Jurnal Ilmiah Pendidikan Guru Sekolah Dasar
Oktober 2026, XII (2), 86 - 94
P-ISSN: 2085 – 4048
https://journal.unj.ac.id/unj/index.php/pgsd/

Learning Social Studies through Video: Audio-Visual Media and Fifth-Grade Learning Outcomes

Ade Triani[1(*)]
Elementary School Teacher Education, Universitas Negeri Jakarta, Jakarta, Indonesia

Abstract

Social studies (IPS) lessons in elementary schools in Ujung Menteng, East Jakarta, are often teacher-centred, and available devices such as projectors and Chromebooks are not used to engage students. This study tested the effect of audio-visual media, in the form of learning videos, on fifth-grade students' IPS learning outcomes. A quantitative quasi-experiment with a nonequivalent control group design was used. The experimental class (n = 31) learned with videos and the control class (n = 31) with visual PowerPoint media over seven meetings. Learning outcomes were measured with a pretest and a posttest and analysed in SPSS 25. The pretest means were almost equal (60.22 and 60.35). The experimental class rose to 84.13 (N-gain 59.23%) and the control class to 67.61 (N-gain 18.43%). The data were normal (Kolmogorov–Smirnov sig. 0.200) and homogeneous (sig. 0.174), and the independent-samples t-test gave sig. 0.000, so the null hypothesis was rejected. Students in the video class were also more active and asked more questions. Because the classes were intact, the video was new to students, and the control class used a different medium from the usual one, the results show that video was associated with higher outcomes but do not separate the effect of the medium from novelty. Learning videos can support IPS teaching in schools that have the devices.

Keywords: Audio-Visual Media; Learning Outcomes; Social Studies; Elementary School; Quasi-Experiment

(*) Corresponding Author: adetriani2002@gmail.com

How to Cite: *Ade Triani. (2026). Learning Social Studies through Video: Audio-Visual Media and Fifth-Grade Learning Outcomes, Jurnal Ilmiah Pendidikan Guru Sekolah Dasar, XII (2): 86-94*

INTRODUCTION

Education is a conscious and planned effort to create a learning atmosphere and process in which students actively develop their potential, including spiritual strength, self-control, personality, intelligence, and the skills needed by society, the nation, and the state, as stated in Law No. 20 of 2003. Learning is an interaction between teacher and students to reach educational goals, and it should not be limited to one-way information from the teacher but involve students directly in the activities. Teachers need to manage the components of learning, which include learning objectives, learning resources, media, and evaluation (Adisel et al., 2022). Among them, media help teachers deliver material in a way that students can

understand (Mukarromah & Andriana, 2022; Wulandari et al., 2023). Digital learning media can raise motivation and engagement, but limited ICT facilities and weak teacher digital skills hinder their use (Sartimah, 2025). Chromebooks used under planned classroom management raised grade 5 students' participation and motivation (Sauri et al., 2026), and audio-visual media in IPAS lessons raised enthusiasm and engagement while teachers' limited technology skills and technical problems remained obstacles (Soediro et al., 2025; Elvira et al., 2026).

In several public elementary schools in Ujung Menteng, the researcher observed that many teachers use media with little variation, even when interactive tools such as PowerPoint and Canva are available. Lessons feel monotonous, focus on the teacher, and leave students bored and passive. In interviews, teachers said that some schools have Chromebooks and projectors that are not used well, because teachers know little about how to use them and need a lot of time to prepare. Where projectors are used, they mostly display material delivered by the teacher, so students remain passive. These problems matter for social studies (*Ilmu Pengetahuan Sosial*, IPS), which students often find monotonous and unengaging, and where limited use of suitable media can leave learning outcomes lower than they could be.

Audio-visual media present pictures and sound at the same time, for example recorded video, film, and slides with sound, and they carry the learning message. Their use is expected to lower boredom, add interest, and so support learning outcomes. Learning outcomes are an indicator of success in teaching and reflect the cognitive, affective, and psychomotor competence students show after learning, as measured by tests. In the cognitive theory of multimedia learning, people learn from words and pictures together, and the theory has recently been extended to include social, emotional, and motivational processes (Mayer, 2024).

