# DEVELOPING ANIMATION VIDEOS AND GAME CARDS FOR TEACHING TELLING TIME IN ENGLISH TO FOURTH-GRADE STUDENTS

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**Abstract:** Changes in the curriculum in education affect how the implementation of existing learning, as well as in learning media, is needed as an effort to stimulate students' abilities in the learning process to be more effective and efficient. The purpose of this research is to develop animation video media and game cards on Telling Time material in English. This research uses the type of research and development with the ADDIE model. The research subjects were fourth grade students of Wates 01 Semarang State Elementary School. Data collection techniques used in this research are (1) interview; (2) observation; (3) questionnaire; (4) test; and (5) documentation. The instruments used are interview guides, documentation, needs questionnaires, media response questionnaires, pretest and posttest questions, and validation sheets conducted by 2 experts, namely media experts, material experts, and language experts. Data analysis techniques were carried out by normality test (Shapiro-Wilk), t test, and n-gain test. The results showed that animated video media and playing cards can improve student understanding and student learning outcomes in English. This result is evidenced from the average value on students there is an increase in small-scale learning outcomes pretest average value 58.3 and posttest average 86.8 then on a large scale pretest average value 57 and posttest average value 82.8. Then the results of the N-gain test on a small scale of 0.7512 and a large scale of 0.5925 which means the high and medium categories, can be concluded to be effective for use in learning. Therefore, it can be concluded that animation video media and game cards can be said to be a category worth using in an interesting learning process and can improve student understanding and learning outcomes.

**Keywords:** animation video; english subject; game cards; telling time.

# **INTRODUCTION**

Currently, education is the main point and main focus for every component of the nation. By changing the constitution, the Education System Law Number 02 of 1989 to Number 20 of 2003, and Government Regulation Number 32 of 2013 concerning National Education Standards, this is listed in the fundamental changes made (Widyana et al., 2024).

The independent curriculum also known as the prototype curriculum was officially announced by Nadiem Anwar Makarim, Minister of Education, Culture, and Research. The learning independence curriculum is a new curriculum that emphasizes learner well-being and involves learners in the teaching and learning process. It gives learners the freedom to choose subjects they enjoy, which

helps them develop their interests and talents. When it is used, the role of teachers is also very important to make learning more interesting and enjoyable for learners. The evaluation of learner learning outcomes in the curriculum aims to ascertain and quantify learners' proficiency in the teaching and learning process (Melati, 2023).

English instruction in primary schools has been increasingly crucial under the Merdeka Curriculum since its introduction in educational institutions, including elementary (Oktavia et al., 2023). English is now required in some schools as part of the current autonomous curriculum implementation, including in primary schools, where it is taught as a local content lesson (Sari et al., 2024). When the autonomous curriculum started in elementary schools, the goal

of teaching English was to help pupils become more proficient communicators in the language.

The implementation of English language learning in the field does not seem to be optimal. Many teachers have difficulty teaching it, especially in grade IV elementary school, where students have not yet gotten the basics of English, making it difficult for students to understand what the teacher is teaching. In class IV, students experience problems with telling time, which is one of the basic understandings in English. Because its application time is used every day for daily activities, such as organizing meetings, organizing lessons, and others, this skill is very important. However, many students, especially fourth grade elementary school students, find telling time in English difficult. Learning time in English often faces complex problems. Students must recognize the numbers on analog and digital clocks and understand time patterns in sentences. Uninteresting teaching, the use of uninnovative learning methods, and the lack of supporting resources can affect students' interest and understanding of learning to tell time in English. So the need for media utilization can help make it easier for teachers to explain the material to students. With the teaching media, teachers can attract the attention of students to be more focused on learning (Oktavia et al., 2023).

Using learning media that is appropriate to the material and student characteristics is a way to overcome this problem. The use of media in learning is very important to create a fun and exciting atmosphere in the learning process. Because the media has the ability to unite words, written images and symbols when delivering material in the learning process (Hasan et al., 2021a). Along with the times, knowledge and technology, learning media also experience development and progress. This means that there are many types and variations of learning media along with the times and advances in knowledge and technology (Hasan et al., 2021b). With media that keeps up with the times, students are not bored and interested in classroom lessons. Therefore, there needs to be an effort to improve the media that can be used, namely animation video media and game cards that can increase student understanding and attract student interest in telling time material in English subjects.

Animation video content is one kind of instrument for education that can improve students understanding and engagement. Video was once a rich, potent, and dynamic teaching tool that supported teaching and learning while also

including text, sound, and occasionally dynamic or moving images for information presentation, visualization, and representation narration, (Evangelou, 2023). Animation, on the other hand, is a series of pictures that are altered to create motion. Animation is a type of moving image produced by carefully arranging a collection of things to tell a preset story (Farida et al., 2022). An animation video, then, is a moving visual created by a group of different objects that have been carefully assembled to follow a specified (Farida et al., 2022). When creating educational materials that help in the teaching and learning process, educators have the option to utilize animation video content as an alternative. A collection of dynamically moving pictures that can be heard and seen is what animation video media uses to express information or messages (Hapsari, 2021).

