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DEVELOPMENT OF CAPCUT APPLICATION IN NATURAL AND SOCIAL SCIENCE LEARNING FOR ELEMENTARY SCHOOL

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Abstract

This development aims to create learning media using the CapCut application for Natural and Social Sciences subjects. The research method used is Research and Development (R&D), which refers to the 4D development model. There are four stages of development: define, design, develop, and disseminate. Data collection was carried out using a questionnaire and a test. Questionnaires were given to the subject and media experts to test the feasibility of learning media products based on the CapCut application. While the primary data source comes from class IV Science textbooks at SDN Kedaleman III and secondary data sources come from class IV students at SDN Kedaleman III. The population in this study were all fourth-grade students at SDN Kedaleman III, totaling 32 students. The sampling technique used a saturated sample; the entire population became the research sample because of the small population. Hence, the sample in this study was students of class IV at SDN Kedaleman III, totaling 32 students. This study used data analysis techniques t-test, namely paired sample t-test. The study results show that the CapCut application-based learning media is very suitable for science learning because it gets high marks from subject and media experts. The material expert's assessment was 89%, and the media expert's assessment was 93% which was classified as very feasible. And the t-test shows that there is a significant difference between the student's pre-test and post-test. Therefore it can be concluded that the CapCut application-based learning media is effectively used in science learning.

Keywords

CapCut Application, Natural and Social Sciences, Elementary School, SDN Kedaleman III

INTRODUCTION

Education is a deliberate effort to create an environment and learning process so that all students can interact and developmental capacity, self-discipline, character, intelligence, and the potential to have the necessary morals and skills. Education can be achieved by being influenced by changes and renewal of various supporting elements, including students, teachers, tools, methods, materials, and educational environment. These elements can be tied together to support the achievement of educational goals (Fahrozy et al., 2022).

The learning process is designed systematically and directed with structured learning activities. There are guidelines or instructions for use that are given to students and teachers and can be adjusted to each student's learning level and abilities. Media is one of the important elements in the learning system that needs to be utilized and used optimally, and this is expressed by (Rumansyah, 2016). From this explanation, it can be concluded that the media is any form of tool, material, or technology that is used as an intermediary in conveying information, messages, or learning materials from the teacher relating to students in the learning process to achieve learning objectives.

The learning process in education can be realized, especially in learning activities at school. To achieve the desired learning objectives, it is necessary to carry out quality learning activities. Factors that support each other such as learning media, can also help improve good learning outcomes (Suryani et al., 2018). In addition, learning media also play an important role in stimulating students' thoughts, interests, concerns, and feelings and increasing the effectiveness and efficiency of interactions in communication (Hamdayama, 2014). The learning process generally requires teachers to create a conducive and comfortable classroom atmosphere to support students in achieving set goals by using interesting, effective, and efficient learning media (Wijayanti et al., 2023).

The emergence of the covid-19 virus has hit the world since mid-March 2020. All human activities are restricted, with a huge impact on almost all fields, including education. As a result of the Covid-19 outbreak, learning activities changed from face-to-face to distance (online) learning. Still, in this situation, the teacher must continue to carry out his duties as an educator. Talking about distance learning and online learning, teachers need to master the skills to apply distance learning effectively during a pandemic (Magdalena, 2021). This increasingly rapid technological development affects many countries, including developing countries like Indonesia. The presence

and speed of this technological development have dramatically changed all areas of life. This situation certainly makes the world of education have no choice but to participate in its use (Zaki & Yusri, 2020). Educational technology has special characteristics that are very relevant for educational purposes. Features of educational technology include 1) The ability to disseminate information quickly, evenly, diversely, and integrated so that messages can be conveyed precisely according to the desired goals. 2) Support clarification, concepts, principles, or topics being taught. 3) Become a teacher partner in creating effective, efficient, and productive learning activities according to the needs of students. 4) Educational technology can be used as a learning resource, enrich subject matter, and present material more interestingly (Danim, 1995).

Learning Natural and Social Sciences (IPAS) in Elementary Schools plays a role in the educational process, especially aimed at understanding the environment, which includes natural and social phenomena. Science learning in elementary schools requires a very good and careful understanding. Therefore the media used must be consistent. To achieve the learning objectives well, the teacher has the task of choosing learning models and media appropriate to the material presented. Based on the observations made by researchers, it was found that science learning in class IV Negeri Kedaleman III, Cibeber District, Cilegon City, could have been more optimally effective. This is caused by the teacher's tendency not to use learning media, which can cause students to become bored and have difficulty understanding the material, especially on cultural diversity material. Such learning activities can make learning boring, uninteresting, and detrimental to students. If such learning patterns continue to be carried out, the learning objectives will not be achieved optimally.

Various factors, including effective learning media, influence student learning success. According to Nunuk Suryani, the benefits of learning media include: 1. Increasing mutual understanding and empathy in the classroom. 2. There is a significant change in student behavior. 3. Increased student learning motivation 4. Learning will be more varied and produce freshness for students. 5. Learning outcomes are more meaningful 6. With the use of learning media, learning outcomes are higher. 7. Provide necessary feedback to help students know how much they are learning. Teachers need to use the right learning media in the learning process to increase the effectiveness and efficiency of learning, help smooth the learning process, and improve student learning outcomes. Learning media can act as a liaison between teachers and students and make it easier for students to follow the learning process properly (Agustini et al., 2021).

