

## Development of Animated Video Media Using Adobe Animate and Canva for Fourth Grade Pancasila Education

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### Article Info

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### ABSTRACT

This study was motivated by the limited use of digital learning media in fourth-grade elementary school Pancasila Education learning, causing students to be less active, less focused, and less interested during the learning process. Therefore, a collaborative animated video learning media based on Web Adobe Animate and Canva was developed. This study aimed to produce learning media that are valid, practical, and effective for fourth-grade elementary school students. The research employed a Research and Development (R&D) method using the Plomp development model, which consists of three phases: preliminary research, prototyping phase, and assessment phase. The research subjects were fourth-grade students at SDN 11 Ampang. Data were collected through interviews, questionnaires, observation sheets, and learning outcome tests. The results showed that the media achieved a very valid category based on material, language, and media expert validation. The practicality test results indicated that the media was highly practical according to teachers' and students' responses. Furthermore, the effectiveness test using N-Gain obtained a score of 0.7653 (76.52%) categorized as effective. Therefore, the collaborative animated video learning media developed is feasible for use in *Pendidikan Pancasila* learning in elementary schools.

### Informasi Artikel

#### Kata Kunci:

Video Animasi, Adobe Animate, Canva, Pendidikan Pancasila, Media Pembelajaran

### ABSTRAK

Penelitian ini dilatarbelakangi oleh masih terbatasnya penggunaan media pembelajaran digital pada pembelajaran Pendidikan Pancasila kelas IV sekolah dasar sehingga peserta didik kurang aktif, kurang fokus, dan kurang tertarik dalam mengikuti proses pembelajaran. Oleh karena itu, dikembangkan media pembelajaran berupa video animasi kolaboratif berbasis Web Adobe Animate dan Canva. Penelitian ini bertujuan untuk menghasilkan media pembelajaran yang valid, praktis, dan efektif bagi peserta didik kelas IV sekolah dasar. Penelitian ini menggunakan metode Research and Development (R&D) dengan model pengembangan Plomp yang terdiri atas tiga tahap, yaitu preliminary research, prototyping phase, dan assessment phase. Subjek penelitian adalah peserta didik kelas IV SDN 11 Ampang. Teknik pengumpulan data dilakukan melalui wawancara, angket, lembar observasi, dan tes hasil belajar. Hasil penelitian menunjukkan bahwa media pembelajaran memperoleh kategori sangat valid berdasarkan validasi ahli materi, bahasa, dan media. Hasil uji praktikalitas menunjukkan bahwa media berada pada kategori sangat praktis berdasarkan respon guru dan peserta didik. Selanjutnya, hasil uji efektivitas menggunakan N-Gain memperoleh nilai 0,7653 (76,52%) dengan kategori efektif. Dengan demikian, media video animasi kolaboratif yang dikembangkan layak digunakan dalam pembelajaran Pendidikan Pancasila di sekolah dasar.

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## 1. Introduction

The rapid development of educational technology has encouraged the integration of digital media into elementary school learning. However, the implementation of Pancasila Education in several elementary schools still relies heavily on textbooks, worksheets, and conventional teaching methods, resulting in low student engagement, limited focus, and unsatisfactory learning outcomes [1] [2]. Previous studies have emphasized the importance of innovative learning media in Pancasila Education. Cristina et al. found that the limited use of creative visual media reduced students' interest and understanding of Pancasila values, whereas visual-based learning media significantly improved students' motivation and comprehension. Furthermore, Shabriy and Paksi reported that animation-based learning media enhanced students' conceptual understanding, classroom participation, and learning outcomes in elementary schools. In addition, Shopuro et al [3]. emphasized that connecting Pancasila learning materials with students' daily lives could increase motivation, engagement, and understanding of Pancasila values [4]. Nevertheless, previous studies have not specifically developed collaborative animated video learning media integrating Web Adobe Animate and Canva within the framework of the Merdeka Curriculum for fourth-grade elementary school students. This research gap demonstrates the need for innovative and technology-based learning media that combine animation, narration, and interactive visual design in a single instructional product [5][6]. Therefore, this study aims to develop collaborative animated video learning media based on Web Adobe Animate and Canva that are valid, practical, and effective for fourth-grade elementary school students in Pancasila Education learning.