Studies in Indonesian elementary schools support the use of audio-visual media. In grade 5 IPS, students taught with audio-visual media scored higher than a control class (Rispadina et al., 2022), and a one-group study with 30 grade 5 students found higher posttest than pretest scores (Nurcahyanti & Tirtoni, 2023). Audio-visual media also improved grade 5 students' interest in IPS (Ambarwati & Sukardi, 2025), their IPAS outcomes with a larger normalised gain than a control class (Ningsih et al., 2026), and the motivation of grade 4 students in science (Aeniyah & Meilana, 2021). A meta-analysis of 12 Indonesian studies found that audio-visual media improved grade 5 IPS outcomes (Isnaeni & Radia, 2021), and audio-visual media have also been studied for grade 5 learning outcomes more generally (Sinaga et al., 2024). In a quasi-experiment in grade 4 IPS, the video group scored higher than the control group (Zuknilarinta et al., 2026), in grade 4 IPAS a video group scored higher than a picture-media group (Sukma et al., 2025), and in grade 3 Pancasila Education a short-form video group scored higher than a control class (Firmansyah et al., 2026). One-group and classroom action studies with animated video also reported gains in grade 3 IPAS (Mappalolang et al., 2026), grade 4 plant-reproduction lessons (Hayaturrohmah et al., 2025), grade 4 IPAS (Suantara et al., 2026; Wijaya et al., 2026), and grade 5 ecosystem lessons (Daria et al., 2026), and animated video with contextual teaching raised grade 5 IPAS mastery (Rozanna et al., 2026). Audio-visual media also raised IPS motivation in grade 4

(Patimah et al., 2025). A meta-analysis of 50 studies found that instructional video, particularly short clips used inside the class, had a positive effect on learning (Lin & Yu, 2023). A review of multimedia reviews, however, showed that effects depend on design features such as signalling and the close timing of pictures and words (Noetel et al., 2022), so the benefit is not automatic.

Most of these studies compare audio-visual media with conventional teaching or use a single group. This study instead compares learning videos with another visual medium, PowerPoint, in grade 5 IPS in East Jakarta schools, where teachers already have some digital tools. It tests whether audio-visual media affects the IPS learning outcomes of fifth-grade students in the schools of Ujung Menteng, and it describes how students behaved when learning with video.

METHODS

This study used a quantitative approach with a quasi-experimental design, namely a nonequivalent control group design (Rukminingsih et al., 2020). Two intact classes were given a pretest, then a different treatment, and then a posttest, and the results were compared. The null hypothesis was that there is no difference in IPS learning outcomes between students taught with audio-visual media and those taught with visual media, and the alternative hypothesis was that there is a difference.

The study took place at SDN Ujung Menteng 07 Pagi in East Jakarta. The experimental class was class V-B (31 students), which learned with audio-visual media in the form of learning videos. The control class was class V-A (31 students), which learned with visual media in the form of PowerPoint. The treatment lasted seven meetings, and the material was IPS chapter 7, topic A. The researcher gave the treatment in both classes, using the medium chosen in advance for each class. Observation of class activity during the lessons was descriptive.

The instrument was a learning outcome test, tried out with students of class V-A at SDN Ujung Menteng 01 Pagi. Of 23 cognitive items tried out, 19 were valid; of 36 affective items, 31 were valid; and the psychomotor instrument had 4 items. These formed the final instrument. The tests had multiple-choice and fill-in items, and the items were checked for validity and reliability in the tryout, but the draft gives no reliability coefficient, no item count for the final pretest and posttest, and no statement of whether the reported scores combine the three domains. The pretest was given before the treatment and the posttest after the seventh meeting. The gain was expressed as the normalised gain (N-gain), the actual gain divided by the maximum possible gain (Hake, 1998), with 0.30 and 0.70 as the limits between low, medium, and high.

Data were analysed in SPSS 25. The normality of the data was tested with the Kolmogorov–Smirnov test and the homogeneity of variance with a test reported as ANOVA, both with a significance level of 0.05. The hypothesis was tested with an independent-samples t-test. Only the significance value of the t-test is reported; the draft does not say whether posttest scores or gains were compared, and it gives no t value, degrees of freedom, standard deviations, or effect size.