Research (Sae & Radia, 2023) indicates that video animation is a legitimate, useful, and successful teaching medium for enhancing students critical thinking abilities in science classes in elementary schools. Research indicates that VIDAM media, an animation video, can boost the interest of third-grade children at SDN 05 Balesari in studying (Cholifah & Saputro, 2022). According to research using animation video learning (Prasetya et al., 2021), the learning process will be more effective since it can enable teachers and students to more quickly accomplish their assignments, overcome time and space constraints, and clarify abstract concepts. As a result, attractive concepts are used in the creation of animated learning materials to satisfy the demands of students.

In addition, game cards were the medium of choice for telling time in this investigation. Simple media in the shape of cards with words and graphics are called flashcards. It is anticipated that students will find it simpler to resolve comparative material problems with the use of this media (Lestari et al., 2023). The English word "game" originally meant "match" or "game." It can also be used to describe scheduled events that are typically conducted for amusement ((Yulianti & Minsih, 2022). Games will be used in conjunction with these game cards. A type of game with established goals for learning is known as learning with game cards" (Cheok & Ali, 2024). Game cards motivate and engage players to keep learning. According to research (Santi et al., 2023), the game approach with image card media significantly improved the learning outcomes of grade 1 addition and subtraction material at Gandekan Surakarta State Elementary School in the 2022-2023 academic

year.

From the previous description, the aim of this research is to develop animation video media and game cards that are feasible and effective for learning about telling time material in English so that it can improve student understanding and learning outcomes of fourth grade students. To find out more about this problem, there are the following questions: (1) How is the development of animation video media and game cards of telling time material in English class IV?; (2) How is the feasibility of animation video media and game cards of telling time material in English class IV?; and (3) How is the effectiveness of animation video media and game cards of telling time material in English class IV?

# **METHOD**

To resolve the problems that occur, a relevant and appropriate method is needed to determine the development, feasibility and effectiveness of an animation video media and game cards. Research and development (R&D) was the research methodology used in this study.

R&D is a process or steps to create new products or improve existing products. Development research serves as a link between basic research and applied research. Research and development (R&D) research is a research method that aims to produce specific products. Educational problem research makes it possible to develop and implement more innovative education through educational problem research.

Research and development, or R&D, is the process of developing a product and assessing its effectiveness (Sugiyono, 2019). In developing a product, research is used, which includes a needs analysis and product testing. Research and development (R&D), in education produces products that must go through some research so that the media can be used effectively. The development research paradigm employed in this study was the ADDIE development model. Analysis, design, development, implementation, and evaluation are the phases of the ADDIE model (Mesra, 2023). Figure 1 below shows the ADDIE model in the image that follows.



Figure 1. *The ADDIE model* 

This study was 28 students in fourth grade were subjects, consisting of 14 female and 14 male students. This study used large-group and small-group trials. The large group consisted of 22 students and a small group of 6 students at SD Negeri Wates 01 Semarang.

Location and timing of the research this study was carried out in the Central Javan province of Semarang at SD Negeri Wates 01, Ngaliyan Subdistrict. This research location was chosen because observations revealed that students in the fourth grade were still not achieving acceptable educational goals in their English classes. Based on this problem, the researcher developed animation video media and game cards to improve students understanding in telling time in English subject grade IV SD N Wates 01 Semarang. Through the development of this learning media, researchers want to know the effect and effectiveness of animation video learning media and game cards to improve students understanding in telling time in English subjects grade IV SD N Wates 01 Semarang. The research time was conducted in May - June 2024.

The independent variables in this study are animation video learning media and game cards. The dependent variable is to improve students understanding of telling time in English class IV SD N wates 01 Semarang.

Data collection techniques used in this study (1) interviews; (2) observation; (3) questionnaires; (4) tests; and (5) documentation. The interview method was conducted to collect data with the teacher as a resource person; the observation method was carried out in class IV during the activity during learning; the researcher took various data from class IV students; the questionnaire method was used to determine the validation of the developed media products addressed to students and class teachers; and the test method was made in the form of pretest and questions posttest used to measure effectiveness of the product.

Two experts, namely material and language experts and media experts, conducted interviews, documentation, needs questionnaires, response questionnaires, pretest and posttest questions, and validation sheets. This instrument uses a Liket scale with a score interval of 1–5 (Pranatawijaya et al., 2019), which is calculated with the following scoring guidelines:

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$$P = \frac{R}{SM} \times 100\%$$

Description:

P : Percentage of Feasibilit
R : Total score obtained
SM : Total maximum score

Then they were grouped based on the eligibility criteria in Table 1 below.

