# Development Of Interactive Video Learning In Science Subjects In The Merdeka Curriculum For Class V Elementary School

# Nadrah Nadrah

Elementary School Teacher Education Study
Program, Universitas
Muhammadiyah Makkasar, Indonesia
Email: nadrah@unismuh.ac.id

## **Abstract**

The purpose of this study is to develop interactive learning videos using powerpoint applications in science learning in the Merdeka Curriculum class V UPT SPF SD Inpres Cilallang Makassar school. Because the results of observations and interviews with the homeroom teacher of class V showed that the learning learning videos really helped increase was low, students' interest in learning with a total of 8 students. Research and Development (R&D) method in the ADDIE model which has important steps contained in it, namely: 1. The stage of needs analysis, student characteristics, and curriculum (Analyze) 2. learning design stage ( Design), 3. development stage is developing video products by testing validity in the form of questionnaires (language, content/construct, and graphics), by obtaining the percentage score from the three validators on average 85% in the "Very Valid" category, 4. implementation stage conducts practicality tests, product effectiveness on students and educators with teacher response questionnaires and student response questionnaires by obtaining percentage of 89% "Very Practical" category determines effectiveness of using student learning interest questionnaires after watching interactive learning videos (Implementation), with a percentage of 87% in the "Very Effective" category 5. evaluation stage where the stage knows the revisions made to product to develop learning from all the previous stages.

Keywords: learning, interactive, learners, merdeka curriculum.

# Introduction

The Independent Curriculum is a curriculum that gives freedom to students to access information and knowledge according to their individual needs. The purpose of creating the Independent Curriculum is for students, teachers and parents to have a pleasant atmosphere while studying (Suchyadi & Suharyati, 2021). Thus, students have enough time to understand the concept and improve their respective abilities. Learning media is a means which is used to facilitate educators in transferring knowledge to students. Apart from that, it is necessary the use of modern media in learning so that it can trigger interactions between educators and students (Restu et al., 2022).

Therefore, the learning method needs to be improved so that it can take place in two directions so that it can make children able to think critically and creatively. The trick is to create learning media that is unique and interesting so that it becomes easier for children to understand the material, for example by adding audio and animated images/videos (Setiyani et al., 2022). With the learning media in the form of videos , then it will be able to increase students ' interest in learning. With the increasing interest in learning from students, educational goals will be more easily achieved (Junarti et al., 2023). Professional teachers pay attention to anything that can attract students' interest so that they want to be enthusiastic about learning because each child has different interests. Even so this is not easy, but a teacher must try to do for the progress of students (Arici et al., 2019). If students are motivated to learn, then the material provided will be easier to master so that they can improve their learning achievement. Therefore, teachers need to pay more attention to students' learning interests so that learning is in accordance with the needs of students and they are motivated to continue learning (Sumandya et al., 2022).

Even so, the reality that occurs in the field shows that students' interest in learning during learning activities is very lacking. This can be seen from class V students at UPT SPF SD Inpres Cilallang Makassar school, where there are students who are less interested in the

learning process (Parong & Mayer, 2021). This is because students are bored with the method used by educators, namely the lecture method only. Of course it affects student learning outcomes. The material delivered by educators is material. "History of the Kingdom of the Archipelago" in the subject of natural sciences. The low learning interest of students can be caused by several factors, namely the limited learning media tools provided in schools (Mpungose, 2023). Widaningsih (2023) argues that interest in learning can be generated by creating a fun atmosphere and demanding student activity. Currently, the era is growing and modern, which supports all digital-based learning processes, especially in interactive videos. Interactive videos are learning videos that have PowerPoint and slide-based work screens and have features such as: video, audio, images, characters, so as to produce complete and interesting material (Purnomo et al., 2023).