RESULTS & DISCUSSION

Results

Learning Outcomes

Before the treatment, the two classes were almost equal: the pretest mean was 60.22 in the experimental class and 60.35 in the control class (Table 1). After seven meetings, the experimental class that learned with videos reached a posttest mean of 84.13, a gain of 23.91 points and an N-gain of 59.23%, which is a medium gain on Hake's scale. The control class that learned with PowerPoint reached 67.61, a gain of 7.26 points and an N-gain of 18.43%, a low gain. The posttest gap between the classes was 16.52 points (Figure 1).

Table 1. Pretest and Posttest Means and N-gain by Group

Group	n	Pretest	Posttest	Gain (points)	N-gain (%)
Experimental (video)	31	60.22	84.13	23.91	59.23
Control (PowerPoint)	31	60.35	67.61	7.26	18.43

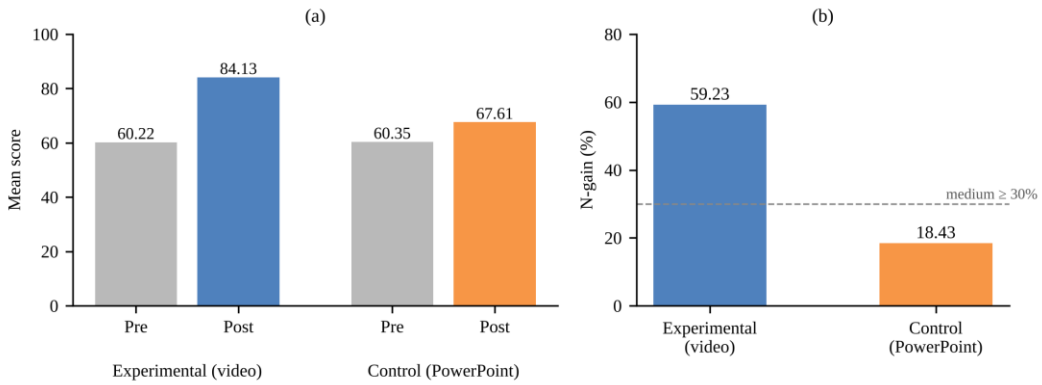


Figure 1. (a) Pretest and posttest means and (b) N-gain of the experimental (video) and control (PowerPoint) classes

The data met the prerequisites for parametric testing. The Kolmogorov–Smirnov test gave a significance of 0.200, above 0.05, so the data were normal, and the homogeneity test gave 0.174, above 0.05, so the variances were homogeneous (Table 2). The independent-samples t-test gave a significance of 0.000, below 0.05, so the null hypothesis was rejected: IPS learning outcomes differed between the video class and the PowerPoint class. Because the posttest mean was higher in the video class, the difference favours audio-visual media.

Table 2. Results of the Prerequisite and Hypothesis Tests

Test	Sig.	Criterion	Decision
Normality (Kolmogorov–Smirnov)	0.200	> 0.05	Data are normal
Homogeneity of variance	0.174	> 0.05	Variances are homogeneous
Independent-samples t-test	0.000	< 0.05	H0 rejected, Ha accepted

Student Activity in the Classroom

The researcher noted differences in the classes during the treatment. In the experimental class, students were at first confused by learning with video and were not eager to answer the teacher's questions. In later meetings they became enthusiastic and answered questions about the content of the video, and many asked questions without being called on. Before the researcher said hello, students asked whether they would watch a video again that day. The teacher's role as a facilitator shrank compared with the first meetings. In the control class, students mostly listened to the teacher and were active only when called on, and there was little enthusiasm because the lessons were run in the way the teacher used every day. These notes are descriptive and were not scored with an observation instrument.

Discussion

Learning outcomes in IPS were higher in the class that learned with video than in the class that learned with PowerPoint, and the difference was statistically significant. The two classes started from the same level, so the 16.52-point gap after the treatment is unlikely to be an artefact of unequal starting points. The finding agrees with a study of grade 5 IPS in Palembang, where the experimental class rose from 56.4 to 82.4 and the control class from 57.2 to 72.8 (Rispadina et al., 2022). The gains in that study, 26.0 and 15.6 points, are close to the 23.9 points here for the video class, although the control gain here was smaller (7.3 points). It also agrees with a one-group study of grade 5 IPS (Nurcahyanti & Tirtoni, 2023), with an IPAS study that found an N-gain of 0.60 for video users against 0.31 for the control (Ningsih et al., 2026), and with the positive effect of in-class video found in a meta-analysis (Lin & Yu, 2023).