Table 1. Eligibility criteria

| Percentage | Criteria     | Description  |  |
|------------|--------------|--------------|--|
| 86% -100%  | Very         | Without      |  |
|            | Feasible     | Revision     |  |
| 71% - 85%  | Feasible     | Revised      |  |
| 56% - 70%  | Moderately   | Not Feasible |  |
|            | Feasible     |              |  |
| 41% - 55%  | Not Feasible | Not Feasible |  |
| 25% - 40%  | Very         | Not Feasible |  |
|            | Unfeasible   | not reasible |  |

Data analysis on the development and research of animation video media and game cards to improve students understanding in telling time on English subject in grade IV SD N Wates 01 Semarang. The data used in the study was taken from one class only because the sample size was less than 40. The research was conducted on both a small and large scale. The small scale amounted to 6 students, and the large scale amounted to 22 students. Small sampling using the purposive sampling technique, namely two upperlevel students, two middle level students, and two lower-level students.

To use the appropriate statistical test, you must understand the data you have, whether it has a normal distribution or not. If the data has a normal distribution or is close to a normal distribution, then parametric statistical methods are used. Meanwhile, if the population data does not have a normal or near normal distribution, non-parametric statistical methods are used. To find out whether the data is normally distributed or not, a normality test is carried out (Anam, 2020).

In this study, we used a statistical test, namely the normality test, to determine whether the animation video media and game cards are normally distributed or not. A normality test is a statistical test used to test the assumption of a normal distribution in data. Population data is said to be normally distributed if the average value collects in the middle, the mode value, and the median are at certain reasonable limits (Sintia et al., 2022). The data used in this study are less than 40, so it is more appropriate to use the Shapiro-Wilk test because, according to Biu, Nwakuya, &

Wonu (2019) Kolmogorov-Smirnov is more appropriate for large samples or more than 40. While the Shapiro-Wilk test is more accurate when used for small samples (Wahab et al., 2021).

The analysis test used by the research is the Paired Samplet-test which is part of the comparative hypothesis test or comparison test. The data used in the paired samplet-test test is generally interval or ratio scaled data (quantitative data) (Fuadi et al., 2022). The Paired Sample t-test test is used to see if there is a significant difference between the Pretest and Posttest averages in the One Group Pretest-Posttest Design (Sukarelawan et al., 2024). In the Paired Sample t-test test, there is a meaningful or significant difference if the Sig value. (2-tailed) <0.05. Conversely, there is no meaningful or insignificant difference if the Sig. (2-tailed) > 0.05(Fuadi et al., 2022).

Based on the results of the Paired-Sample T-test between the initial and final understanding of students, it can be concluded that there is a significant difference. Therefore, the analysis of changes or improvements in student learning outcomes can be continued using the N-Gain Test. N-Gain test is a commonly used method to measure the effectiveness of a learning or intervention in improving students' learning outcomes (Sukarelawan et al., 2024). This method provides a strong foundation for evaluating the extent to which a learning program has contributed to students understanding of telling time material in English.

# RESULTS AND DISCUSSION

Researchers in developing animation video media and game cards to improve students understanding in telling time on English subject in grade IV use the ADDIE development design, which consists of stages that include analysis, development, implementation, and evaluation (Elvitaria et al., 2023). Improving current educational resources in the classroom and raising student learning goals are the objectives of this media development. Learning media is a tool used by teachers to carry out learning activities more effectively (Hasan et al., 2021b) Currently, there are many types of learning media. The use of technology in education, especially in learning media, has provided opportunities for teachers and students to improve the quality of education so that they can achieve better results (Said, 2023).

Development of animation video media and game card

The first stage Analysis is what researchers do. At

this point, the researchers observed class IV at SD N Wates 01 and conducted interviews with the students, and the results obtained indicated the need for new learning media that could attract students attention, especially in English subjects on telling time material and English vocabulary habituation. In this first stage, analyzing what needs are needed by teachers and students is done by interviewing the IV grade teacher of SD Negeri Wates 01 Semarang.

Based on the needs analysis conducted, it is stated that fourth grade students of SD N Wates 01 Semarang have difficulty in understanding the material of telling time in English. One of the factors causing this is that students have just received English subjects in class IV so that the teacher is quite difficult in dealing with it. Therefore, to help students understand the learning material maximally, an interesting learning media is needed and improve student understanding and learning outcomes.

The second stage is design. Researchers at this stage start by determining the software and hardware in the development of animation video products and game cards. The software used for animation videos and game cards is the Canva and Capcut applications, while the hardware is a laptop and an Android smartphone. Next, design the details of the animation video and game card design according to the character of elementary school students, then organize the material that will be included in the animation video and game cards; design the concept of examples of activities that use time that will be included in the animation video, then design Yes or No and hear and circle exercises that aim to hone students understanding of the material presented in the animation video. The game card media is designed with alternating prints (front view for questions and back view for answers), and this game card will have playing rules as well. This animation video media and game cards are made by taking into account several aspects, including media appearance such as image, color, and font selection, ease of media operation, and audio clarity. Then design a container for the game cards using the canva application.