Science learning on cultural diversity material in semester 2 of class IV requires learning media. One solution to this problem is to develop science teaching media through learning videos that students can access during teaching and learning activities. Using learning videos as learning media can help increase the effectiveness and efficiency of learning and motivate students to learn. Learning videos are a learning media in the form of components or physical devices in the student learning environment, presenting audio-visual messages to facilitate students' understanding of the material. CapCut is one of the most popular video processing software and has been recognized for its sophistication. This video editing application can not only be used to create video content on TikTok, but we can also use it for learning media and uploading it via social media (Khotimah, 2020). This application offers a variety of interesting features and effects for video editing. CapCut also has features that are easy for many people to understand and use, so it doesn't require high skills. On the other hand, the CapCut application has been recognized for its sophistication and has become one of the most popular video processing software (Deriyan & Nurmairina, 2022).

CapCut is software that is used to edit videos with various available features. This application can be accessed via an Android device or PC and is very easy to use for users just starting video editing. Although each application has advantages and disadvantages, CapCut offers various templates that simplify video editing. Various interesting features are available in CapCut, such as animations, filters, stickers, and back sound.

Several previous studies have been carried out, including 1) research conducted by (Y. F. Chen, 2018) with the title "Effects of the Application of Computer Multimedia Teaching to Automobile Vocational Education on Students' Learning Satisfaction and Learning Outcome" research results: learning outcomes Using computer media can provide significant advantages in creating visualization characteristics. 2) Research conducted by (Nurwidayanti, 2018) with the title "The Influence of Learning Media on Economic Learning Outcomes Given the Learning Styles of Public High School Students" research results: student learning outcomes using PowerPoint obtained an average of 83.87 higher than student learning outcomes using conventional obtained 76.51. 3) Research conducted (Firmansyah, 2021) with the title "Development of Learning Videos with the CapCut Application in the Basic Photoshop Material Publication Design Subject for Class XI Students of the Visual Communication Design Department of Al-Falah Vocational High School, Pesanggrahan, Jangkar District, Situbondo Regency" shows learning using video CapCut is suitable for use in class XI DKV Department in publication design subjects. 4) Research conducted by

(Kolopita, 2022) with the title "The Influence of Learning Media on Student Learning Outcomes in Computer and Network Subjects" the results of the study found that student learning outcomes using influential instructional media obtained pretest 33.23 increased to 76.46. Based on the results of data analysis using the N-gain test, it reached 0.46 with moderate criteria. While the test results use the paired sample formula t-test analysis results of -19.29. 5) Research conducted by (Rahayu, 2022b) with the title "Implementation of the CapCut Application to Improve English Speaking Skills for Class IX-A SMP Negeri 2 Gudo" Shows the results of obtaining the percentage of implementation of teacher activities reached 86%, student activity 86% and the acquisition of results student learning 88%. 6) Research conducted by (Suryaman, 2022) with the title "Development of Plotagon and CapCut-Based Animated Video Media to Improve Cognitive Learning Outcomes of Class II Elementary School Students" Shows Development of student-based animated video media obtained pretest 20%, posttest of 90%, and learning outcomes 75%.

From some of the previous studies above, there is a general difference with this study, which lies in the object of research, namely the school level, subjects, and the type of learning media. While this research focuses on developing CapCut applications for science learning for grade IV students, analysis has never been carried out, so it is necessary to develop CapCut applications for grade IV elementary school levels.

Based on the background described above, this study aimed to develop CapCut application-based learning media in science learning for fourth-grade students of SDN Kedaleman III for cultural diversity material.

METHOD

This research is a Research And Development (R&D) study with a 4D model. This study aims to develop products and evaluate their effectiveness through validation. Research And Development (R&D) is a research methodology for analyzing the needs and effectiveness of products and evaluating them so that they can function in the wider community and are adapted to learning objectives (Sugiyono, 2017). This 4D development model consists of four main stages: define, design, develop, and disseminate. In this study, the researchers aimed to develop a learning media product in the form of a video based on the CapCut application for science subjects which contained material about cultural diversity for class IV at SDN Kedaleman III.

This research was conducted at Kedaleman III Elementary School in Cibeber District, Cilegon City. The population in this study were all fourth-grade students at SDN Kedaleman III, totaling 32 students. Because the population is small (under 100), the sampling technique used is a saturated sample, namely using the entire population as the sample, so the research sample here is students of class IV SDN Kedaleman III with a total of 32 students.

The primary data source in this study came from class IV Science textbooks at SDN Kedaleman III to obtain data related to the teaching materials to be developed, namely cultural diversity. In contrast, secondary data sources came from class IV students at SDN Kedaleman III to obtain data related to the effectiveness of the CapCut application and developed through tests. The data collection techniques used are questionnaires, observations, and tests. Questionnaires were given to material experts and media experts to validate the CapCut application being developed and also offered to class IV students at SDN Kedaleman III to find out satisfaction with the CapCut application being developed. The observation used was direct observation because the researcher directly made observations in class to obtain data on how the science learning process took place in class. The tests conducted in this study were pre-test and post-test to get data related to student learning outcomes in science subjects with the type of objective questions, namely multiple choice.

