







#### Development of learning videos at SDN 106104 Sambirejo

Maisyaroh<sup>1</sup>, Syarifah<sup>2</sup>, Mursid<sup>3</sup>

<sup>1,2,3</sup>Universitas Negeri Medan, Kota Medan, Indonesia <u>maisamaisa089@gmail.com</u><sup>1</sup>, <u>syarifahahmad@gmai.com</u><sup>2</sup>, <u>mursid.tp@gmail.com</u><sup>3</sup>

#### ABSTRACT

The lecture learning method sometimes makes students bored, so it is necessary to develop learning methods that are effective and fun for students. This research aims to determine the feasibility and effectiveness of using instructional videos in teaching my area, my pride, class V at SDN 106104 Sambirejo. This research is development research, which refers to the 4-D development model, which consists of 4 stages, namely the Define, Design, Development, and Disseminate stages. Data was collected through observation, interviews, validation questionnaires, and tests. Based on research results, the developed learning video was validated by material expert validators, obtaining a feasibility percentage of 95.38 percent, a very valid criteria. The results of the small group trial obtained a practicality percentage of 88.50 percent, very practical criteria. The field trials' results show the percentage of practicality was 91.57 percent, a very practical criteria. At the field trial stage, effectiveness was achieved at 100 percent classically, with a gain score of 0.615 classified as medium effectiveness criteria. The percentage increase in learning outcomes is 92 percent, meaning that learning videos can be effectively used in the learning process of my proud region in class V at SDN 106104 Sambirejo

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#### ABSTRAK

Metode pembelajaran ceramah terkadang membuat Student bosan, sehingga perlu dilakukan pengembangan metode pembelajaran yang efektif dan menyenangkan untuk Student. Penelitian ini bertujuan untuk mengetahui kelayakan dan keefektifan penggunaan video pembelajaran pada pembelajaran daerahku kebangganku kelas V SDN 106104 Sambirejo. Penelitian ini merupakan penelitian pengembangan yang mengacu pada model pengembangan 4-D yang terdiri dari 4 tahapan yaitu tahap Define, Design, Development, dan Disseminate. Pengumpulan data dilakukan dengan observasi, wawancara, angket validasi dan tes. Berdasarkan hasil penelitian video pembelajaran yang dikembangkan telah divalidasi oleh validator ahli materi memperoleh persentase kelayakan sebesar 95,38 persen kriteria sangat valid. Hasil uji coba kelompok kecil memperoleh persentase kepraktisan sebesar 88.50 persen kriteria sangat praktis. Hasil uji coba lapangan persentase kepraktisan sebesar 91,57 persen kriteria sangat praktis. Pada tahap uji coba lapangan keefektifan tercapai dengan 100 persen secara klasikal, dengan hasil gain score sebesar 0,615 diklasifikasikan dalam kriteria efektivitas sedang. Persentase peningkatan hasil belajar sebesar 92 persen, artinya video pembelajaran dapat efektif digunakan dalam proses pembelajaran daerahku kebangganku di kelas V SDN 106104 Sambirejo.

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# INTRODUCTION

Learning media serves as a tool and method to enhance the effectiveness of communication and interaction between teachers and students in the learning process. Education constantly evolves to become better and stronger than before (Ariani, 2019). The media plays a crucial and irreplaceable role in school education. Its presence as an integral part makes it a key element in achieving learning objectives efficiently and effectively. The application and adaptation of technology in learning activities are essential to face the challenges of change in the globalization era, as the development of information and communication technology has already influenced the learning process (Firmadani, 2020; Giwangsa, 2019).

Based on interviews and observations conducted by the researcher at SDN Sambirejo Timur in grade V, it was found that learning videos had not yet been implemented. Teachers only used lecture methods; even when visual aids were available, only images were used. Students perceived the learning process as monotonous and unengaging, leading to low classroom participation. Unattractive content delivery resulted in poor understanding and an unconducive learning environment. However, social studies (IPS) requires students to master, understand, and develop competencies and learning outcomes. Educational technology benefits learning at all levels, such as media as an engaging learning tool (Dwijayani, 2019).

Social studies (IPS) is a core subject taught at all levels. It integrates social sciences and humanities to help students become good Indonesian citizens (Khasanah, 2020). This challenge arises due to limited teacher knowledge of appropriate methods and media for teaching IPS, lack of creativity, and the limited media available in elementary schools (Widagdo, 2020). The problem intensifies when students become bored and disengaged due to one-way interactions based only on textbook images (Triyanto, 2021).

As described above, learning media are essential for motivating students in the learning process. Delivering materials using videos allows students to replay the content independently. Teachers must also explain material clearly so students can comprehend the content creatively through audiovisual media, avoiding boredom. Visual appeal plays an important role in capturing children's interest and attention. Children are usually attracted to images, colors, and cute or funny designs (Mukaromah et al., 2021).