The third stage is development. In this stage, what researchers do is develop products according to the design made. (1) Collection of materials, such as collecting basic materials to develop animation video media such as material, images, text, audio, video, and animation; (2) Start making animation videos and add some features to the animation video with Canva as follows: choosing

the size of the animation video canvas, adding moving animation features, adding images, appropriate elements, voice actors, backsound (on this backsound using the Capcut application), and transitions; (3) Arranging the animation video starting from the first display, delivery of CP, objectives, Pancasila student profile, explanation of material, examples and practice questions, acknowledgments; (4) adding images and interesting elements on the game cards; (5) This game card is made of ivory paper base material because the material is better than buffalo paper and is not harmful to elementary school students; (6) make a container that is used as a game card holder.

The results of the development of animation video media can be seen in the picture below:



Figure 2. *The animated video's first appearance* 



Figure 3. Display of CP delivery, learning objectives and pancasila learner profile



Figure 4. *Display of telling time material delivery* 



Figure 5. Example of telling time explanation display



Figure 6. Look and say display



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Figure 7. Example of look and say display



Figure 8. Display of practice questions



Figure 9. Yes or no practice question display



Figure 10. Listen and circle question start display



Figure 11. *Listening and circling question display*The results of the development of Telling Time game cards can be seen below:



Figure 12. The front view of the game card about the instructions for using the game card



Figure 13. Display of how to playcards



Figure 14. Front view of game cards and questions



Figure 15. The back view of the game card and the answer

The way to use the game is as follows: (1) Before the game starts, read first how to play the telling time game card. (2) Each student gets one card. (3) The number of players is 2 people (in pairs). (4) Determine the player who gets the first turn to play. (5) Here each player is required to be able to answer the telling time question from his opponent's friend's card. (6) If you can't answer, you will get a score of 0 and if you answer correctly, you will get a score of 1. (7) If you can answer correctly, you must find another opponent (you cannot play with the same person). (8) The game with the telling time game card will win the highest score in the class. The results of the development of the Telling Time game card container can be seen below



Figure 16. Containers for telling time game cards

Feasibility of animation video media and game cards telling time

The media that has been developed is then validated by media experts, material experts, and language experts, who will assess and state whether the media is valid and feasible to use in learning by using an expert validator assessment questionnaire. The results of the expert validator assessment from these results it can be stated that the animation video media and game cards are very feasible to use in learning because it can be seen from the percentage received by media experts and linguists 87.5% including very feasible criteria and in media experts with a percentage of 93.75% including very feasible criteria.

This is in line with research showing that (Putri et al., 2022), the ADDIE development model is used to develop animated video-based chemistry

learning media, which includes analysis, design, development, implementation, and evaluation. The animated video-based chemistry learning small was deemed highly valid or very feasible with an average valid value category of 0.900884, according to the results of the three validators' feasibility test. Meanwhile, the average feasibility percentage of 81.16% from the student response questionnaire indicated that it was feasible and did not require revision.

The effects of the media response further the reliability of the strengthen questionnaire conducted by class teachers and fourth grade students of SD Negeri Wates 01 Semarang City. The ADDIE development model is utilized in research (Putri et al., 2022) to create animated videos for chemistry learning materials based on student responses in small and large group trials. Overall, with an average of 81.16%, it is deemed feasible for use in both indoor and outdoor learning activities. Furthermore, studies (Maeswaty et al., 2023) discovered professionals rated the flashcard learning medium as "very feasible" with an average score of 91.7%. This demonstrates how highly viable it is to employ the instructional media created in the classroom.

The results of the questionnaire responses of teachers and students of SD Negeri Wates 01 Semarang City to the animation video media and game cards. The results of media responses from teachers and students of SD Negeri Wates 01 are included in the criteria very feasible because the percentage of media response questionnaires from teachers is 90% and student media response questionnaires are 98%. So according to the media response questionnaire conducted by teachers and students, animation video media and game cards are said to be feasible.

Effectiveness of animation video media and game cards telling time

The fourth stage in the ADDIE model used in this study is the implementation stage. At this stage, the researcher tests the learning media by showing whether the media developed is feasible and effective to use as a tool for learning.

The data used to measure the effectiveness of animation video media and game cards is the acquisition of students pretest and posttest scores. The pretest was carried out at the beginning of learning before the use of the animation video media and game cards, then the posttest was carried out after students received learning by using animation video media and game cards. The

results of the acquisition of the average pretest and posttest are on a small scale with 6 students the average pretest value is 58.3 and the average posttest is 86.8; then on a large scale with 22 students, the average pretest value is 57 and the average posttest value is 82.8.

The fifth stage is evaluation. This stage analyzes the results of pretests and posttests to determine whether animation video media and game cards are feasible and effective for students. The process of increasing students understanding and learning outcomes is measured by comparing the results of students pretest and posttest scores. The first thing to do to determine the feasibility of the media is to conduct a normality test. Normality test is a statistical test used to test whether the data distribution is normally distributed, if the data is not normally distributed, you cannot do the next step. The normality test in this study used the Shapiro-wilk normality test because the sample used was less than 40 samples (Ahadi & Zain, 2023). The results of the normality test using the SPSS 25 application can be seen in table 2 below.

