



Development of Animation-Based Media Incorporating Local Wisdom to Enhance Reading Fluency Among Primary School Students

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ABSTRACT

This developmental study aims to design and produce animation-based instructional media grounded in local wisdom to support reading fluency among elementary school students. The research employed the Design and Development (D&D) methodology, specifically utilizing the R&D Type 2 Product and Tools Research development model. Data were collected through various instruments, including documentation, expert validation sheets, user response questionnaires and interviews, as well as reading fluency test items for students. The resulting media product is an animated video designed to enhance students' reading fluency, integrating narrative texts, illustrated and character images, audio, video elements, and infographics. Based on the aggregated assessments from media and language experts across various evaluation aspects, the animation media achieved a final validation score of 90.52%, indicating that it is "highly feasible" for use in elementary reading instruction. Furthermore, the user response analysis—comprising feedback from both teachers and students—yielded a score of 93.52%, reinforcing the conclusion that the developed media is "highly feasible" for enhancing reading fluency in primary education settings.

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1. INTRODUCTION

Education has the most basic goal of forming humans into whole persons. Education can humanize humans. Education aims to cultivate students who can acquire and explore knowledge extensively. Within this educational framework, students require solid foundational knowledge and fundamental skills to facilitate their ongoing academic development. To prevent learning challenges among students, it is essential to equip them with proficient reading skills that can enhance their overall skill set.

Reading is to help students get broader information. In accordance with Anderson's opinion (Ulfa et al., 2021), suggests that the main purpose of reading is to seek and obtain information, cover the content and be able to understand the meaning of reading. Meanwhile, according to Tarigan (Hilda Hadian et al., 2018) reading is a basic skill that every human being must have. Reading is a process for obtaining information, expanding knowledge, and the key for individuals to have an efficient life and cultural-cognitive skills that most people do every day (Basam & Sulfasyah, 2018; An, 2013; Chotitham & Wongwanich, 2014; Wallot, 2016). Proficiency in reading necessitates strong speaking, listening, and visual skills, along with environmental, emotional, and cognitive factors. Reading can improve brain function, expand knowledge, and boost memory retention for students. Therefore, reading skills are very important skills in the field of education. Within the educational domain, reading skills are the basis of education.

Reading ability also aids in extracting information from written texts. One of the four language skills (listening, speaking, reading, and writing) that is most important for everyone to learn and master is reading. This is due to the fact that reading provides opportunities to have fun, expand knowledge, and discover the messages contained in the text (Basam & Sulfasyah, 2018).

This skill has two primary functions in school: as a medium of language and as a medium of knowledge. Learning To Read is the initial function oriented towards low-grade elementary school students. Children undergo rapid changes in terms of cognitive, physical, and motoric. During this period, children need to be introduced to various concepts, including language. Language is utilized for everyday communication among individuals. If students do not grasp these fundamental skills effectively, students will encounter communication challenges. Teachers should minimize these difficulties to ensure smooth learning.

During the learning process, students will experience phases where they can learn smoothly, sometimes not, and can understand what is learned quickly, but will also experience difficulties. When students cannot read, they will not be able to follow the learning material delivered by the teacher and complete the learning that the teacher provides. Students who have difficulty in learning usually have different backgrounds, and some of them can only read in one paragraph, usually occurring in students in grades I, II, and III mostly have difficulty reading (Rafika et al., 2020). The theory of reading fluency developed by Laberge & Samuel. If someone tries to interpret a reading content fluently, it is necessary to have a good reading ability so that the intent and purpose of what is read will be clear. Many things happen in the field regarding students' reading problems in elementary schools.

Observations reveal students who lack fluency in reading. This is evident when students read with hesitations. In addition, students, when reading one word take too long so that sometimes they are left behind by other student readers. Mistakes in reading such as the letter b becomes d, for example word *duku* becomes a *buku* (book), when learning to read

sometimes smoothly, sometimes not, sometimes they can quickly grasp what is learned, and sometimes it is difficult to grasp what is learned. Sometimes the enthusiasm is high, but sometimes it is difficult to stay focused, with the fact that every student has learning activities in their daily lives. To ensure that students' learning achievement will be affected by such problems, it is very important to pay special attention and create reading strategies that are easy for students to understand.