The effectiveness of the CapCut application developed on the science subjects with cultural diversity material, so before conducting the t-test, the hypothesis to be tested has been determined, namely:

H_0 : there is no significant difference between the pre-test and post-test in science learning for class IV students at SDN Kedaleman III using learning media based on the CapCut application.

H_a : there is a significant difference between the pre-test and post-test in science learning for class IV students at SDN Kedaleman III using CapCut application-based learning media

The data collected from the questionnaire on expert validation uses the formula:

$$P = \frac{S}{N} \times 100\%$$

Keterangan:
P : Variable percentage
S : Total score in the variable
N : Total maximum score

Table 1. Table of Eligibility Criteria

Score	Eligibility Category
81-100 %	Very worth it
61-80 %	Worthy
41-60 %	Pretty decent
21-20 %	Not worth it
< 20 %	Not feasible

FINDINGS AND DISCUSSION

Findings

Development Process of CapCut Application in Natural and Social Science Learning in Elementary Schools

A. ***Define***

The defining stage defines and determines the conditions needed for learning development. Determination of the needs needed to consider and adopt the learning needs of fourth-grade elementary school students. In defined terms, it consists of five steps, namely a) front-end analysis, b) student analysis, c) concept analysis, d) task analysis, and e) formulation of learning objectives.

1. Front-End Analysis

Front-end analysis aims to identify and describe the basic problems encountered in science learning on cultural diversity materials in schools. Therefore it is necessary to develop teaching materials; After the analysis is carried out, the researcher conducts a needs analysis to get an overview of the coverage and other ways of solving the underlying problems to facilitate the selection of learning media to be developed.

In the learning process, problems often occur between teachers and students due to the need for more variety of media used in class. This causes students to feel bored, their interest in learning decreases, and it is difficult to understand the material with inappropriate media, especially in grade IV students, causing low learning outcomes. Although some teachers have sufficient skills in operating computers, they still need to be proficient in developing computer-based learning media.

2. Student Analysis

Student analysis is a study of characteristic discourse adapted to the design of learning devices. Based on the analysis results, it is known that students have a passive response during learning when the teacher does not use learning media and only uses the lecture method. Therefore, it is necessary to develop learning media based on the CapCut application so students can be more active and involved in learning. This learning media product is expected to attract the attention of

students and make students more engaged in learning activities. On the other hand, most students have yet to reach a satisfactory level of achievement in cultural diversity material. This was found based on data obtained from student learning outcomes on cultural diversity material. The following is a table of student learning outcomes before using the product to be developed.

Table 2. Student Learning Outcomes Before Using the Products Developed

	Interval Nilai	Jumlah Peserta Didik	Prosentase
Baik Sekali	91-100	-	0%
Baik	81-90	3	9%
Cukup	71-80	8	25%
Gagal	≤ 70	21	66%
Jumlah		32	100%

3. Concept Analysis

The concept analysis aims to understand the material's content in the developed media. Concept analysis is carried out by using learning concept maps as a tool to achieve certain competencies. This analysis involves identifying the learning materials' main components and assembling them systematically and clearly. Thus, researchers can ensure that the learning material presented in the developed media will be easily understood and effectively achieve predetermined learning objectives.

This research helps educators shape and choose the right learning to help achieve learning goals that align with core competencies and competency standards.

4. Task Analysis

The purpose of task analysis is to identify students' primary tasks. The assignment is an evaluation test analyzed based on the learning objectives listed in the Reference Level of Achievement (ATP) with cultural diversity material. Researchers can more easily develop instructional video media by doing this task analysis.

5. Formulation of Learning Objectives

The formulation of learning objectives is the behavior change required to complete learning. Changes in behavior occur when students succeed in understanding the learning material provided by educators. It is expected that using CapCut application-based learning media will make it easier for educators to provide teaching materials and increase student learning outcomes. The learning objectives here are for students to be able to describe and analyze cultural diversity in Indonesia.

B. Design

The next step is the design stage, after identifying the problems at the define stage. At the design stage, the goal is to design learning media using the CapCut application for science subjects. This design stage includes several things, such as:

1. Criterion-Test Contraction

The researcher compiled a test adjusted to the analysis of the Level of Achievement Reference (ATP) for class IV science subjects, which included learning achievements, competencies, dimensions, and learning objectives. The purpose of preparing this test is to measure the achievement of student learning outcomes using CapCut-based learning media developed to test its feasibility and effectiveness for use in science learning. The questions given to students are in the form of objective questions, namely multiple-choice questions.

Table 3. Questions that are used

No.	Indicator Question	Domain Question	Number	Multiple Question
1.	**Remember**	C1	1,2,3,4,5,6	6
2.	**Understand**	C2	7,8,9,10	4
3.	**apply**	C3	11,12,13	3
4.	**Analyze**	C4	14,15,16	3
5.	**Evaluate**	C5	17,18	2
6.	**Create**	C6	19,20	2
		Amount		20

2. Media Selection

In the selection stage of learning media that will be used as product development, the researcher analyzes according to the characteristics of the students. This is very important to ensure that the learning media chosen can make students more active and involved in the learning process. In this study, the learning media that will be developed is for cultural diversity material in grade IV, using CapCut application-based media.