Table 2. *Normality test results* 

| Class                           | Pretest<br>sig<br>value | Posttest<br>sig<br>value | Description                         |
|---------------------------------|-------------------------|--------------------------|-------------------------------------|
| Small<br>Scale (6<br>students)  | 0.362                   | 0.283                    | Normally distributed because > 0.05 |
| Large<br>Scale (22<br>students) | 0.188                   | 0.476                    | Normally distributed because > 0.05 |

Based on the results of the normality test of students pretest and posttest scores using the Shapiro-Wilk test, which shows significant results on a large scale for pretest 0.188 and posttest 0.476. Then the pretest and posttest values were measured on a small scale using the Shapiro-Wilk test, which showed significant results on the pretest (0.362) and posttest (0.283). Normality testing is said to be normal if the sig value is > 0.05. So from the results of pretests and posttests on a large and small scale, it can be concluded that the pretest and posttest results are normally distributed because > 0.05.

After the normality test is carried out and the results are normally distributed, the t-test or paired sample test will be used to see if there is a significant difference between the pretest and posttest data if the data distribution is declared normal. The results of the paired sample t-test conducted using the SPSS 25 program are shown in table 3 below.

Table 3. Paired sample test

| Class         | Sig value  | Description        |
|---------------|------------|--------------------|
|               | (2-tailed) | _                  |
| Small Scale   |            | There is a         |
| (6 students)  | 0,002      | significant        |
|               | 0,002      | difference because |
|               |            | < 0.05             |
| Large scale   |            | There is a         |
| (22 students) | 0,000      | significant        |
|               |            | difference because |
|               |            | < 0.05             |

Based on the t-test table or paired samples test, it is found on a large scale with a significant (2-tailed) 0.000 and on a small scale with a significant (2-tailed) 0.002. In the paired sample test, there is a significant difference if the value is <0.05. So it can be concluded that in the paired sample test on a large and small scale, there is a significant difference of <0.05.

Furthermore, the N-gain test was conducted to find out the effectiveness of animation video media and game cards in the learning process. The N-gain value is calculated using the following equation:

$$Normal\ Gain = \frac{Skor\ Post\ Test - Skor\ Pre\ Test}{Skor\ Ideal - Skor\ Pre\ Test}$$

Description: Ideal score: 100

Furthermore, it is grouped based on categories (Wahab et al., 2021) in the following table 4:

Table 4. *N-gain value category* 

| N-gain value        | Category |
|---------------------|----------|
| g > 0,7             | High     |
| $0.3 \le g \le 0.7$ | Medium   |
| 0 < g < 0.3         | Low      |
| $g \le 0$           | Fail     |

The following is the N-gain test data on product trials using animation video media and game cards in class IV SD Negeri Wates 01, which can be viewed in table 5.

Table 5. N-gain test results

| Class                     | N-gain<br>Value | Category |
|---------------------------|-----------------|----------|
| Small Scale (6 students)  | 0.7512          | High     |
| Large scale (22 students) | 0.5925          | Medium   |

The results of the N-gain data analysis show that the animation video media and game cards have an N-gain value of 0.7512 on a small scale (6 students), which is categorized as high, while the N-gain value is 0.5925 on a large scale (22 students), which is categorized as medium. This shows that animation video media and game cards are effective in learning so that it can improve

student understanding and student learning outcomes if in telling time on English subjects.

According to the research's conclusions, it is legitimate, practical, and efficient to generate video animation content and game cards to help IV grade English students understand how to tell the time. According to earlier research (H. R. Sari & Yatri, 2023) using videos with animation in elementary school language instruction can significantly improve learning outcomes as well as student interest and motivation. Children can gain various advantages from the use of video animation in primary school instruction, such as improved comprehension, heightened language proficiency, and enhanced creativity.

According to research (Muryanti, 2022), animation videos are thought to be more appealing to draw in young viewers because they contain both visual and aural elements (sound and images), which can pique young viewers' interest in learning and identifying English.

The researcher created an animation video that explains telling time with graphics, elements, animations, and videos, all of which add to the video's unique charm. The animation video uses simple syntax. According to this research, students are highly engaged with the animated videos that have been created with features and motion animations included in each video to compel them to pay attention and comply with all of the instructions. The animated videos in this curriculum help students practice speaking English as well. because the educational animation teaches students to recognize and pronounce the time statement in English. Because there are practice questions in the animation video that students must answer right away by speaking, it not only helps students practice their English but also sharpens their critical thinking skills. Animation video content is seen immediately on an LCD screen in the classroom utilizing an offline mode, which avoids the need for an internet connection for convenient access.

Then, using these findings, researchers created media game cards. Using these game cards as a learning tool will motivate students more during class. When students engage in games with one another during class activities, they become less obedient, happier, and enthusiastic. This is due to the intriguing design of the game cards, which combine images of clocks, vibrant colors, and questions along with game rules and responses. In order to increase student enthusiasm and prevent boredom throughout the learning process, researchers can identify which students do not

understand the topic once they begin using this game card. This is because students who are unable to respond to questions will not receive a score.