The use of media in learning can trigger students' desire to learn, understand learning material more easily, and have a psychological impact on students. Good learning media will be able to help students understand the material much more easily and quickly, so that it will make them more enthusiastic to seek knowledge (Serevina et al., 2018). From the description above, the formulation of the problem can be taken, namely the low interest in student learning during learning activities, the limitations of learning media that only rely on books, and teachers must utilize learning media through video-based interactive multimedia (Kit Ng et al., 2022). Of course, in developing interactive learning videos, they must be developed based on the objectives, competencies and indicators to be achieved, as well as effectiveness and efficiency in their use (Pratiwi et al., 2023).

In this research, the media used is learning media, namely interactive video. Where this media is intended to make students interested in participating in learning at school by having various interesting presentations of material, writing, sound, images and videos (Mudinillah, 2019). The advantages of this video are very practical to use, attract the attention of students and are fun. So, to improve student learning, high innovation in learning is needed, one of which is

the use of interactive learning videos combined with the use of PowerPoint applications so that it can attract students' interest to continue learning and create fun learning (Nasution et al., 2021).

## Method

R & D research method, namely the ADDIE development model developed by (Herodotou, 2018). This model consists of five steps, namely: (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation. The first stage, namely analysis, is the initial stage carried out by researchers to find existing problems (Fyfield et al., 2019). The steps taken are conducting a needs analysis, analyzing the characteristics of students, and analyzing the curriculum. At this stage, an interview process was carried out with the class V teacher at UPT SPF SD Inpres Cilallang Makassar according to the needs of educators and students (Salvador et al., 2023). The second stage is design, where at this stage it is carried out to determine the right solution in the form of a product that will be used according to the needs of educators and students in the form of design planning. At this stage it describes an outline of learning media, where the learning media is in the form of interactive videos on the subject of natural sciences on "the history of the archipelago kingdom" material development and videos using the powerpoint application, in the design there is a main menu, CP, ATP, technical instructions, Materials, Qius and Summary under development. The third stage is development, which aims to realize product designs that have been made based on interactive learning video development designs (Aithal & Aithal, 2019).

Before being developed in learning, the validation process steps are carried out to material experts, graphic experts, and linguists to find out the contents of the interactive video that will be developed by the validator. Next, the data obtained from this study, namely in the form of suggestions, scores, input/comments from the distribution of questionnaires given by experts/experts (Sahronih et al., 2019). The implementation stage is the stage of direct implementation of real action where this stage is the direct implementation of the design in the school that will be targeted for research. At this stage educators use learning media that really helps educators and students in learning. Where the researcher used the media in the form of a video containing learning material,

after the students watched the researcher gave a questionnaire form of student prescriptions totaling 8 people and the response of the homeroom teacher of class V to find out the practicality of the product being developed. The last stage is the evaluation stage of interactive media that has been tested previously and determines the feasibility of students' learning interests which are developed in the implementation stage, the evaluation is carried out according to the data that has been filled in by the validator and the questionnaire of students' learning interest using 8 class V students at UPT SPF SD Inpres Cilallang Makassar. The aim is to find out whether the developed media is valid and suitable for use or not. Collecting data in this study using the method questionnaire and interview sheet. Questionnaires were given to students and homeroom teachers for class V while the interviews were conducted with the homeroom teacher for class V UPT SPF SD Inpres Cilallang Makassar. For the questionnaire sheet in the expert test, a Likert scale is used with a score of 1-4 starting from the criteria " disagree " up to criteria " totally agree".

#### **Results and Discussion**

# Research result

The analysis phase is the stage for conducting an analysis of the characteristics of students, needs, and curriculum. The researcher carried out the introduction by making observations at UPT SPF SD Inpres Cilallang Makassar class V and conducting joint interviews with the homeroom teacher for class V. One of the problems found by the researchers in the observation was that educators were overwhelmed when delivering material about the history of the archipelago kingdom because of the limited learning media at school educators experience a lack of interest in students' learning interest, students feel easily bored just hearing educators lecture, only relying on books, when delivering material during the learning process. This design stage consists of preparing an interactive learning video, namely with science and science learning material on the history of the archipelago kingdom, then designing the content of the interactive video media which consists of an opening intro, main menu, namely CP, ATP, technical instructions, materials, quizzes and summaries (Fomunyam, 2019). Students can choose according to the desired menu when they click as desired, the clicked slide appears automatically.