3. Format Selection

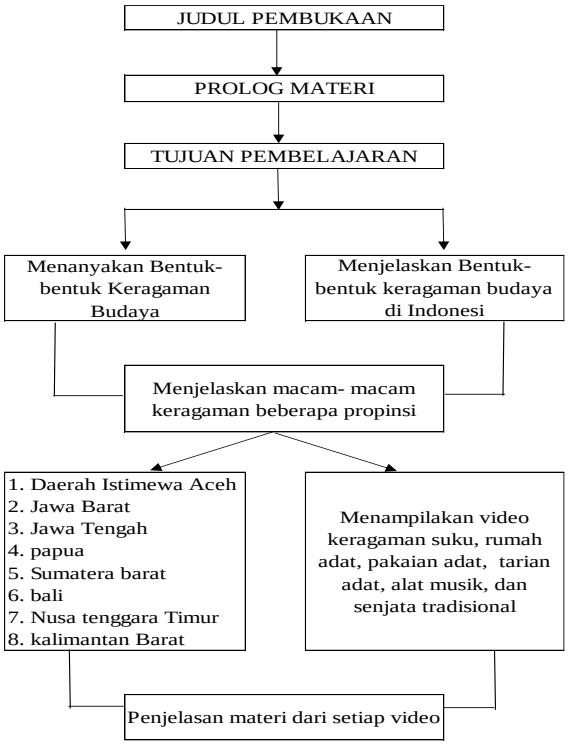
In the initial steps of the design stage, the format selection is carried out according to the learning material. The form of presentation is chosen based on adaptation to the learning media used. The choice of format in this development aims to design the content of learning materials, the approach to be used, the selection of learning resources, and the creation of CapCut media designs. This stage includes preparing the necessary tools and materials and making flowcharts and

storyboards.

a) Tools and materials to develop learning media products based on the CapCut application, several devices used include laptops, canvas applications, and CapCut applications. In addition, the materials needed to make the product have videos about cultural diversity, backgrounds, and personal voice recordings to support content about cultural diversity.

b) Making a Flowchart, the researcher will make a visual plan in a diagram to describe the sequence and relationship between video content. This flowchart will help researchers clarify the ideas and concepts they want to convey through the video and ensure that all important information is given properly in the video.

Figure 1. CapCut-based Learning Video Development Flowchart

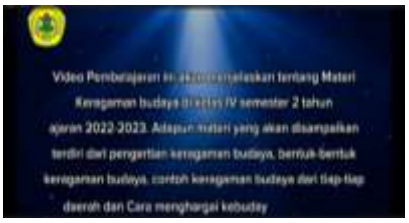


c) Making Storyboards as a guide to realizing the video in real terms. After the storyboard is finished, the researcher can then discover the video based on the guidelines that have been made.

4. Initial Design

The initial design is the CapCut media design that the researcher designed. The following is the design of the CapCut application developed for science learning

Table 4. CapCut Application Design with Cultural Diversity Material

Design	Information	Description
	Opening Page View	The opening display shows the title, developer name, and supervisor at the start of the CapCut-based video
	Prologue View	Explain the content of learning videos about cultural diversity
	Opening View	Displays cultural diversity text
	Display Learning Objectives	Describe the learning objectives of cultural diversity material that is in accordance with the Merdeka Curriculum
	Apperception Display	
	Material Display	Explanation of material forms of the cultural diversity of traditional dances

	Material Display	Explaining the cultural diversity of the Special Region of Aceh
	Material Display	Explaining the Diversity of the Traditional Houses of the Special Region of Aceh
	Material Display	Explaining the Diversity of the Traditional Clothing of the Special Region of Aceh
	Material Display	Explaining the Diversity of Traditional Dances in the Special Region of Aceh
	Material Display	Explaining the Diversity of Musical Instruments in the Special Region of Aceh
	Closing View	Explain the way of attitude in respecting the diversity of Indonesian culture
	Bibliography View	Displays all bibliography of cultural diversity material
	Developer View	Displays the developer's profile which includes the name, Student Identification Number, and campus identity

C. Develop

This stage involves the development of media. The steps taken at this stage are expert validation and trials.

1. Expert Validation

The validation process consists of two stages carried out by two validators with different fields of expertise: the material expert validator and the media specialist validator. This validation aims to evaluate the feasibility of the learning media that has been made. If the media is considered feasible after passing the validation from the two validators, then the media is ready to be tested on students.

a) Material Expert Validation

This stage is a validation process by material experts on developing research products, namely CapCut-based learning video media. Material validation was carried out by Dr. Ujang Jamaludin, M.Si, M.Pd, a lecturer in the PPG Untirta Department and at Sultan Ageng Tirtayasa University.