This is due to their still-developing abstract thinking abilities. Key visual elements that engage children include bright colors, simple shapes, and expressive, adorable facial features. When a character or object has a strong visual appeal, children are more likely to interact with it. Users can easily create videos with various apps, from choosing backgrounds and characters to adding sound and sound effects. CapCut is one of the most exciting advances in educational technology, allowing children to think creatively without limits. Teachers can use it to help students understand content and attract their attention (Priandini et al., 2023).

This interactive process results in user responses to media. Providing interactivity allows students to feel directly involved in the learning process. Other research states that media that provide interactivity can motivate students to learn (Kusumawati & Mustadi, 2021; Mawaddah et al., 2019; Octafiana et al., 2018; Purnomo & Sujatmiko, 2022). Therefore, the media is one of the key components in achieving learning objectives. Teachers play a vital role in creating creative and innovative learning environments, from planning, implementing, and evaluating learning processes. Teachers are the key to successful learning, supported by other factors like infrastructure, students, parents, etc.

This research is based on the researcher's desire to develop learning media that meet student needs. The goal is to create media that helps students understand content clearly, stay active and engaged during

class, and be visually appealing. It is expected to improve learning outcomes. Based on this, this study aims to develop learning videos for the topic *"My Proud Region"* as part of IPS lessons for grade V students at SDN 106104 Sambirejo.

# LITERATURE REVIEW

#### **Development of Learning Videos**

Development is a logical and systematic process of designing instruction to determine all components involved in learning activities while considering the potential and competencies of students (Hasyim, 2022). Developing learning videos can help teachers synchronize material, ensuring quality and appropriateness for elementary education. Attractive visuals and concise explanations help students better understand classroom materials. Learning outcomes using video media often have better or more positive impacts than those without animation and video media. A significant advantage is the visual presentation of information. Images and animations help students easily understand abstract concepts (Apriadi, 2021).

Clear and experienced narration enhances students' understanding of video content (Indriani, 2019). Media serve as an intermediary between the sender and receiver during communication (Azis, 2020). Video learning media can eliminate spatial and temporal barriers, providing more flexible and accessible education (Gafur et al., 2023). It is a viable alternative that motivates students and supports effective learning (Khairani et al., 2019). Information and communication can be conveyed easily with the help of media (Mulhayatiah, 2019). Using video learning effectively helps students improve their learning outcomes and better comprehend the material.

# Technological Development in Education

As times change, technology rapidly evolves, bringing many benefits across various sectors, including education. All forms of learning activities are now more accessible thanks to modern technology. In education, technology is a tool for accessing information and supporting learning implementation and assignments (Permana et al., 2024). Tech-based or digital learning media helps enliven classroom atmospheres by encouraging active communication and discussion, simplifying content delivery, and providing a more engaging learning experience (Anam, 2021). National education policies continue to innovate, adapting to the development of learning technologies (Zen, 2019). Learning video development is an innovation expected to benefit students (Basyaev et al., 2021).

#### Audiovisual Media

Audiovisual techniques deliver content using mechanical and electronic tools that convey audio and visual messages. Audiovisual media include videos, films, and other formats with sound and visuals. Practical educational tools promote appropriate practice, feedback, and responses. Advantages include visualizing learning objects concretely, engaging audio-visual elements, and reducing boredom. The drawbacks are high costs, electricity dependency, and one-way communication (Nomleni, 2018).

# Social Studies (IPS)

Social Studies is an integrated study of social sciences and humanities aimed at developing students into capable citizens. The curriculum includes anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, sociology, humanities, mathematics, and science. IPS

examines interactions between individuals, communities, and their environment. Its teaching can be adapted to the classroom and daily life (Yuanta, 2020).

#### METHODS

This research is a type of Research and Developement R&D). According to Sugiyono in the book *Metode Penelitian Kuantitatif Kualitatif dan R&D, " R&D research aims to develop or improve new products.* This method aims to create specific products for research purposes, beginning with a needs analysis and proceeding to effectiveness testing. This study uses the Four-D Model developed by Thiagarajan, Semmel, and Semmel, which includes four stages: define, design, develop, and disseminate.

The Define stage aims to determine the learning requirements for developing instructional videos for fifth-grade students. It includes needs analysis to understand field conditions and learner characteristics (cognitive, linguistic, social, etc.).

The Design stage focuses on planning the video development, considering sentence clarity, image relevance, readability, and compelling content presentation. The goal is to create a precise sequence from the design, content, and language perspectives.

The development stage involves producing and revising the learning video based on expert feedback. This includes validation by experts and product revision if needed. Once validated, limited trials are conducted to test practicality and applicability. This stage includes assessments of validity, practicality, and feasibility.