This result is consistent with studies that show using flash card media to study is likely to enhance learning quality, increase students engagement and enthusiasm, and make learning activities more enjoyable (Nurfadilah et al., 2023). Similarly, studies show that playing card games can produce a more engaging and dynamic learning environment. in order to increase students motivation to learn and to give their position in the classroom greater life (Azizah, 2019).

Researchers have created game cards and animation video media that are flexible enough to let students watch animation movies whenever and wherever they want, without having an internet connection. Additionally, the game cards are lightweight and compact, making them easy to bring everywhere and store. The study and a few trial results lead to the conclusion that playing cards and animated videos are appropriate for the purpose of education.

### **CONCLUSION**

Based on the results of research and development of animation video media and game cards to improve student understanding and student learning outcomes in telling time in English subjects for fourth grade students at SD Negeri Wates 01 Semarang, it is declared valid, feasible and effective to use. The validation results were declared very valid by media experts, material and language experts. So the feasibility of animation video media and game cards is feasible to use for the learning process because not only from expert validators but from the results of teacher and student responses after the application of this media gets a good response and falls into the feasible category. Then for the effectiveness of this animation video media and game cards, it was tested with a normality test which was normally distributed, then the t test found a significant difference between the pretest and posttest scores, and the N-gain test was in the high and medium categories, which means that animation video media and game cards are effective for increasing student understanding and improving student learning outcomes can also be seen from the average value that rose significantly. It is concluded that animation video media and game cards increase students understanding in telling time in English subject. In addition, with this animation video and game cards, students become more active and eager to follow the existing learning because the media used are interesting and also support students ability to speak English and reduce boredom when following the lesson.

Based on the experience of conducting this research. researcher provides several suggestions that may be useful for further research. The development for future learning of animation video media uses a more detailed design in each video design that will be made and game cards are made as attractive as possible with designs of various colors and shapes. Then class management when the playing cards must also be arranged to be effective and efficient to maximize achievement of learning objectives and increase student interest so that students understand the importance of learning telling time. Make improvements and revisions to the learning media to improve its quality and effectiveness. Sharing the research results to the world of education to share knowledge so that it can improve learning practices in other schools.

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### REFERENCES

Ahadi, G. D., & Zain, N. N. L. E. (2023). Pemeriksaan uji kenormalan dengan kolmogorov-smirnov, anderson-darling dan shapiro-wilk. *Eigen Mathematics Journal*, 11–19.

Anam, C. (2020). Jenis uji statistik untuk analisis hasil penelitian. *Berkala Fisika*, 23(4), 115-117.

Aprianti, R. A. R., Rakhmat, C., & Indihadi, D. (2023). Pengaruh penggunaan video animasi terhadap minat belajar siswa pada tema organ gerakan hewan di kelas v sekolah dasar. *Jurnal Elementaria Edukasia*, 6(2), 398-407.

Asnawati, Y., & Sutiah, S. (2023). Pengembangan media vidio animasi berbasis aplikasi canva untuk meningkatkan motivasi belajar siswa. *Journal of Islamic Education*, 9(1), 64-72.

Azizah, A. R. (2019). Pengembangan media kartu loker dalam pembelajaran ips materi keragaman suku bangsa dan budaya kelas IV. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar*, 7(2), 1–11.

Cheok, C. S., & Ali, A. M. M. (2024). Effectiveness of card games in english vocabulary learning among chinese public primary school esl

- students. International Journal of Emerging Issues in Social Science, Arts and Humanities (IJEISSAH), 2(2), 35–45.
- Cholifah, T. N., & Saputro, G. I. (2022). Pengembangan media pembelajaran vidam (video animasi) pembelajaran tematik untuk meningkatkan minat belajar siswa Kelas 3 SD. *Jurnal PRIMED: Primary Education Journal Atau Jurnal Ke-SD An*, 2(2), 120–130.
- Cholik, M., & Umaroh, S. T. (2023). Pemanfaatan video animasi sebagai media pembelajaran di era digital. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika*), 8(2), 704-709.
- Darniyanti, Y., Subhan, M., & Hoiriyanti, Y. (2023). Pengembangan media video animasi pada muatan ips menggunakan aplikasi capcut di kelas V Sdn 01 Koto Baru. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 9(3), 870-879.
- Dini, J. P. A. U. (2023). Pengembangan video animasi terhadap kecerdasan interpersonal anak usia dini. *jurnal obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(1), 1024-1034.
- Elvitaria, L. E., Setiawan, D., Susanti, L., & Syafrizal, S. (2023). Pemodelan addie dalam pengembangan kurikulum 13 pada pembelajaran bahasa inggris tingkat sekolah dasar berbasis android. *Rabit: Jurnal Teknologi Dan Sistem Informasi Univrab*, 8(2), 231–246.
- Evangelou, F. (2023). Video as an educational tool for teaching and learning for primary school students: a research approach by greek teachers. *European Journal of Education and Pedagogy*, *4*(1), 104–111.
- Farida, C., Destiniar, D., & Fuadiah, N. F. (2022). Pengembangan media pembelajaran berbasis video animasi pada materi penyajian data. *Plusminus: Jurnal Pendidikan Matematika*, 2(1), 53–66.
- Fuadi, N., ARIF, M., & ZELVIANI, S. (2022). Pengaruh kebisingan terhadap frekuensi denyut nadi dan kelelahan kerja menggunakan uji statistik spss pada uji paired sampel ttest. *Jurnal INSTEK (Informatika Sains dan Teknologi)*, 7(2), 325-333.
- Hade, O. A., Helvina, M., & Yufrinalis, M. (2023). Meningkatkan hasil belajar IPA materi perubahan wujud benda menggunakan video animasi pada siswa kelas IV SDK 077 Kewapante. *Journal on Education*, 5(3), 6681-6687.
- Hapsari, G. P. P. (2021). Analisis kebutuhan pengembangan media video animasi berbasis aplikasi canva pada pembelajaran IPA. *PSEJ* (*Pancasakti Science Education Journal*), 6(1), 22–29.
- Hasan, M., Milawati, M., Darodjat, D., Harahap, T. K., Tahrim, T., Anwari, A. M., Rahmat, A., Masdiana, M., & Indra, I. (2021a). *Media* pembelajaran. Tahta media group.
- Hasan, M., Milawati, M., Darodjat, D., Harahap, T. K.,