These student issues are supported by prior research. A challenge encountered by low-grade students, particularly those in grade I, is the presence of students requiring assistance to improve their reading fluency. Furthermore, there lacks a suitable learning tool for students struggling with fluent reading (Pratama & Hardini, 2022). (Masmuah, 2019) argued that most grade II students could not read fluently when they entered grade II. These factors come from the students themselves, such as intelligence, interest, and learning methods, as well as factors from outside the students, such as the students' environment, learning facilities, and learning methods. According to (Sawiyah, 2019), fluent reading problems include the use of inappropriate methods, the use of unattractive teaching aids, and lack of attention, lack of attention from parents, and lack of practice by students. Students' difficulties in reading fluently are due to the fact that there are still many words that students have not recognized and the lack of use of teaching aids for reading learning (Mayana, 2015). There are a number of problems that students face in reading, with some grades being below the average grade (Pramesti, 2018). This is attributed to the fact that some students are still slow in reading and have difficulty in reading.

Researchers will tell children about animated media with regard to this issue. The use of learning tools or media in the learning process can also affect students' interest and desire to learn and can even have an impact on student motivation (Dewi & Handayani, 2021). This animated media is suitable for elementary school students in lower grades, capturing their attention to facilitate a swift and effective reading learning process. Additionally, this animation medium can capture students' attention through the presentation of engaging visuals and text, aiding their focus on learning. Through this animation medium, students can also comprehend the swift advancements in technology.

Media can provide messages to students or connect teachers with students. Animation is synonymous with images, but can be created through media such as photographs or objects (Sukiyasa & Sukoco, 2013; Nurjanah et al., 2018). Animated media can explain something complicated or complex in a way that can be explained only with pictures and words. In this way, animation can be used to explain material that cannot actually be seen by the eye but can be described through visualization. Students are interested in various forms of animation because animated media has many bright colors and various animated characters.

Aligned with the aforementioned description, this study aims to create animation media. Distinguishing itself from other research, this study introduces the incorporation of local wisdom as an innovative aspect to be explored. This animated media offers numerous benefits, including enabling educators to elucidate intricate processes, integrating audio and visual components, and demanding creativity and proficiency to craft animations for educational purposes, captivating students and fostering their eagerness to learn.

2. METHODS

The purpose of this research is to produce local wisdom-based animation media, in line with these objectives, the method chosen is the Design and Development method. Design

and Development (D&D) or also called design and development is a systematic study of the design, development and evaluation of processes that have the aim of building an empirical basis for creating instructional and non-instructional products and tools as well as new models or new improved models (Richey & Klein, 2014). In this Design and Development (D&D) research is a study consisting of the design stage, the development stage, and the evaluation of learning media through product validity testing. D&D is used to study a process of design, development and evaluation with the aim of forming an empirical basis for creating good products and tools in learning and non-learning activities. The steps of the D&D research design used are in **Figure 1** Below.