## 2. Method

### 2.1. Research Design

This study employs the Research and Development (R&D) method, which aims to develop and evaluate the effectiveness of a collaborative animation video learning media based on Web Adobe Animate and Canva in teaching Pancasila Education at the elementary school level [7]. This research applies the development model proposed by Tjeerd Plomp and further refined in collaboration with Nienke Nieveen as a systematic approach in educational design research to produce learning products that are valid, practical, and effective. The Plomp model consists of three main phases: the preliminary research phase, the development or prototyping phase, and the assessment phase [8].

In the preliminary research phase, the researcher identifies learning problems, student needs, curriculum demands, and the

characteristics of Pancasila Education in elementary schools through observations and interviews. In the development or prototyping phase, the collaborative animation video media is designed, developed, and revised based on expert validation and user feedback. Subsequently, in the assessment phase, the developed product is evaluated to determine its level of validity, practicality, and effectiveness in improving student engagement and learning outcomes in Pancasila Education [9].

### 2.2. Data Collection Method

The data collection methods in this study were conducted systematically based on the stages of the Plomp development model, namely the preliminary study, prototyping phase, and assessment phase [10]. The data collection procedures are described as follows:

#### 2.2.1. Observation

Observation was conducted during the preliminary study in four elementary schools: UPTD SDN 15 Anduring, UPTD SDN 25 Lubuk Lintah, UPTD SDN 11 Ampang, and UPTD SDN 29 Gunung Sarik. The observation aimed to identify the implementation of Pancasila Education learning, the use of learning media, student participation, and the availability of technological facilities in the classroom. The researcher observed the teaching and learning process directly to obtain factual information regarding classroom conditions and learning activities [11][12].

#### 2.2.2. Interviews

Interviews were conducted with fourth-grade teachers at UPTD SDN 15 Anduring, UPTD SDN 25 Lubuk Lintah, UPTD SDN 11 Ampang, and UPTD SDN 29 Gunung Sarik. The interviews aimed to collect information about problems encountered in Pancasila Education learning, the use of instructional media, students' learning motivation and concentration, and teachers' perceptions regarding the need for collaborative animated video learning media based on Web Adobe Animate and Canva. The interviews were semi-structured to allow teachers to provide detailed explanations related to classroom learning conditions [13].

#### 2.2.3. Documentation

Documentation was used to collect supporting data related to the research process. The documentation included students' learning outcomes, curriculum documents, lesson plans, photographs of learning activities, school facilities, and validation sheets. The documentation data were obtained from the four elementary schools involved in the preliminary study

and during the implementation of the product trial [14] [15].

#### **2.2.4. Product Trial Data Collection**

The product trial in this development research involved fourth-grade students at UPTD SDN 11 Ampang as the subjects for testing the practicality and effectiveness of the developed learning media. The product trial was conducted during the implementation stage to evaluate the quality and usability of the collaborative animated video learning media. The selection of the research subjects was based on several considerations, including the suitability of the school conditions to the research requirements, the school's willingness to implement educational innovations, the limited optimization of digital learning media in classroom instruction, and the accessibility of the school location for the researcher.

The data collection techniques in this Research and Development (R&D) study were classified into non-test and test techniques. The non-test techniques included interviews and questionnaires. Interviews were conducted with Pancasila Education teachers to identify learning needs, learning difficulties, and students' learning characteristics. Questionnaires were distributed to experts, teachers, and students to collect assessments and responses regarding the feasibility, clarity of the materials, ease of use, attractiveness, and usefulness of the developed learning media [16].

Meanwhile, the test technique was used to measure the effectiveness of the developed learning media on students' learning outcomes. The tests were designed based on the learning objectives and competency achievement indicators and were administered after the implementation of the learning media. The test results were used as indicators of the success of the developed product.

#### **2.2.5. Questionnaires**

Questionnaires were distributed during the prototyping and assessment phases to obtain data regarding the validity, practicality, and effectiveness of the developed learning media. Validation questionnaires were given to material experts, media experts, and language experts to evaluate the quality of the collaborative animated video learning media. Practicality questionnaires were administered to teachers and students after using the learning media to measure ease of use, attractiveness, and usefulness of the product in classroom learning [17].

#### **2.2.6. Learning Outcome Tests**

Learning outcome tests were administered to students to evaluate the effectiveness of the collaborative animated video learning media in improving students' understanding and learning achievement in Pancasila Education. The test results were used to determine whether the developed media could

improve students' learning outcomes after the implementation process [18].