The Disseminate stage is the final step in the 4-D model. After the media is validated and deemed practical, it is distributed more broadly beyond a single classroom. Students are given questionnaires to assess engagement and product appeal to ensure the developed media can be used in other classes. The research subjects were 24 fifth-grade students at SDN Sambirejo Timur, Kota Medan. The sample was selected using total sampling, including all students in the population.

# **RESULT AND DISCUSSION**

#### **Define Stage**

In this stage, the objectives and subject matter were analyzed to determine and define the learning requirements. This stage included an analysis of teacher needs, student characteristics, tasks, and learning objectives. Based on interviews with teachers and observations of students, it was found that learning media were rarely used or not used at all. Observations showed that teachers primarily relied on textbooks. Images as teaching aids were also not effective in stimulating student enthusiasm. Task and learning objective analysis showed that the material presented in the video would be "My Proud Region," followed by tasks to help students master the topic through the video. Based on the material and task analysis, the learning objectives (Table 1) are as follows:

Table 1. Learning Objective Analysis

Learning Achievement	Learning Objective
In Phase C, students are introduced to interrelated systems that follow specific rules, particularly regarding the relationship between nature and social life in diversity. Students are expected to take action, make decisions, or solve problems based on their understanding of the material.	Recognizing cultural heritage and understanding its history

Source: Author's Documentation, 2024

# **Design Stage**

This stage involved designing the learning video. The video was created using the CapCut application to integrate text, images, animations, and audio. Based on the planned design, the format of the video is explained. The opening of the learning video displays the author's identity, title, and related subject matter **(see Figure 1)**.



**Figure 1.** Video Opening Display Source: Author's Documentation 2024

Next is the opening video display, which contains learning outcomes, core objectives, and topics to be taught (see Figure 2).



Figure 2. Opening Video Display Source: Author's Documentation 2024

The material display covers cultural heritage's history, types, and preservation efforts, supported by animated images and videos aligned with learning objectives (see Figure 3).



Figure 3. Material Display Source: Author's Documentation 2024

The assignment section includes five essay questions about cultural heritage and its history **(see Figure 4)**. This assignment aims to assess students' understanding and enhance their knowledge of the topic through the learning video.



Source: Author's Documentation 2024

# **Develop Stage**

Following the definition and design stages, a draft of the learning video was produced. The first step in the development process was validation and evaluation, the results of which are shown in Table 2.

No	Test Subject	Validation Result (%)	Validation Result
1	Content Expert	95,38%	Very valid
2	Media Expert	94%	Very valid
3	Language Expert	90,76%	Very valid
4	Small Group Test	88,50%	Very practical
5	Field Test	91,57%	Very practical

Table 2. Validation Test Results

Source: Author's Documentation 2024

The content expert validation result of 95.38% indicated the video was suitable for implementation. The media expert gave a score of 94%, meaning the video is appropriate for student testing. The language expert scored 90.76%, indicating it is very valid.

The small group test was conducted after the video was revised based on expert feedback. Ninth-grade V-B and V-C students were divided into three groups. Students were introduced to the video-based learning method and asked to complete a response questionnaire. The average score was 88.50%, indicating that the video was very practical and suitable for field testing.

The field test aimed to evaluate the learning video's practicality and effectiveness. The researcher distributed questionnaires to 24 grade V students. Results showed that students were highly interested in the video, with 91.57% of responses categorized as very practical.

# **Disseminate Stage**

The video was then disseminated to grade V students at SDN 106164 Sambirejo Timur in Kota Medan, involving 24 students. During the field test, students were given a pre-test and a post-test to measure learning improvement. The pre-test focused on cultural heritage, aligned with the module's learning objectives. After the pre-test, the video lesson was presented, followed by a post-test.

Based on the results obtained by class V students in the evaluation activities, Table 3 shows the results of the pre-test and post-test learning outcomes.

No	Student	Pre-Test	Post-Test	Information
1	Student 1	70	92	Improved
2	Student 2	52	96	Improved
3	Student 3	62	88	Improved
4	Student 4	76	88	Improved
5	Student 5	62	96	Improved
6	Student 6	66	100	Improved
7	Student 7	74	88	Improved
8	Student 8	66	100	Improved
9	Student 9	74	96	Improved
10	Student 10	76	96	Improved
11	Student 11	66	90	Improved
12	Student 12	62	92	Improved
13	Student 13	58	96	Improved
14	Student 14	62	96	Improved
15	Student 15	44	100	Improved
16	Student 16	52	96	Improved
17	Student 17	52	86	Improved
18	Student 18	64	80	Improved
19	Student 19	68	90	Improved
20	Student 20	74	90	Improved
21	Student 21	62	76	Improved
22	Student 22	66	96	Improved
23	Student 23	66	100	Improved
24	Student 24	70	86	Improved
	Average	64.3	94.2	Improved

#### Table 3. Field Trial Data on Student Learning Outcomes

Source: Author's Documentation 2024

The KKM value for the Social Studies subject for grade V is 75. The value included in the complete category based on the KKM is 75 to 100. Based on the results of the field trial, it is explained in Table 3 that two students completed the pre-test treatment, and 22 students did not complete it. After the treatment was carried out by implementing learning in the form of learning videos, there was an increase from before, where, based on the results of the post-test, 24 students were declared to have completed it overall, based on the KKM standards that had been set.