- Tahrim, T., Anwari, A. M., Rahmat, A., Masdiana, M., & Indra, I. (2021b). *Media pembelajaran*. Tahta media group.
- Isnaini, S. N., Firman, F., & Desyandri, D. (2023). Penggunaan media video pembelajaran dalam meningkatkan minat belajar matematika siswa di sekolah dasar. *Alpen: Jurnal Pendidikan Dasar*, 7(1), 42-51.
- Jasiah, J., Mayasari, M., Haniko, P., Munisah, E., Pebriani, E., Apriza, B., & Hita, I. P. A. D. (2023). Media kartu bergambar untuk anak usia dini: apakah memiliki pengaruh terhadap peningkatan motivasi belajar. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(6), 7149-7157.
- Kurnia, I. R., & Sunaryati, T. (2023). Media pembelajaran video berbasis aplikasi canva untuk meningkatkan minat belajar siswa. *Jurnal Educatio FKIP UNMA*, *9*(3), 1357-1363.
- Kusumah, S. N., & de Rooij, A. (2023). EcoMind: exploring the use of a card game for sustainable design ideation in design education.
- Lestari, A. D., Wijayanti, R., Susilawati, L., & Rochsun, R. (2023). Pengembangan media pembelajaran flashcard berbasis akm pada materi perbandingan menggunakan scan qr. *Jurnal Ilmiah Matematika Realistik, 4*(2), 311–317.
- Maeswaty, A. D., Mulyasari, E., & Rahmawati, E. (2023). Pengembangan media pembelajaran flashcard menggunakan aplikasi canva pada materi membaca permulaan siswa kelas I SD. *Jurnal Pendidikan Guru Sekolah Dasar*, 8(2), 11–18.
- Malik, L. A., & Maunah, B. (2023). Penggunaan video animasi dalam pembelajaran IPS guna untuk meningkatkan minat belajar siswa kelas Viii Di MTS Miftahul Huda Ngunut Tulungagung. Journal of Creative Student Research, 1(4), 238-255.
- Melati, P. S. (2023). Implementasi kurikulum merdeka belajar pada sekolah dasar mempengaruhi pada hasil evaluasi belajar peserta didik. Proceedings Series of Educational Studies.
- Mesra, R. (2023). Research & development dalam pendidikan.
- Mukaromah, L., Ningsih, E. F., Choirudin, C., & Sekaryanti, R. (2023). Eksperimentasi model pembelajaran problem posing terhadap kemampuan berfikir kreatif pada materi lingkaran berbantu video animasi. *Jurnal Penelitian Tindakan Kelas*, *1*(1), 46-52.
- Muryanti, E. (2022). Efektivitas video animasi terhadap pengenalan kosakata bahasa inggris anak usia dini. *Jurnal Pelita PAUD*, 6(2), 216–221.
- Ningrum, A. K. P., Khaerunnisa, E., & Ihsanudin, I. (2023). Lembar kerja peserta didik berbantuan video animasi pada materi sistem persamaan linear tiga variabel. *Jurnal Educatio FKIP UNMA*, 9(2), 841-849.