Several features of video may explain the result, although this study did not test them. Video shows pictures and sound together, which can make social phenomena concrete and hold attention. Students in the video class asked and answered more questions, which suggests that the video gave them something shared to talk about and reduced the teacher's need to lead every step. The multimedia literature adds a caution: effects depend on how the material is designed, including signalling and the timing of images and narration (Noetel et al., 2022). The videos in this study were not described in detail, so the study cannot say which of their features mattered.

Three points limit the claim of an effect of video as such. First, the researcher noted that the video class found the medium new and that students had not used this kind of digital medium before. A novelty effect may therefore have raised attention and scores, and the study did not run long enough to know if the gain would last. A re-analysis of earlier reviews suggests that the benefits of video are not universal and are clearest for learning that needs lower-level thinking (Trenholm & Marmolejo-Ramos, 2024). Second, the control class used PowerPoint, so the comparison is between two media rather than between video and conventional teaching; the 18.43% gain of the control class shows that PowerPoint lessons also taught the material. Third, intact classes were used without random assignment, the same researcher gave the lessons, and the pretest equivalence was only descriptive, so differences between teachers, classes, or testing conditions may have

contributed. No standard deviations, t value, or effect size were available, so the size of the effect cannot be stated precisely.

In practice, the finding fits the situation in Ujung Menteng, where projectors and Chromebooks exist but are used mainly to show material. Using the same devices to present learning videos, together with questions that make students talk about what they saw, may use them more fully. Teachers need training and preparation time, which they themselves named as obstacles. Future studies should use random assignment or more classes, compare video with conventional teaching as well as with other media, use delayed tests, describe the videos in detail, and report effect sizes.

CONCLUSION

Learning IPS with audio-visual media in the form of learning videos was associated with higher learning outcomes among fifth-grade students than learning with PowerPoint. The experimental class rose from 60.22 to 84.13 (N-gain 59.23%) and the control class from 60.35 to 67.61 (N-gain 18.43%), and the t-test showed a significant difference (sig. 0.000). Students in the video class were also more active. Because the classes were intact, the medium was new to students, and the control class used another medium, the study shows an association and cannot isolate the effect of video from novelty.

Teachers are encouraged to use learning videos as one strategy to increase students' involvement and understanding in IPS, and to ask questions that lead students to discuss the content. Future research should use more classes, delayed tests, fully reported statistics, and comparison with conventional teaching.

ACKNOWLEDGEMENT

The author thanks the students, teachers, and principals of SDN Ujung Menteng 07 Pagi and SDN Ujung Menteng 01 Pagi who took part in this study.

REFERENCES

Adisel, A., Aprilia, Z. U., Putra, R., & Prastiyo, T. (2022). Komponen-komponen pembelajaran dalam Kurikulum 2013 pada mata pelajaran IPS [Learning components in the 2013 Curriculum for social studies]. *Journal of Education and Instruction (JOEAI)*, *5*(1), 298–304. https://doi.org/10.31539/joeai.v5i1.3646

Aeniyah, W., & Meilana, S. F. (2021). Pengaruh media audiovisual terhadap motivasi belajar IPA siswa kelas IV SD Putra Jaya [The effect of audio-visual media on science learning motivation of grade IV students at SD Putra Jaya]. *Jurnal Educatio FKIP UNMA*, *7*(3), 888–894. https://doi.org/10.31949/educatio.v7i3.1287

Ambarwati, T. M., & Sukardi, B. U. (2025). Pengaruh media pembelajaran audio visual terhadap minat belajar siswa pada mata pelajaran IPS kelas V [The effect of audio-visual learning media on students' interest in grade V social studies]. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *10*(2), 402–411. https://doi.org/10.23969/jp.v10i02.28235

Daria, J. N., Sumarni, S., & Raharjo, M. (2026). The effect of video-based learning on elementary students' learning outcomes in ecosystem topics. *Jurnal Penelitian Pendidikan IPA*, *12*(3). https://doi.org/10.29303/jppipa.v12i3.14361

Elvira, Y., Ginanda, Y. O., Stephanie, V., Lorenza, V., Saputra, Z. E., & Sari, S. R. (2026). Penggunaan media audio visual dalam pembelajaran IPS di sekolah dasar [The use of audio-visual media in social studies learning in elementary schools]. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, *12*(2), 229–239. https://doi.org/10.36989/didaktik.v12i02.14245

