive multimedia learning English, especially about fruits, can be a way for students and teachers to help each other learn at school. The content of the interactive multimedia is also in line with the school program. With the alternative learning media, elementary school kids can learn on their own to improve their skills and meet the learning goals at school.

## 4. CONCLUSION

The conclusion of the research is that the interactive multimedia application of English language learning, especially the material of the types and benefits of fruits made in the research has been adjusted based on the analysis of the needs of students and teachers so that it can be an alternative in supporting learning activities. The implications of the research are shown in the suitability of the material with the learning syllabus, especially the curriculum applied to the school has been declared appropriate. The contribution of the research is aimed at supporting special learning of fruit material in English for elementary school children so that the features in interactive multimedia can be tailored to user needs and equipped with a menu of materials and tasks so that students can not only see the material but also can train their abilities. The test results show that interactive multimedia learning English, especially material about fruits can be an alternative for students and teachers in supporting learning at school, and the composition of the material is in accordance with the curriculum applied at school. With the alternative learning media can provide alternative learning media for elementary school students to be able to learn independently to improve their abilities and can meet the learning outcomes at school. Suggestions for further research are to be able to test the pre and post test abilities of elementary school students and can add game features related to fruits in English on interactive media so as to stimulate the understanding of school students in improving English language skills.

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