- Nurfadilah, S., Rahma Khalisa, P., Muniroh, H., Jamaludin, U., Setiawan, S., Fkip, P., Sultan, U., & Tirtayasa, A. (2023). Efektifitas penggunaan media flashcard dalam meningkatkan kemampuan membaca siswa kelas rendah. Didaktik: *Jurnal Ilmiah PGSD FKIP Universitas Mandiri*, 09(2477–5673).
- Oktavia, D., Habibah, N., Balti, L., & Kurniawan, R. (2023). Kurikulum merdeka dan pengajaran bahasa inggris di sekolah dasar: Need Ansalisis Study. *Jurnal Muara Pendidikan*, 8(1), 257–265
- Pebriani, S., & Mustika, D. (2023). Pengembangan media video animasi kartun kelas V sekolah dasar. *Jurnal Pendidikan Tambusai*, 7(1), 2468-2477.
- Pranatawijaya, V. H., Widiatry, W., Priskila, R., & Putra, P. B. A. A. (2019). Penerapan skala Likert dan skala dikotomi pada kuesioner online. *Jurnal Sains dan Informatika*, *5*(2), 128–137.
- Prasetya, W. A., Suwatra, I. I. W., & Mahadewi, L. P. P. (2021). Pengembangan video animasi pembelajaran pada mata pelajaran matematika. *Jurnal Penelitian dan Pengembangan Pendidikan*, 5(1), 60–68.
- Putri, S. W., Taufik, L., & Qurniati, D. (2022). Spin jurnal kimia & pendidikan kimia pengembangan media pembelajaran kimia berbasis video animasi untuk meningkatkan motivasi belajar siswa sman 1 wanasaba development of chemical learning media based on video animations to increase learning motivation of students oF SMAN 1 Wanasaba. SPIN, 4(1), 58–66. https://doi.org/10.20414/spin.v4i1.5092
- Rahmania, D. M., Mustafa, A. H., Fitriani, H., & Handayati, S. (2023). Penggunaan media video animasi berbasis capcut sebagai media dakwah dalam pembelajaran pai di sekolah dasar. *Journal on Education*, *5*(4), 17336-17344.
- Sae, H., & Radia, E. H. (2023). Media video animasi dalam pembelajaran IPA untuk meningkatkan kemampuan berpikir kritis siswa SD. *Indonesian Journal of Education and Social Sciences*, 2(2), 65–73.
- Safitri, I., Hansyah, P., & Siregar, D. A. (2023). Implementasi media pembelajaran video animasi ipa berbasis karakter melalui analogy learning. *Ika Bina En Pabolo: Pengabdian Kepada Masyarakat*, 3(1), 42-51.
- Said, S. (2023). Peran teknologi digital sebagai media pembelajaran di era abad 21. Jurnal PenKoMi: Kajian Pendidikan Dan Ekonomi, 6(2), 194– 202
- Santi, S., Suryanti, H. H. S., & Prihastari, E. B. (2023). Efektivitas metode permainan berbantuan media kartu bergambar terhadap hasil belajar peserta didik kelas 1 materi penjumlahan dan pengurangan SD Negeri Gandekan Surakarta Tahun Ajaran 2022/2023. *Jurnal Pendidikan*

- Tambusai, 7(2), 18800–18806.
- Sari, H. R., & Yatri, I. (2023). Video animasi melalui aplikasi canva untuk meningkatkan hasil belajar bahasa indonesia siswa sekolah dasar. *Edukasiana: Jurnal Inovasi Pendidikan*, 2(3), 159–166.
- Sari, N. N. K., Maulida, Z. P., & Salmawati, A. (2024). Pentingnya bahasa inggris pada era globalisasi. *Karimah Tauhid*, *3*(3), 3685–3692.
- Sintia, I., Pasarella, M. D., & Nohe, D. A. (2022, May). Perbandingan tingkat konsistensi uji distribusi normalitas pada kasus tingkat pengangguran di Jawa. In *Prosiding Seminar Nasional Matematika dan Statistika* (Vol. 2).
- Sugiyono, P. D. (2019). Metode penelitian pendidikan (kuantitatif, kualitatif, kombinasi, R&D dan penelitian pendidikan). *Metode Penelitian Pendidikan*, 67.
- Sukarelawan, M. I., Indratno, T. K., & Ayu, S. M. (2024). N-gain vs stacking.
- Wahab, A., Junaedi, J., & Azhar, M. (2021). Efektivitas pembelajaran statistika pendidikan menggunakan uji peningkatan n-gain di PGMI. *Jurnal Basicedu*, *5*(2), 1039–1045.
- Wahyuni, S. (2023). Peningkatan hasil belajar membaca permulaan siswa kelas 1 SDN Temas 02 Batu melalui penerapan metode make a match berbantuan media kartu gambar. *Jurnal Pendidikan Taman Widya Humaniora*, 2(1), 329-353.
- Widyana, T., Zulfa, N., Pras, J., & Mukhlasin, A. (2024). Manajemen strategi untuk meningkatkan kualitas pendidikan. *Journal of International Multidisciplinary Research*, 2(1), 79-83.
- Yasa, I. G. S., & Sudirman, I. N. (2023). Penerapan media flash card dalam meningkatkan kosa kata bahasa inggris anak Desa Selat Peken Tahun 2023. *Innovative: Journal Of Social Science Research*, 3(6), 4122-4137.
- Yulianti, D., & Minsih, M. (2022). Pengembangan media pembelajaran kartu pak alam berbasis game edukatif IPS di Sekolah Dasar. *Jurnal Basicedu*, 6(3), 5086–5096.

# Ike Kurniawati & Arif Widagdo

Developing animation videos and game cards for teaching telling time in english to fourth-grade students