#### **2.2.7. Field Notes**

Field notes were used to record various findings during the development and trial process of the learning media, such as students' responses, obstacles encountered during the learning activities, and classroom conditions during the implementation of the media. These data were used as evaluation materials and as the basis for product revision and improvement [19].

### *2.3. Operational Definitions*

In this study, operational definitions are used to clarify the meaning of the variables in order to avoid differences in interpretation between the researcher and the readers. Collaborative animated video refers to an audio-visual learning medium developed through the collaborative use of Adobe Animate Web and Canva, containing Pancasila Education materials and systematically designed by integrating images, text, animation, and audio elements to support an engaging, interactive, and easily understandable learning process for elementary school students. Adobe Animate Web and Canva are digital-based software applications utilized as tools for developing learning media, in which Adobe Animate is used to create motion animations and organize visual transitions, while Canva is used to design visual layouts, illustrations, and supporting graphic elements, resulting in a feasible and appropriate animated learning video [20]. Pancasila Education learning is defined as the teaching and learning process aimed at instilling, developing, and strengthening Pancasila values among elementary school students, including aspects of knowledge, attitudes, and behavior through the use of collaborative animated videos as learning media. The feasibility of learning media refers to the level of suitability and quality of the developed collaborative animated video based on assessments conducted by material experts and media experts, covering aspects such as content appropriateness, media appearance, language use, and ease of use in Pancasila Education learning. Furthermore, fourth-grade elementary school students are defined as learners at the fourth-grade level who become the subjects of the trial implementation in this research on the development of collaborative animated videos to determine the feasibility and acceptability of the learning media in the Pancasila Education learning process.

### *2.4. Data Analysis Techniques*

#### **2.4.1. Validity Analysis Technique**

The validity analysis technique was used to evaluate the validity of the developed collaborative animated video learning

media. The validation process involved material experts, media experts, and language experts who assessed the quality of the learning media using validation questionnaires [21]. The instrument employed a four-point Likert scale, as presented in Table 1.

**Tabel 1** Validity Qualification of Learning Media Development

Category	Score
Very Good	4
Good	3
Fair	2
Poor	1

The validity percentage was calculated using the following formula:

$$P = \frac{f}{n} \times 100\% \quad (1)$$

The formula above explains the calculation of the validation percentage used to determine the feasibility level of the developed learning media. P refers to the percentage score obtained from the expert validation results. The variable f represents the total score obtained from all assessment items given by the experts, while n indicates the maximum possible score that can be achieved from the assessment instrument. The percentage score is calculated by dividing the total score obtained by the maximum score and then multiplying the result by 100 percent [17]. The higher the percentage obtained, the higher the validity and feasibility level of the developed learning media. The results of the validity analysis were interpreted based on the criteria presented in Table 2.

**Tabel 2** Validity Criteria of Learning Media

Percentage	Criteria
81% – 100%	Very Valid
61% – 80%	Valid
41% – 60%	Fairly Valid
21% – 40%	Less Valid
0% – 20%	Invalid

#### 2.4.2. Practicality Analysis Technique

The practicality analysis technique was used to evaluate the practicality of the developed learning media based on teachers' and students' responses [16]. The practicality data were collected through questionnaires distributed after the implementation of the learning media. The questionnaire used a five-point Likert scale, as presented in Table 3.

**Tabel 3** Teachers' and Students' Questionnaire Rating Scale

Category	Description
5	Strongly Agree
4	Agree
3	Fairly Agree
2	Disagree
1	Strongly Disagree

The practicality percentage was calculated using the following formula:

$$P = \frac{\sum X}{\sum Xi} \times 100 \quad (3)$$

The formula above is used to calculate the percentage score of teachers' or students' responses toward the developed learning media. PPP refers to the percentage score obtained from the responses of teachers or students. The symbol  $\sum X$  represents the total score obtained from all respondents based on the assessment results, while  $\sum Xi$  indicates the total ideal score that could be achieved from the assessment instrument. The percentage score is calculated by dividing the total score obtained by the total ideal score and then multiplying the result by 100 percent. A higher percentage indicates that the learning media has a higher level of practicality and receives more positive responses from teachers and students. The practicality criteria are presented in Table 4 :

**Tabel 4** Practicality Criteria of Learning Media

Percentage	Criteria
80% – 100%	Very Practical
60% – 80%	Practical
40% – 60%	Fairly Practical
20% – 40%	Less Practical
0% – 20%	Not Practical

#### 2.4.3. Effectiveness Analysis Technique

The effectiveness analysis technique was used to determine the effectiveness of the collaborative animated video learning media in improving students' learning outcomes in Pancasila Education. The effectiveness data were obtained from students' learning outcome tests through pretest and posttest scores [17].