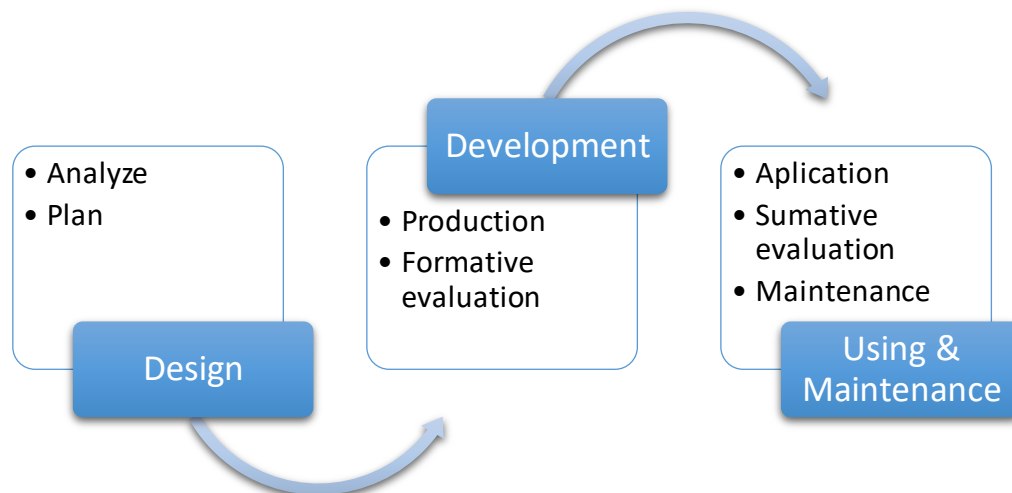


Figure 1. The Steps of the D&D Research Design

This D&D research is included in product design and development research. Because in its implementation, this research focuses on designing and developing a product. The first step is to make a product design, then the product development stage, and finally the use and maintenance stage of the product that has been developed. Based on these objectives, the research method chosen was D&D type 2 Product and Tools Research. The following is **Table 1** of D&D type 2 Product and Tools Research according to Richey & Klein (2007).

Table 1. D&D Type 2 Product and Tools Research by Richey & Klein

<i>Type of Research</i>	<i>Project Emphasis</i>	<i>Type of Participant</i>
<i>Product & Tool Research</i>	<i>Tool Development & Use</i>	<i>Designers, Developers, Clients, Evaluators, Users</i>

This model is frequently employed to examine the design, development, utilization, and maintenance processes. The aim of utilizing this model is to establish an empirical foundation for developing products and tools in learning and non-learning contexts, and to enhance or create models that guide their development. Certain D&D research incorporates creative activities to discover practical solutions to issues. Developing digital-based products and tools to enhance student learning outcomes serves as a solution.

Based on the second type of D&D chosen, the participants in this research are designers & developers, clients, evaluators, users. The complete research participants are described as follows:

- a. Designers act to design local wisdom-based animation video products.

- b. Development is carried out by creating and producing products in the form of local wisdom-based videos about the origin story of the horse stone and the introduction of puppets with the character of Cepot.
- c. The client of this research participant is an elementary school teacher who is a teacher of students in one of the schools in Rancaekek.
- d. The evaluators in this study consisted of 2, namely language evaluators and media evaluators consisting of lecturers with backgrounds that have expertise in the field of language and the field of media, in this case linguists and media experts will assess the suitability of language and media in accordance with the development of Phase A classes.
- e. The users of this research are 13 Phase A students from one of the schools in Rancaekek as field test subjects who will use the animation media that has been made.

The instrument in this study was used to see how much success the animated video could smooth students' reading. Research instruments are tools selected and used by researchers when collecting data to make the process easier and more systematic (Arikunto in Ridwan, 2017). This research is to develop local wisdom-based animated media for reading fluency of grade 1 elementary school students, the instruments to be used are documentation, expert validation assessment sheets, user response questionnaires and interviews, and student reading fluency ability test questions. Data obtained from designers using documentation of teacher and student needs, data obtained from developers, namely documentation of the process in developing product manufacturing; data obtained from clients using questionnaires and reading fluency test questions; data obtained from evaluators using media and language assessment sheets, and data obtained from users using interview guidelines and teacher response questionnaires.

3. RESULTS AND DISCUSSION

3.1. Temperature

The collection and creation of media in local wisdom-based animated videos made is for learning tools in the form of videos for student reading fluency that can be controlled digitally and consists of various media or technology components that are assembled into a useful unit. It is anticipated that incorporating various media into the learning process will be very interesting for students. Currently illustrations, character images, audio, video are being collected and created according to the concept and design that has been created. Here is an additional explanation on the subject of media design.

1. Story Text

Stories are systematically organized in accordance with relevant children's language so that they are easy to understand and easy for children to read. Stories are raised from local wisdom from the area around where students live. References to local wisdom stories are taken from people around the Batu Kuda area and cultural experts.

2. Illustration Picture

Illustrations are visual images or images used to describe or represent a concept, idea, or story. Illustrations are often used in children's books, graphic novels, magazines, advertisements, postcards, and other media to help clarify or embellish existing text or stories. The illustrations can be seen in **Tables 2, 3, 4, and 5**.