Figure 1. Intro



Figure 2. Menu Options



Figure 3. Material



Figure 4. Quis

Development (development), after the design stage has been carried out, it can be developed and then applied in learning, while the learning video media will be checked and validated first by graphics, materials and language experts. The results obtained can be seen in the table below .

**Table 1. Expert Expert Test** 

No.	Expert/Expert	Score	category	
1	Graphic Expert	96%	Very Valid	
2	Material Expert	81%	Very Valid	
3	Linguist	78%	Valid	

From the data in table 1 above, it can be seen that the feasibility of interactive learning videos is included in the very valid, san valid category. As stated on the questionnaire sheet, there are 8 statement items that meet an average of 85% in the "Very Valid" category. So it can be said that the video This interactive learning can be applied in schools, especially in class V at UPT SPF SD Inpres Cilallang Makassar.

**Table 2. Practical Response Test** 

No.	Expert/Expert	Score	category	,
1	Educator	84%	Very Valid	
2	Learners	88%	Very Valid	

Based on the table of product practicality trials carried out by educators and students, the results were obtained where on the response questionnaire, educators and students had 8 statement items that met the "Very Practical" category.

**Table. 3 Effectiveness trials** 

No.	Expert/Expert	Score	category
1	Class V students	87%	Very effective

The results of the analysis of the effectiveness assessment sheet for the development of learning videos by having 8 item statement items that will be developed where there are 7 students who have the category "Very Effective" with an average percentage of 87%. So it can be said that interactive learning videos are very effective for students at UPT SPF SD Inpres Cilallang Makassar. Next is the evaluation stage, where at this stage the validity is carried out with a percentage of 85%. Furthermore, practicality can be seen from the response questionnaire of educators and students obtaining a percentage of 84% for educators, and for students 88%.

# Discussion

Interactive learning media really helps students' interest in

learning, especially in class V UPT SPF SD Inpres Cilallang Makassar, is declared valid, practical and effective to apply. This interactive learning video media is said to be feasible because it meets the expert expert test with an average percentage of 85% so it has entered the category very valid to use. In this way, learning activities really help students understand the material provided and are able to attract their interest and attention to learning (Love et al., 2022). This interactive media learning is also suitable for use at any time because it is very practical in using the material being studied to make things easier for students and attract students to increase their interest in learning (Wibowo & Sadikin, 2019). It is said to be practical when researchers directly apply it in real terms to educators and students during the learning process by watching this interactive video with enthusiasm, after watching educators and students fill out a response questionnaire sheet containing 8 statement items which have a total of 84% and 88% belonging to the category "Very Practical". The results of the analysis of the effectiveness assessment sheet for the development of learning videos by having 8 item statement items that will be developed where there are 7 students who have the category "Very Effective" with an average percentage of 87%. This shows that interactive learning videos are very effective in supporting the learning process of students at UPT SPF SD Inpres Cilallang Makassar. It is hoped that with the presence of this learning media, students can become more enthusiastic about learning and gaining as much knowledge as possible because they can access it anywhere and anytime (Alamsyah et al., 2022). That way, students will concentrate more on absorbing the material in the learning video and can understand the information more easily so that learning will be maximized.

#### **Conclusion**

Interactive video learning is learning that is suitable for use, especially in elementary schools, so that educators and students have a fun learning process. Growing students' interest in learning to participate in learning activities, this video has interesting sounds, pictures and videos. Suggestions for future researchers in developing this media would be to make it as attractive as possible using your own design so that it does not look like plagiarism, and is practical for students to use wherever they are and whenever they want.

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