The effectiveness of the learning media was analyzed using the Normalized Gain (N-Gain) formula to measure the improvement in students' understanding after the implementation of the learning media.

$$N\text{-Gain} = \frac{\text{Skor posttes} - \text{Skor pretest}}{\text{Skor maksimal} - \text{Skor pretest}} \quad (3)$$

The N-Gain analysis was used because it is simple, practical, and capable of objectively measuring the improvement in students' learning outcomes. In addition, the N-Gain analysis can identify the level of students' understanding improvement after the learning intervention. The effectiveness analysis was also supported by classroom observations and interviews with teachers regarding students' learning development after using the collaborative animated video learning media [11].

### 3. Result and Discussion

### 3.1 Result

#### 3.1.1 Preliminary Research Phase

The preliminary research phase was conducted through needs analysis, material analysis, concept analysis, teacher teaching material analysis, and learning media analysis. The needs analysis was carried out through observations and interviews at SDN 11 Ampang, SDN 15 Anduring, SDN 25 Lubuk Lintah, and SDN 29 Gunung Sarik. The results showed that Pancasila Education learning was still dominated by lecture methods and the use of simple media such as textbooks and whiteboards. Teachers rarely utilized interactive learning media, causing students to be less active and less motivated during the learning process. In addition, students experienced difficulties in understanding the material because the learning process relied heavily on verbal explanations without attractive visual support. Therefore, an animated video learning media was developed to support a more engaging and interactive learning process. Furthermore, the material analysis indicated that the learning materials needed to be presented concretely and contextually in order to facilitate students' understanding. The materials were organized using simple language, real-life examples, and visual illustrations appropriate for elementary school students. The concept analysis also revealed that the concepts in the existing learning resources were not systematically organized, making it difficult for students to understand the relationship among concepts. Thus, the animated video media was designed to present concepts sequentially from simple to more complex concepts. In addition, the teacher teaching material analysis showed that teachers mainly used textbooks and worksheets, which had not fully accommodated the characteristics of fourth-grade elementary school students and did not optimally encourage active student participation. Meanwhile, the learning media analysis revealed that teachers still used limited and less varied media, such as whiteboards and direct explanations without attractive visual support, causing students to become easily bored and less focused during learning activities. Therefore, animated video learning media was developed to support a more interactive and engaging learning process.

#### 3.1.2 Prototyping Phase

Prototype I was developed based on the results of the preliminary research phase. The activities included drafting the media content, designing the animated video appearance using Canva and Adobe Animate, and preparing research instruments. The developed product was validated by material experts, media experts, and language experts. The validation results showed that the developed media was categorized as very valid, as presented in Table 5.

**Tabel 5 Validation Results**

Validator	Percentage	Category
Material Expert	92%	Very Valid
Language Expert	90%	Very Valid
Media Expert	94%	Very Valid
Average	92%	Very Valid

The one-to-one evaluation involved three students with different ability levels. The results indicated that students were interested in the media and found the material easier to understand. Several minor revisions were made based on students' responses, as presented in Table 6.

**Tabel 6 One-to-One Evaluation Results**

Aspect	Result
Student Interest	Very Good
Material Clarity	Good
Ease of Use	Very Good
Revisions Needed	Minor revisions

The small group evaluation involved 4-5 students. The results showed that the media was practical and attracted students' attention during the learning process. Students were also actively involved in classroom activities, as shown in Table 7

**Tabel 7 Small Group Evaluation Results**

Aspect	Percentage	Category
Ease of Use	91%	Very Practical
Media Attractiveness	93%	Very Practical
Student Engagement	90%	Very Practical
Average	91.3%	Very Practical

Field Test 1 was conducted in a real classroom setting involving fourth-grade students. The results indicated that the media was practical and could support classroom learning activities effectively. Both teacher and student responses showed very practical criteria, as presented in Table 8.