Table 5. Material Expert Validation

Aspek	Indikator Penilaian	Butir Penilaian	Penilaian				
			1	2	3	4	5
Kelayakan Isi	a. Kesesuaian Materi	1. Kelengkapan Materi					√
		2. Keluasan Materi					√
		3. Kedalaman Materi					√
	b. Keakuratan Materi	1. Keakuratan konsep dan definisi					√
		2. Keakuratan fakta dan data					√
		3. Keakuratan contoh dan kasus					√
		4. Keakuratan gambar dan ilustrasi					√
Kelayakan Penyajian	a. Teknik Penyajian	1. Keruntutan konsep				√	
	b. Pendukung Penyajian	1. Contoh-contoh gambar ilustrasi					√
		2. Pengantar				√	
Kelayakan Kebahasaan	a. Lugas	1. Ketepatan struktur kalimat				√	
		2. Keefektifan kalimat				√	
		3. Kebakuan istilah				√	
	b. Komunikatif	1. PemahamC2:C17an terhadap				√	
	c. Kesesuaian dengan perkembangan peserta didik	1. Kesesuaian dengan perkembangan intelektual peserta didik					√
Total			69				
Skor Rata-rata			4,6				
Prosentase			92%				
Kategori			Sangat layak				

Based on the data above, the validation of material experts obtains results with a percentage of 92%. These results indicate that CapCut-based learning video media products achieve the "Very feasible" qualification, with an achievement level between 81-100%. Therefore, the material in these media products is very valid and appropriate to be used in the science learning process for fourth-

grade students at SDN Kedaleman III.

Material Revision

After validation by material experts, suggestions and input are obtained to make improvements to the content of the material in the product that has been developed. The following are suggestions and feedback the material expert lecturer provided qualitatively: "Give questions and pause for students to answer so the video looks more interactive." So the researcher revised as follows:

Table 6. Material Revision

Before Revision	After Revision
	
Improve the material to make it more interactive	Ask questions

b) Media Expert Validation

The second validation was by media expert Dr. Lukman Nulhakim, M.Pd. He is a lecturer at the Teaching and Education Faculty of Sultan Ageng Tirtayasa University.

Table 7. Media Expert Validation

Aspek	Indikator	Jumlah Butir Soal	Skor				
			1	2	3	4	5
Tampilan	Pemilihan Backgroud Video	1					√
	Pemilihan Jenis warna	1				√	
	Kualitas suara	1					√
	Kualitas animasi	1				√	
	Kualitas video dalam pembelajaran	1					√
Pemograman	Kualitas animasi dan keefektifan	1					√
	Kualitas musik	1				√	
	Kemudahan pengoprasian	1					√
	Fleksibelitas	1					√
Total			42				
Skor Rata-rata			4,7				
Prosentase			93%				
Kategori			Sangat layak				

Based on the results of the validation test by media experts, the CapCut-based instructional video media that has been developed has been assessed in terms of appearance and programming and obtained a percentage of 93% with an average of 4.7, which means achieving an achievement level of between 81-100%. These results indicate that the product is included in the "very feasible" qualification for use in science learning for class IV students at SDN Kedaleman III and can be tested on students.

Media Revision

After being validated by material experts, suggestions and input are obtained in quantitative form, which can be paraphrased as follows: Title, Name of Developer, and Supervisor in 1 slide.

Table 8. Media Revision

Before Revision	**After Revision**
	
Does not include the developer's name	Title, Developer Name, and Advisor in 1 slide

2. Trial

The CapCut application trial that has been developed was carried out on fourth-grade students at SDN Kedaleman III with a total of 32 students through pre-test and post-test tests. The pre-test was given before science learning using CapCut media that had been developed, while the post-test was given to students after science learning using CapCut application-based media. The pre-test and post-test results are as follows:

Table 9. Pre-Test dan Post-Test Results

No	Nama	*Pre-Test*	*Post-Test*	*N-gain score*
1	Abdul Fikri	50	80	0,60
2	Adinda Khoirunnisa	50	85	0,70
3	Amira Maulida	75	90	0,60
4	Aprilian Adi Putra	50	80	0,60
5	Arif Fatir Dwimulyo	20	70	0,63
6	Dimas Azka	45	85	0,73
7	Dhimas Adrian Permana	30	85	0,79
8	Fawajah Nabila	55	85	0,67
9	Jevino Aditya	75	90	0,60
10	Julia Ramadhani	50	85	0,70
11	Lusia Ekawati Putri	55	85	0,67
12	Muhammad Nazriel Ilham	75	90	0,60
13	Muhammad Riswandi Saputra	75	90	0,60
14	Muhammad Adim	80	95	0,75
15	Muhammad Fahri Nurrohman	90	100	1,00
16	Muhamad Setiawan	85	95	0,67
17	Muhammad Taufiq Al-Farizi	25	80	0,73
18	Muhamad Yusfi Maulidan	75	90	0,60
19	Nur Afira Rahmawati	60	90	0,75
20	Okta Ristiani	85	95	0,67
21	Putri Aliyanti	25	80	0,73
22	Putri Desti Anggraeni	30	85	0,79
23	Putri Nur Asyifa	75	90	0,60
24	Ratu Sevira	50	90	0,80
25	Rifki Danar Hadi	35	85	0,79
26	Rizki Alif Kurnia	55	85	0,67
27	Safinah	60	90	0,75
28	Sandi	30	85	0,79
29	Sarini	75	95	0,80
30	Sahafa Salsabila	25	80	0,73
31	Qais Habib Arrahman	60	95	0,75
32	Kenzo Christian	55	95	0,89
Rata-rata		55,63	87,50	0,71
Kategori (g>0,7)				Tinggi

Based on the table above, it can be seen that before using CapCut-based media in science learning, most of the fourth-grade students at SDN Kedaleman III got low grades below the KKM. Only 11 people passed the KKM. In other words, only 34.3% of students passed science learning. Cultural diversity material. And after using CapCut-based media in science learning, most students scored above the KKM, and only one person scored below the KKM. So it can be concluded that science learning is successful after using CapCut application-based media because 96.9% of students pass the KKM or get scores above the KKM.