Table 2. Illustrations Found in MAKUTA


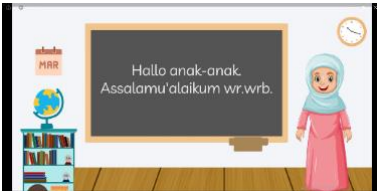


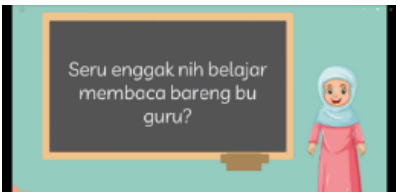



No.	Image	Description	Source
1.		Scene 1: Blue background, whiteboard, teacher character UPI logo, campus identity	Canva
2.		Scene 2: White background, whiteboard, calendar, bookshelf, books, globe, and teacher character	Canva
3.		Scene 3: Blue background, blackboard, calendar, bookshelf, books, globe, and teacher character	Canva
4.		Scene 4-13: Blue background, blackboard, calendar, bookshelf, books, globe, and teacher character	Canva
5.		Scene 14: Blue background, blackboard, teacher character	Canva
6.		Scene 15: School building, red and white flag and pole, 3 students.	Canva

Table 3. Illustrations Found in The Story of the Origin of Rancaekek

No.	Image	Description	Source
1.		Scene 1: The image is in nature there is a tree that has a door to enter the next scene, lights, fence	Canva
2.		Scene 2: The picture is inside the tree house, (pictures of watermelon, mango, bicycle, door, window to appear), additional pictures of books, shelves, table	Canva




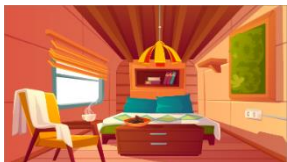

3.		Scene 3: The picture is in nature there are pagers, grass, trees, mountains	Canva
4.		Scene 4: Medium images in nature are trees, rivers, rocks, mountains, grass (images of swamps and ospreys appear in the middle of the video scene)	Freepik
5.		Scene 5: The image is in nature there is a tree that has a door to enter the next scene, a lamp, a fence	Canva

Table 4. Illustrations Found in the Story of “Hari Libur Si Cepot”

No.	Image	Description	Source
1.		Scene 1: The picture is hilly, a house, a tree, clouds and a clear sky	Canva
2.		Scene 2: The picture is in the room there is a clock dingding, mattress, pillow, window, cupboard, book, room decoration	Canva
3.		Scene 3: Clear morning, blue sky, green trees, garden.	Freepik
4.		Scene 4: In the garden, salted pole game, 6 children (3 guards 3 players)	Freepik
5.		Scene 5: Under a shady tree, 6 children are gathered under a tree.	Freepik
6.		Scene 6: Trees, mosques, mountains, clouds, blue sky.	Freepik
7.		Scene 7: The picture is in the room there is a wall clock, mattress, pillow, window, cupboard, book, room decoration	Freepik










8.		Scene 8: The picture is hilly, a house, a tree, clouds and a clear sky	Freepik
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Table 5. Illustrations Found in the Origin Story of “Batu Kuda”

No.	Image	Description	Source
1.		Scene 1: Images of mountains, trees, grass, rocks, fences, roads, horse head-shaped rocks,	Canva
2.		Scene 2: Closer the image from scene 1, to the images of the fence, horse-head-shaped rock, mountain, rock, grass	Canva
3.		Scene 3: The outer courtyard of the palace	Freepik
4.		Scene 4: Map of Indonesia	Freepik
5.		Scene 5: Mountain ravine illustration	Freepik
6.		Scene 6: Where the horse fell into the mud	Canva
7.		Scene 7: Half a horse's body, mud on the mountainside	Canva
8.		Scene 8: Closer the image from scene 1, to the images of the fence, horse-head-shaped rock, mountain, rock, grass	Canva

3. Character Picture

Character images in local wisdom-based animation videos have several characters used. The character is a character set downloaded from Freepik so that its use does not require changes so it only breaks the character into several parts so that it can be moved in Adobe After Effect. The illustrations can be seen in **Table 6**.

Table 6. Character Images

No.	Character	Character Drawings
1	Teacher	
2	Cepot	
3	Ekek Bird	
4	Cepot's Friend	
5	King	
6	Queen	
7	Semprani Horse	

The results of the assessment from the media expert validator on local wisdom-based animated media for elementary school students' reading fluency received a final score of 92.5. Based on the score interpretation criteria, it can be said that the animation media gets a "Very Feasible" interpretation because it is in the range of 81–100. The final score obtained is inseparable from the suggestions and input to be used as a media revision which

needs improvement in the typography section of the media used. The conclusion from the assessment results is that local wisdom-based animated media for elementary school students' reading fluency is feasible to use in students' reading fluency needs improvement.