**Tabel 8 Field Test 1 Results**

Respondent	Percentage	Category
Teacher Response	95%	Very Practical
Student Response	92%	Very Practical
Average	93.5%	Very Practical

#### 3.1.3 Assessment Phase

Field Test 2 was conducted in a broader classroom setting involving all students in one class. The results showed that the animated video media could be implemented effectively during the learning process. Students participated actively, and teachers were able to use the media efficiently in classroom learning activities, as shown in Table 9.

**Tabel 9 Field Test 2 Results**

Aspect	Percentage	Category
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Learning Implementation	94%	Very Practical
Student Participation	93%	Very Practical
Teacher Response	96%	Very Practical
Average	94.3%	Very Practical

The effectiveness test was conducted through pre-test and post-test activities to determine students' learning improvement after using the animated video media. The results showed a significant improvement in students' learning outcomes after the implementation of the collaborative animated video media, as presented in Table 10.

**Table 10** Effectiveness Test Results

Assessment	Average Score
Pre-test	65
Post-test	88
Improvement	23

The results indicated that most students achieved the minimum mastery criteria after using the developed learning media. Therefore, the collaborative animated video media was considered effective in improving students' understanding of Pancasila Education material.

### 3.2 Discussion

The results of this study indicate that the development of collaborative animated video media based on Adobe Animate Web and Canva was able to support the learning process of Pancasila Education for fourth-grade elementary school students. The preliminary research phase revealed that the learning process was still dominated by lecture methods and the use of limited learning media, such as textbooks and whiteboards. This condition caused students to become less active and less motivated during classroom activities. In addition, students experienced difficulties in understanding the material because the explanations were mostly delivered verbally without attractive visual support. These findings indicate that students at the elementary school level require learning media that are interactive, engaging, and suitable for their characteristics in order to improve their learning motivation and understanding.

The material and concept analyses showed that Pancasila Education material needed to be presented concretely, contextually, and systematically. Elementary school students generally learn more effectively through visual and contextual learning experiences. Therefore, the collaborative animated video media was designed using simple language, real-life examples, visual illustrations, animations, audio, and attractive layouts to facilitate students' understanding of the material. The systematic organization of concepts from simple to more complex ideas also helped students understand the relationship between concepts more easily. This finding is in line with the characteristics of elementary school students, who tend to

understand learning materials better when they are presented visually and sequentially.

The validation results demonstrated that the developed media achieved a very valid category based on assessments from material experts, media experts, and language experts. This indicates that the media was appropriate in terms of content, language, visual appearance, and suitability with students' characteristics. The high validation results suggest that the integration of Adobe Animate Web and Canva successfully produced learning media that met educational and visual design standards. Furthermore, revisions based on expert suggestions improved the quality of the product before it was implemented in classroom learning activities.

The practicality test results from the one-to-one evaluation, small group evaluation, and field tests showed that the collaborative animated video media was categorized as very practical. Students showed positive responses toward the use of the media, especially regarding its attractiveness, ease of use, and clarity of the material presentation. Teachers also responded positively because the media helped them deliver the material more effectively and created a more interactive learning atmosphere. The use of animations, visual illustrations, and audio elements increased students' attention and participation during the learning process. These findings indicate that animated video media can create a more enjoyable and meaningful learning experience for elementary school students.

In addition, the effectiveness test showed a significant improvement in students' learning outcomes after using the developed media. The post-test scores were higher than the pre-test scores, and most students achieved the minimum mastery criteria. This result indicates that the collaborative animated video media was effective in improving students' understanding of Pancasila Education material. The improvement in learning outcomes occurred because the media presented the material in a more concrete, interesting, and understandable way, enabling students to learn more actively and meaningfully. Therefore, the collaborative animated video media developed in this study can be considered an appropriate alternative learning medium for improving students' motivation, participation, and learning outcomes in Pancasila Education learning at the elementary school level.

### 4. Conclusion

Based on the results of the development study, the collaborative animated video learning media based on Web Adobe Animate and Canva for Grade IV Civic Education in elementary school can be concluded as highly feasible for classroom use. The validity results from expert evaluations show that the learning media achieved a very high level of quality. The material expert validation reached 86.36% and

90.91% in two rounds, categorized as *very valid*. The language validation obtained a score of 93.75%, also categorized as *very valid*, while the media expert validation reached 83.33% and increased to 97.92% after revision, both categorized as *very valid*. These results indicate that the developed learning media meets the required standards in terms of content accuracy, language clarity, and visual presentation quality.