In addition to the pre-test and post-test, satisfaction questionnaires were also distributed to students with the following results:

Table 10. Student Satisfaction Questionnaire Results

No	Nama	1	2	3	4	5	6	7	8	9	10	Jumlah Rata-Rata
1	Abdul Fikri	5	5	5	5	4	4	5	5	5	3	4,6
2	Adinda Khoirunnisa	4	5	5	5	3	4	4	5	5	5	4,5
3	Amira Maulida	5	4	5	5	4	3	3	5	5	3	4,2
4	Aprilian Adi Putra	5	5	5	5	4	4	5	5	5	3	4,6
5	Arif Fatir Dwimulyo	4	3	4	4	5	3	5	4	4	3	3,9
6	Dimas Azka	5	5	5	5	4	3	3	4	5	4	4,3
7	Dhimas Adrian Permana	5	5	5	5	4	4	5	5	5	3	4,6
8	Fawajah Nabila	5	4	5	5	4	5	5	5	4	5	4,7
9	Jevino Aditya	5	5	5	5	4	3	3	4	5	4	4,3
10	Julia Ramadhani	5	4	5	5	4	5	5	5	4	5	4,7
11	Lusia Ekawati Putri	4	5	5	4	5	4	3	4	5	5	4,4
12	Muhammad Nazriel Ilham	4	5	5	5	3	4	4	5	5	5	4,5
13	Muhammad Riswandi Saputra	5	4	5	5	5	5	4	5	5	5	4,8
14	Muhammad Adim	5	5	5	5	4	4	5	5	5	5	4,8
15	Muhammad Fahri Nurrohman	5	4	5	5	5	5	4	5	5	5	4,8
16	Muhamad Setiawan	5	4	5	5	5	5	4	5	5	5	4,8
17	Muhammad Taufiq Al-Farizi	4	5	5	3	3	4	3	4	4	3	3,8
18	Muhamad Yusfi Maulidan	5	4	5	5	5	5	4	5	5	5	4,8
19	Nur Afira Rahmawati	5	4	5	5	4	5	5	5	4	5	4,7
20	Okta Ristiani	5	4	5	5	5	5	4	5	5	5	4,8
21	Putri Aliyanti	5	5	5	5	4	3	3	4	5	4	4,3
22	Putri Desti Anggraeni	4	5	5	5	3	4	4	5	5	5	4,5
23	Putri Nur Asyifa	5	4	5	5	4	5	5	5	4	5	4,7
24	Ratu Sevira	5	4	5	5	5	5	4	5	5	5	4,8
25	Rifki Danar Hadi	5	5	5	5	4	4	5	5	5	3	4,6
26	Rizki Alif Kurnia	4	5	5	5	3	4	4	5	5	5	4,5
27	Safinah	5	4	5	5	4	5	5	5	4	5	4,7
28	Sandi	5	5	5	5	4	4	5	5	5	3	4,6
29	Sarini	5	5	5	5	4	4	5	5	5	3	4,6
30	Sahafa Salsabila	5	5	5	5	4	3	3	4	5	4	4,3
31	Qais Habib Arrahman	5	4	5	5	4	5	5	5	4	5	4,7
32	Kenzo Christian	5	4	5	5	5	5	4	5	5	5	4,8
Rata-rata												4,6
Prosentase												91%
Kategori												Sangat Baik

The results of the calculation above obtained the results of student satisfaction and responses to the use of CapCut-based learning media in science learning in class IV SDN Kedaleman III receiving a total percentage of 91%, which means that it is at an achievement level of 91-100% which is in the very good category. Thus, the development of CapCut-based learning media gets students' satisfaction and very good responses.

D. *Disseminate*

After finishing developing CapCut-based learning video media products on cultural diversity material at SDN Kedaleman III Cilegon, the next step is to disseminate information announcing that the product has been developed.

The Effectiveness of CapCut Application Development on Science Learning in Elementary Schools

To determine the effectiveness of the developed CapCut application, a hypothesis test was carried out using the t-test, namely the paired sample t-test. The hypothesis in this study is as follows:

H_0 : there is no significant difference between the pre-test and post-test in science learning for class IV students at SDN Kedaleman III using learning media based on the CapCut application.

H_a : there is a significant difference between the pre-test and post-test in science learning for class IV students at SDN Kedaleman III using CapCut application-based learning media

While the basis for decision-making in the paired sample t-test is as follows:

- If the Sig. (2-tailed) <0.05, then there is a significant difference between the pre-test and post-test = H0 is rejected, and Ha is accepted
- If the Sig. (2-tailed) > 0.05, so there is no significant difference between the pre-test and post-test = H0 is accepted, and Ha is rejected

After doing the t-test, the following results are obtained:

Table 11. Paired Sample t-Test Results

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	T	df	Sig. (2-tailed)
Pair 1	Pre-Test - Post-Test	-31.87500	15.74750	2.78379	-37.55258	-26.19742	-11.450	31	.000

From the results of the t-test above, it can be seen that Sig.2 tailed = 0.000, which means that Sig. 2 tailed < 0.05 = 0.000 < 0.05 so that H0 is rejected and Ha is accepted, meaning that there is a significant difference between the pre-test and post-test in science learning for class IV students at SDN Kedaleman III using CapCut application-based learning media. In other words, the CapCut application developed is effective for learning science for class IV students at SDN Kedaleman III.