Firmansyah, A., Herlina, H., Muchdar, M., Muslim, M., & Mas'adi, M. (2026). The effectiveness of the use of short-form videos on the learning outcomes of Pancasila Education in elementary schools. *Scaffolding: Jurnal Pendidikan Islam dan Multikulturalisme*, *8*(2). https://doi.org/10.37680/scaffolding.v8i2.9974

Hake, R. R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. *American Journal of Physics*, *66*(1), 64–74. https://doi.org/10.1119/1.18809

Hayaturrohmah, S., Pramono, S. E., & Yulianto, A. (2025). The influence of animation video media on the interests and learning outcomes of elementary school students. *Inovasi Kurikulum*, *22*(1), 55–68. https://doi.org/10.17509/jik.v22i1.75524

Isnaeni, R., & Radia, E. H. (2021). Meta-analisis pengaruh penggunaan media audio visual terhadap hasil belajar IPS siswa di sekolah dasar [A meta-analysis of the effect of audio-visual media on social studies learning outcomes in elementary schools]. *EDUKATIF: Jurnal Ilmu Pendidikan*, *3*(2), 304–313. https://doi.org/10.31004/edukatif.v3i2.281

Lin, Y., & Yu, Z. (2023). A meta-analysis evaluating the effectiveness of instructional video technologies. *Technology, Knowledge and Learning*. https://doi.org/10.1007/s10758-023-09669-3

Mappalolang, E., Mahmudah, R., & Rahman, S. A. (2026). Pengaruh penggunaan media video animasi terhadap hasil belajar IPAS siswa kelas III SDN 79 Bongki Bongki Kab. Sinjai [The effect of animated video media on grade III IPAS learning outcomes at SDN 79 Bongki Bongki, Sinjai]. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *11*(3), 211–220. https://journal.unpas.ac.id/index.php/pendas/article/download/64196/35889/220328

Mayer, R. E. (2024). The past, present, and future of the cognitive theory of multimedia learning. *Educational Psychology Review*, *36*, Article 8. https://doi.org/10.1007/s10648-023-09842-1

Mukarromah, A., & Andriana, M. (2022). Peranan guru dalam mengembangkan media pembelajaran [The role of teachers in developing learning media]. *JSER: Journal of Science and Education Research*, *1*(1).

Ningsih, D. C., Sofia, A., Hariyanto, & Sowiyah. (2026). Pengaruh media audio visual terhadap hasil belajar IPAS peserta didik kelas V sekolah dasar [The effect of audio-visual media on fifth-grade students' IPAS learning outcomes].

Pendas: Jurnal Ilmiah Pendidikan Dasar, *11*(3), 358–366. https://doi.org/10.23969/jp.v11i03.60802

Noetel, M., Griffith, S., Delaney, O., Harris, N. R., Sanders, T., Parker, P., del Pozo Cruz, B., & Lonsdale, C. (2022). Multimedia design for learning: An overview of reviews with meta-meta-analysis. *Review of Educational Research*, *92*(3), 413–454. https://doi.org/10.3102/00346543211052329

Nurcahyanti, R. M., & Tirtoni, F. (2023). Media pembelajaran audiovisual untuk meningkatkan hasil belajar siswa sekolah dasar [Audio-visual learning media to improve elementary school students' learning outcomes]. *Jurnal Educatio FKIP UNMA*, *9*(1), 265–270. https://doi.org/10.31949/educatio.v9i1.4605

Patimah, A. F., Zulkarnaen, R. H., & Chandra, D. (2025). Meningkatkan motivasi belajar siswa terhadap mata pelajaran IPS dengan penerapan media pembelajaran audio visual di kelas IV SDN 3 Sukasari [Improving students' motivation in social studies by using audio-visual learning media in grade IV at SDN 3 Sukasari]. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *10*(3), 420–432. https://journal.unpas.ac.id/index.php/pendas/article/download/31771/15601/116813

Rispadina, R., Rizhardi, R., & Suryani, I. (2022). Pengaruh penggunaan media audio visual terhadap hasil belajar IPS siswa kelas V SD Negeri 225 Palembang [The effect of using audio-visual media on social studies learning outcomes of grade V students at SD Negeri 225 Palembang]. *JS (Jurnal Sekolah)*, *6*(4), 111–119. https://doi.org/10.24114/js.v6i4.38783