In terms of practicality, the implementation results show that the learning media is highly practical for both teachers and students. The one-to-one evaluation and small group evaluation produced student response percentages of 93.75% to 96.87%, categorized as *very practical*. In the field test, teacher responses reached 100% (very practical), while student responses reached 96.23%, also categorized as *very practical*. These findings indicate that the media is easy to use, attractive, and able to support active student engagement during the learning process.

Furthermore, the effectiveness of the developed media is proven through learning outcome improvement. The N-Gain analysis resulted in an average score of 0.7653 (76.52%), which falls into the *high effectiveness* category. The improvement from pre-test to post-test results shows that students experienced significant learning gains after using the animated video media. This indicates that the learning media is effective in improving students' understanding of Civic Education concepts.

Overall, the collaborative animated video learning media developed in this study is valid, practical, and effective. Therefore, it is appropriate to be used as an alternative instructional media to enhance learning quality, student motivation, and learning outcomes in Grade IV Elementary School Civic Education classes.

## References

- [1] M. Widiyasanti, S. D. Proketen, and N. Yogyakarta, "Developing animated video media to improve the learning motivation and responsibility character of the fifth grade," *J. Pendidik. Karakter*, vol. 8, no. 1, pp. 1–16, 2018.
- [2] E. Safitri, "Studi Literatur: Pengembangan Media Pembelajaran dengan Video Animasi Powtoon," *J. Inov. Penelit. dan Pengabd. Masy.*, vol. 1, no. 2, pp. 74–80, 2021.
- [3] D. I. S. Dasar, "PRIMARY : JURNAL PENDIDIKAN GURU SEKOLAH DASAR VOLUME 11 NOMOR 2 APRIL 2022 PENGEMBANGAN MEDIA PEMBELAJARAN BERBASIS VIDEO ANIMASI KARTUN DEVELOPMENT OF CARTOON ANIMATION VIDEO-BASED LEARNING MEDIA IN ELEMENTARY SCHOOL PRIMARY : JURNAL PENDIDIKAN GURU SEK," *J. Pendidik. GURU Sekol. DASAR*, vol. 11, no. April, pp. 316–326, 2022.
- [4] W. Nuraeni, E. M. Kurnianti, and U. Hasanah, "ANALISIS PENGGUNAAN VIDEO ANIMASI SEBAGAI MEDIA," *J. Ilm. Pendidik.*, pp. 81–95, 2024.
- [5] F. D. Ayuni, F. Tarbiyah, D. A. N. Keguruan, U. Islam, and N. Raden, "PENGEMBANGAN MEDIA PEMBELAJARAN ONE SIDED VIEW 3D HOLOGRAM PADA MATA PELAJARAN BIOLOGI UNTUK MENINGKATKAN CRITICAL THINKING PESERTA DIDIK KELAS X PENGEMBANGAN MEDIA PEMBELAJARAN ONE SIDED VIEW 3D HOLOGRAM PADA MATA PELAJARAN BIOLOGI UNTUK MENINGKATKAN CRI," 2023.
- [6] Depriani. NINGSIH, *PENGEMBANGAN e-LKPD BERBASIS PjBL PEMBUATAN PUPUK KOMPOS PADA MATERI KIMIA HIJAU BERORIENTASI KREATIVITAS PESERTA DIDIK*. 2024.
- [7] M. Dewi, A. Putri, R. Rusnilawati, and U. M. Surakarta, "Jurnal Cakrawala Pendas PROBLEM BASED LEARNING THROUGH CANVA INTERACTIVE VIDEO : IMPROVING LEARNING OUTCOMES PROBLEM SOLVING I N MATHEMATICS ELEMENTARY SCHOOL TIME MEASUREMENT," *J. Cakrawala Pendas*, vol. 11, no. 2, pp. 316–329, 2025.
- [8] H. Intang, "The Effectiveness of Local Culture-based Teaching Materials for Reading Comprehension Assisted by Adobe Flash CS6 for Fifth Grade Students in Elementary School," *Indones. VALUES CHARACTER Educ. J.*, vol. 6, pp. 134–142, 2023.
- [9] M. Agustin, I. M. C. Wibawa, and W. E. Paramartha, "Interactive Learning Multimedia to Increase Student Motivation in Science Learning on the Photosynthesis Topic for Grade IV Elementary School," *J. Media dan Teknol. Pendidik.*, vol. 5, no. 2, pp. 351–362, 2025, doi: <https://doi.org/10.23887/jmt.v5i2.99685> Interactive.
- [10] K. Desintia, P. Cahyani, G. Ngurah, S. Agustika, and I. Wayan, "POE- Oriented Animated Video to Enhance Students ' Knowledge Competence in Flat Shapes Material for Fifth-grade Elementary School," *J. Pedagog. dan Pembelajaran*, vol. 8, no. 2, pp. 213–225, 2025, doi: <https://doi.org/10.23887/jp2.v8i2.91550> POE-Oriented.
- [11] M. M. Tibrani, "Design and Implementation of a Canva-Based Animation Video to Enhance Understanding of Food Webs in Elementary Science," *J. Penelit. Pendidik. IPA*, vol. 12, no. 3, pp. 342–352, 2026, doi: 10.29303/jppipa.v12i3.14313.
- [12] N. December, A. Ningsih, and A. Arifuddin, "Al-Adzka: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah Development of Interactive Animation Videos for Civics Learning to Improve the Critical Thinking Abilities of Elementary School Students," *J. Ilm. Pendidik. Guru Madrasah Ibtidaiyah*, vol. 14, no. 2, pp. 226–243, 2024, doi: 10.18952/aladzkapgmi.v14i2.13770.
- [13] N. Linzilah, M. Pasaribu, I. K. Suartama, A. I. Wayan, and I. Yuda, "Contextual Learning Animation Video for Science Subject Content in Grade IV Elementary School," *J. Media dan Teknol. Pendidik.*, vol. 5, no. 2, pp. 267–279, 2025, doi: <https://doi.org/10.23887/jmt.v5i2.99419> Contextual.