Discussion

In this study, the development of CapCut application-based learning media in class IV science lessons used Thiagarajan's 4D model, namely define, design, develop, and disseminate. These steps are to Thiagarajan's theory which explains the development process that must be carried out in a 4D model (Thiagarajan et al., 1974). After designing the learning media, the results were validated by one media expert and one material expert. Based on the results of the validation that has been carried out, the instructional media design is declared "very feasible," with a percentage of media experts' assessment of 93% and material experts' assessment of 89%. Therefore, learning media can be continued to the Disseminate stage. This finding is consistent with several previous studies which state that the developed media is suitable for use in the learning process, such as research (Y.F. Chen et al., 2018), (Setyorini & Wulandari, 2021), (Firmansah et al., 2021), (Siregar, 2023), dan (Rahayu, 2022a).

The instructional video media developed here has advantages in the effectiveness of time, space, and messages. Thus, students can more easily and quickly understand and communicate learning material, as conveyed by (Nurwidayanti, 2018). In the final stage of this study, a hypothesis test was carried out to determine the effectiveness of the CapCut application developed in science learning, and it was concluded that there was a significant difference between students' pre-test and post-test scores in science learning for fourth-grade students, so these results indicate that the learning objectives the use of learning media has been successfully achieved, with the help of products that have been developed it has succeeded in increasing the effectiveness of the learning process. This is in line with research conducted by (Kolopita, 2022; Supriyono, 2018), which shows the effect of using instructional media in improving student learning outcomes.

This study also found that using the CapCut application media could attract students' attention and eliminate boredom in science learning because students were curious about what would be displayed in the CapCut video. In addition, it also improves students' science learning

outcomes on cultural diversity material. This is in line with research which shows that the use of CapCut as a learning tool can increase student interest in learning and eliminate boredom in learning (Tafonao, 2018; R. Wulandari & Herminta, 2022; T. Wulandari & Mudinillah, 2022).

CONCLUSION

The study results show that the CapCut application-based learning media is very suitable for science learning because it gets high marks from subject and media experts. The material expert's assessment was 89%, and the media expert's assessment was 93% which was classified as very feasible. And the t-test shows a significant difference between students' pre-test and post-test in science learning using CapCut application-based media because Sig. 2 tailed < 0.05 = 0.000 < 0.05, so H_0 is rejected, and H_a is accepted. Therefore, the CapCut application-based learning media is effectively used in science learning for class IV students at SDN Kedaleman III.

REFERENCES

Agustini, D., Wijayanti, N., Rahmawati, P., Prahara, E. Y., & Cahyani, V. P. (2021). Pemanfaatan Canva sebagai Media Pembelajaran IPA pada Materi Klasifikasi Makhluk Hidup untuk Peserta Didik Kelas VII SMP/MTs. *PISCES: Proceeding of Integrative Science Education Seminar*, *1*(1), 199–207.

Chen, Y. F. (2018). Effects of the Application of Computer Multimedia Teaching to Automobile Vocational Education on Students' Learning Satisfaction and Learning Outcome. *Eurasia Journal of Mathematics, Science and Technology Education*, *14*(7), 3293–3300.

Chen, Y.-F., Luo, Y.-Z., Fang, X., & Shieh, C.-J. (2018). Effects of the application of computer multimedia teaching to automobile vocational education on students' learning satisfaction and learning outcome. *Eurasia Journal of Mathematics, Science and Technology Education*, *14*(7), 3293–3300.

Danim, S. (1995). *Media komunikasi pendidikan: Pelayanan profesional pembelajaran dan mutu hasil belajar*. Bumi Aksara.

Deriyan, & Nurmairina. (2022). Pengembangan Media Video Pembelajaran IPA dengan Menggunakan Aplikasi CapCut di Kelas V SD. *Jurnal Penelitian Pendidikan MIPA*, *7*(1), 1–10.

Fahrozy, F. P. N., Iskandar, S., Abidin, Y., & Sari, M. Z. (2022). Upaya Pembelajaran Abad 19-20 dan Pembelajaran Abad 21 di Indonesia. *Jurnal Basicedu*, *6*(2), 3093–3101.

https://doi.org/10.31004/basicedu.v6i2.2098

Firmansah, S., Jaya, F., & Seituni, S. (2021). Pengembangan Video Pembelajaran Dengan Aplikasi CapCut Pada Mata Pelajaran Desain Publikasi Materi Photoshop Dasar Siswa Kelas XI Jurusan Desain Komunikasi Visual SMK Al–Falah Pesanggrahan Kecamatan Jangkar Kabupaten Situbondo. *Holistic Science*, *1*(2), 21–24.