Rozanna, Fatimah, & Karim, A. (2026). Pembelajaran bermakna melalui Contextual Teaching and Learning (CTL) berbantuan video animasi untuk meningkatkan hasil belajar IPAS siswa sekolah dasar [Meaningful learning through Contextual Teaching and Learning assisted by animated video to improve elementary students' IPAS learning outcomes]. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *11*(3), 384–396. https://journal.unpas.ac.id/index.php/pendas/article/download/61120/36472

Rukminingsih, Adnan, G., & Latief, M. A. (2020). *Metode penelitian pendidikan: Penelitian kuantitatif, penelitian kualitatif, penelitian tindakan kelas* [Educational research methods: Quantitative research, qualitative research, classroom action research]. Erhaka Utama.

Sartimah, S. (2025). Pemanfaatan media pembelajaran berbasis teknologi digital dalam meningkatkan kualitas pendidikan di sekolah dasar [Using digital technology-based learning media to improve the quality of elementary education]. *Jurnal Pendidikan Tambusai*, *9*(2), 19108–19116. https://jptam.org/index.php/jptam/article/download/29206/19434

Sauri, R. S., Asyadi, R., Aziza, N. P., & Sari, V. P. (2026). Manajemen media pembelajaran berbasis Chromebook dalam meningkatkan kualitas belajar siswa kelas V [Managing Chromebook-based learning media to improve grade V students' learning quality]. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *11*(1), 161–171. https://doi.org/10.23969/jp.v11i01.40378

Sinaga, W. T. M., Sihombing, L. N., & Napitupulu, R. P. (2024). Pengaruh media audio visual terhadap hasil belajar siswa kelas V sekolah dasar [The effect of

audio-visual media on grade V elementary students' learning outcomes]. *Jurnal Basicedu*, *8*(3), 1804–1812. https://doi.org/10.31004/basicedu.v8i3.7486

Soediro, O. B. A., Yafi, M. A., & Hidayati, D. N. (2025). Media audio-visual dan minat belajar IPAS: Praktik pembelajaran bermakna di sekolah dasar [Audio-visual media and interest in learning IPAS: Meaningful learning practice in elementary school]. *Jurnal Pendidikan Sultan Agung*, *5*(3), 375–385. https://doi.org/10.30659/jp-sa.5.3.375-385

Suantara, I. G., Werang, B. R., & Bayu, G. W. (2026). Video animasi berbasis design thinking untuk meningkatkan hasil belajar pada mata pelajaran IPAS kelas IV SD [Design thinking-based animated video to improve learning outcomes in grade IV IPAS]. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *11*(2), 563–577. https://journal.unpas.ac.id/index.php/pendas/article/download/50664/31068

Sukma, F. R., Sa'odah, & Rini, C. P. (2025). Perbedaan hasil belajar IPAS kelas IV antara media gambar dengan media video di SDN Kutabumi IV Kabupaten Tangerang [Differences in grade IV IPAS learning outcomes between picture media and video media at SDN Kutabumi IV, Tangerang]. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *10*(3), 180–185. https://journal.unpas.ac.id/index.php/pendas/article/download/33905/20908/143862

Trenholm, S., & Marmolejo-Ramos, F. (2024). When video improves learning in higher education. *Education Sciences*, *14*, Article 311. https://doi.org/10.3390/educsci14030311

Wijaya, H., Dewi, A. S., & Dewi, G. K. (2026). Penggunaan video animasi untuk meningkatkan hasil belajar IPAS pada siswa kelas 4 SD [Using animated video to improve IPAS learning outcomes in grade 4]. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *11*(2), 247–258. https://journal.unpas.ac.id/index.php/pendas/article/download/49923/28400

Wulandari, A. P., Salsabila, A. A., Cahyani, K., Nurazizah, T. S., & Ulfiah, Z. (2023). Pentingnya media pembelajaran dalam proses belajar mengajar [The importance of learning media in the teaching and learning process]. *Journal on Education*, *5*(2), 3928–3936.

Zuknilarinta, D., Martha, A., & Yulastri, W. (2026). Effects of interactive educational videos on learning interest and social studies achievement in elementary school: A quasi-experimental study. *Journal of Education Research*, *7*(2), 749–756. https://doi.org/10.37985/jer.v7i2.3637