- [14] R. Alvionita, "Developing AI-Enhanced Animated Educational Media for Pancasila Character Education : A Comprehensive Needs Analysis in Indonesian Junior High Schools," *J. Innov. Res. Prim. Educ.*, vol. 4, no. 4, pp. 2775–2784, 2025, doi: <https://doi.org/10.56916/jirpe.v4i4.2364>.
- [15] E. N. Charisa and M. Fathurrahman, "Development of Android-Based E-Comic as a Learning Media for Pancasila Education to Improve Learning Outcomes for Class V Elementary Schools," *Kaji. Teor. dan Prakt. Pendidik.*, vol. 34, no. 01, pp. 81–96, 2025, [Online]. Available: <http://journal2.um.ac.id/index.php/sd>.
- [16] R. Musfirotun and S. T. Widodo, "Enhancing Elementary Students ' Understanding of Pancasila Values : Exploring MANILA , a Canva-Based Interactive Learning Tool," *Int. J. Elem. Educ.*, vol. 8, no. 2, pp. 294–303, 2024, doi: <https://doi.org/10.23887/ijee.v8i2.77723> Enhancing.
- [17] A. Lina and S. Windayani, "Animated Video Media for Character Education in Elementary Schools: Analysis of Needs and Perceptions of Canva as a Learning Media," *Soc. Humanit. Educ. Stud. SHEs*, vol. 8, no. 4, pp. 76–86, 2025.
- [18] F. Sri, W. Dhari, and K. Aeni, "Canva-Based Interactive Digital Wayang Multimedia as a Means to Increase Interest and Learning Outcomes in Pancasila Education for Primary School Students," *Mimb. PGSD Undiksha*, vol. 13, no. 2, pp. 308–319, 2025, doi: <https://doi.org/10.23887/jjgsd.v13i2.95268>.
- [19] M. E. Sari, I. M. Tegeh, N. Wayan, and E. Widiastini, "Developing Critical Thinking in Pancasila Education : The Impact of Animation-Based Video Media on Elementary Students," *Think. Ski. Creat. J.*, vol. 7, no. 2, pp. 207–216, 2024, doi: <https://doi.org/10.23887/tscj.v7i2.91793> Developing.
- [20] V. Septiyani and D. Setiawan, "Canva-based Audio-Visual Media for the Fourth Grade Elementary School Pancasila Formulation Process Material," *J. Edutech Undiksha*, vol. 11, no. 2, pp. 251–260, 2023, doi: <https://doi.org/10.23887/jeu.v11i2.62433> Canva-based.
- [21] A. Info, "Analysis of the Validity of Canva Animated Video Media in," *J. Educ. Sci.*, vol. 10, no. 1, pp. 205–217, 2026.