Firmansyah, S. (2021). Pengembangan Video Pembelajaran Dengan Aplikasi CapCut pada Mata Pelajaran Desain Publikasi Materi Photoshop Kelas XI urusan Desain Komunikasi Visual SMK Al- Falah Pesanggrahan Kecamatan Jangkar. *Jurnal Larisma*, *1*(2), 21–24.

Hamdayama, J. (2014). Model dan metode pembelajaran kreatif dan berkarakter. *Bogor: Ghalia Indonesia*, *2*(3).

Khotimah. (2020). Meningkatkan Kemampuan Berbicara bahasa Inggris Siswa Kelas VII SMP Dengan Media Pembelajaran Flash card. *Jurnal Pionir*, *6*(2), 1–6.

Kolopita, C. K. (2022). Pengaruh Media Pembelajaran Terhadap hasil Belajar Siswa Pada Mata Pelajaran Komputer dan Jaringan. *Journal Of Information Technology Education*, *2*(1), 1–12.

Magdalena. (2021). Efektivitas Penggunaan Media Online dalam Meningkatkan Hasil Belajar Siswa Dimasa Pandemi Covid-19 Di SDN Cikokol 3. *Jurnal Edukasi dan Sains*, *3*(2), 377–391.

Nurwidayanti, D. (2018). Pengaruh Media Pembelajaran Terhadap hasil Belajar Ekonomi Ditinjau Dari Gaya Belajar Siswa SMA Negeri. *Jurnal Pendidikan IPS*, *5*(2), 105–114.

Rahayu, I. D. (2022a). Mrs Penerapan Aplikasi CapCut Untuk Meningkatkan Keterampilan Berbicara Bahasa Inggris Kelas IX-A SMP Negeri 2 Gudo. *Jurnal Petisi (Pendidikan Teknologi Informasi)*, *3*(2), 44–50.

Rahayu, I. D. (2022b). Penerapan aplikasi CapCut Untuk Meningkatkan Keterampilan Berbasis Bahasa Inggris Kelas IX-A SMP Negeri 2 Gudo. *Jurnal Petisi*, *3*(2), 44–50.

Rumansyah, M. (2016). Perbedaan Pengaruh Pembelajaran dengan Menggunakan Modul Interaktif Dan Modul Konvensional Terhadap Pemahaman Konsep IPA. *Jurnal Pendidikan Matematika dan Sains*, *4*(1), 54–62.

Setyorini, I. D., & Wulandari, S. S. (2021). Pengaruh Media Pembelajaran, Fasilitas dan Lingkungan Belajar Terhadap Hasil Belajar Selama Pandemi Covid-19. *Jurnal Profit: Kajian Pendidikan Ekonomi Dan Ilmu Ekonomi*, *8*(1), 19–29.

Siregar, E. H. (2023). Pengembangan Media Pembelajaran Berbasis Smart Apps Creator Materi Osteichthyes pada Mahasiswa Biologi 2021 Universitas Negeri Medan. *BEST Journal (Biology*

Education, Sains, and Technology), *6*(1).

Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. CV Alfabeta.

Supriyono. (2018). Pentingnya Media Pembelajaran untuk Meningkatkan Minat Belajar Siswa SD. *Edustream: Jurnal Pendidikan Dasar*, *2*(1).

Suryaman. (2022). Pengembangan Media Video animasi berbasis Plotagon dan CapCut Untuk Meningkatkan hasil belajar kognitif siswa kelas II Sekolah Dasar. *Jurnal Cakrawala Pendas*, *8*(1), 841–850.

Suryani, N., Setiawan, A., & Putria, A. (2018). *Media Pembelajaran Inovatif Dan Pengembangannya*. PT Remaja Rosdakarya.

Tafonao, T. (2018). Peranan Media Pembelajaran Dalam meningkatkan Minat Belajar Mahasiswa. *Jurnal Komunikasi Pendidikan*, *2*(2), 103–114.

Thiagarajan, S., Semmel, D. S., & Semmel, M. I. (1974). *Instructional Development for Training Teachers of Exceptional Children: A Sourcebook*. Indiana University.

Wijayanti, L. S., Koto, I., & Winarni, E. W. (2023). Pengembangan Multimedia Interaktif dengan Example Non ExampleBerbasis Inkuiri pada Pembelajaran IPAMateri Organ Pencernaan Hewan untuk Siswa Kelas V. *Jurnal Pembelajaran dan Pengajaran Pendidikan Dasar*, *6*(1), 75–87.

Wulandari, R., & Herminta, N. (2022). Pengembangan Media Pembelajaran Tari Berwawasan Peduli Lingkungan Di Sekolah Dasar. *Jurnal Pendidikan Guru Sekolah Dasar*, *11*(2), 361–375.

Wulandari, T., & Mudinillah, A. (2022). Efektivitas Penggunaan Aplikasi canva Sebagai Media Pembelajaran IPA MI/SD. *Jurnal Risert Madrasah Ibtidaiyah*, *2*(1), 102–118.

Zaki, A., & Yusri, D. (2020). Pengaruh Media Pembelajaran Untuk Meningkatkan Prestasi Belajar Siswa Pada Pelajaran PKN SMA Swasta Darussa'adah Kecamatan Pangkalan Susu. *Jurnal Ilmu Pendidikan*, *7*(2), 809–820.