Furthermore, the percentage of classical completeness of student learning outcomes before and after learning using learning videos was explained. The percentage of student results that were completed based on the pre-test value is as follows:

The percentage of students who completed the test based on the pre-test scores is as follows.

Percentage of students who completed =  $\frac{\text{the number of students who graduated} +}{\text{students overall}} \times 100\% = \frac{2}{24} \times 100\% = 8$ 

The percentage of students who completed the course based on the post-test scores is as follows.

Percentage of students who completed =  $\frac{the \ number \ of \ students \ who \ graduated}{students \ overall} \times 100\% = \frac{24}{24} \times 100\% = 100\%$ 

The improvement in learning outcomes can be seen through the difference in pre-test and post-test scores. Table 3 shows that out of 24 students who took the pre-test, 8% completed it, and 92% did not. Furthermore, the post-test results after learning multimedia in the form of learning videos showed that 100% of students completed it completely.

The following calculation results were obtained based on the results obtained with the help of SPSS 25— description of the N-Gain calculation results on the learning outcomes of class V students.

 Table 4. Hasil Perhitungan N-Gain Terhadap Hasil Belajar Student Kelas V.

	Ν	Minimum	Maximum	Mean	Std. Deviation
Ngain	24	.37	1.00	.7666	.18922
Valid N (listwise)	24				
Source: Pesearch 2	021				

Source:Research 2024

Table 4 explains that the calculation results obtained with the help of SPSS 25 obtained an average N-Gain result of 0.7666, placing the average within the "high" criteria. So, it can be said that using learning videos improves the learning outcomes of social studies for grade V students.

# Discussion

The field test was conducted in grade V at SDN 106164 Sambirejo Timur in Kota Medan, involving 24 students. According to Widoyoko in "Learning Program Evaluation: A Practical Guide for Educators," the effectiveness criterion is met if the classical mastery percentage exceeds 75%. If students understand the material and achieve the expected results, the learning media is considered effective. The post-test results showed the average score exceeded the minimum standard of  $\geq$ 75. The overall classical mastery after applying the learning video was 100%, categorized as "very good." Therefore, the learning video is effective for grade V IPS learning. Using video as a learning medium helps students understand abstract concepts more easily (Purnama et al., 2023).

Student learning improvement is evident from both pre-test and post-test results. The pre-test average was 64.3%, and the post-test average was 92.3%. The increase was 92%. Using SPSS 25, the N-Gain calculation showed an average of 0.766, a "high" criterion, indicating an overall improvement in student learning outcomes. Thus, the learning video effectively improves grade V IPS learning. In general, the use of video in learning increases student achievement (Hita et al., 2021).

Individual factors influencing student learning interest vary (Saputra et al., 2023). Access to learning videos enhances student achievement. Learning media is vital to academic success. Learning videos increase student engagement with the material (Kusumawati & Mustadi, 2021; Mawaddah et al., 2019; Indriani, 2019). Teachers must explain concepts clearly to optimize IPS learning. The video is expected to encourage students to study harder, especially in the topic *My Proud Region*, so they can solve local problems, as IPS is closely related to daily life (Yuanta, 2020; Khairani et al., 2019). Achieving quality learning outcomes requires innovative teaching models, and the teacher's role is essential to motivate students to learn effectively (Wahyono, 2019).

# CONCLUSION

Based on the research and development results, it can be concluded that the learning video developed is highly suitable for grade V mathematics lessons on *My Proud Region*. The video was also efficient, receiving positive feedback from small groups and field tests at SDN 106164 Sambirejo Timur. The learning video achieved maximum classical effectiveness with improved learning outcomes in the field test and a gain score of 0.766, indicating high effectiveness. Student learning videos improve IPS learning efficiency. IPS learning through video media increases student activity and correlates with improved learning outcomes. Future research is expected to explore the methods used in the development process to produce even better products. The developed product should also align with the planned learning strategies to maximize learning objectives.

#### AUTHOR'S NOTE

The author declares that there is no conflict of interest regarding the publication of this article and confirms that the data and content of the article are free from plagiarism.

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