The results of the linguist validator's assessment of local wisdom-based animated media for elementary school students' reading fluency in language and linguistic aspects received a final score of 88.54. Based on the score interpretation criteria obtained, it can be said that the animation media is "Very Feasible" because it is in the range of 81-100. The final score obtained is inseparable from suggestions and input to be used as a revision of learning media, namely the need for consistency in the use of punctuation, the use of effective sentences and the use of sentences that are proportional to one another. The conclusion from the assessment results is that local wisdom-based animation media for elementary school students' reading fluency is feasible to use in the fluent reading process, but still needs improvement.

Based on the recapitulation of the overall assessment by all validators, namely media experts and linguists on each aspect of local wisdom-based animated media for fluent reading of elementary school students, the final recapitulation is 90.52%. With the recapitulation results, the animated media developed is "Very Feasible" to be used in the fluent reading process in elementary schools.

Based on the results of the overall recapitulation of user responses, namely teachers and students on each aspect of the local wisdom-based animated media for elementary school students' reading fluency, the final percentage is 93.52%, which means that the media is very feasible to use for reading fluency.

To test the effectiveness of the developed media, experimental research was conducted. Based on the experimental test results, the data analysis is as follows.

Table 7. Student Pre-test and Post-test T-test

		Independent Samples Test								
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Student Results	Equal variances assumed	.485	.497	-4.457	14	.001	-28.50000	6.39382	-42.21338	-14.78662
	Equal variances not assumed			-5.521	8.129	.001	-28.50000	5.16178	-40.37019	-16.62981

Based on the results of the data analysis above, the t value is -4.475 with a significance value (Sig. 2 tailed) of 0.01. **Table 7** shows the significance value of 0.001 < 0.05, it can be concluded that there is a difference between the students' pre-test and post-test results. This means that the local wisdom-based animated video media developed is proven to be effective in improving the fluent reading skills of elementary school students.

4. DISCUSSION

The research discussion is conducted to discuss research findings based on relevant research to answer research questions that have been compiled previously. The discussion of this research is as follows.

Design of Local Wisdom-based Animation Media for Students' Reading Fluency

The use of methods in designing local wisdom-based animated media for reading fluency is very influential on the design of the media to be developed. In the selection of media, of course, it is closely related to the method used. Here the teacher is needed ideas to do activities that are interesting for students. The teacher should understand the art of teaching basically to create a varied learning atmosphere (Abidin et al., 2017). Therefore, this animated media is designed in such a way as to create interactive learning activities for students. The use of interactive learning animation media can improve the quality of student learning and make learning more interesting for students in providing easy learning because of its interactive presentation. The animation media designed is tailored to the fluency needs of students, thus creating interesting activities for students.

1. Learning media that utilizes technology. The use of animated media as learning media was developed to improve students' reading fluency, because reading books at school tend to be boring and less varied. Animated media is still rarely used by teachers or on social media, which generally only displays letter or syllable material. Therefore, a local wisdom-based video was made as a new innovation to make students more interested and fluent in reading in a different learning atmosphere.
2. The story used in the development of animation media is a story based on regional local wisdom. The values of local wisdom for now have begun to fade. Affirmed by Turmuzi et al. (2022), the current globalization, Indonesian cultures began to become extinct. Children tend to be more familiar with foreign cultures through online games than traditional games. Through education, especially learning using animation media, students can recognize the origin of the region and the nation's cultural values. Local wisdom stories help preserve cultural identity and strengthen students' understanding of ethics and norms in their society. These activities are sought to increase the sense of local wisdom in the environment and can maintain the existence of local wisdom amid the current globalization (Shufa et al., 2018).
3. The design of animation media is done through several stages, starting from the preparation of Media Program Outline (GBPM) which contains local wisdom stories such as the origin of Rancaekek, Si Cepot's Holiday, and the origin of Batu Kuda. This story aims to introduce local culture to students. After the GBPM was completed, the next stage was the creation of a storyboard that describes the layout and content of each scene in the video in detail.
4. The process of making animation media is supported by several applications, such as Microsoft Word to create GBPM and storyboards, Canva and Freepik to find image references, and Adobe Illustrator to process and convert images into vectors. Animations were created with Adobe After Effects, then combined with sound using Adobe Premiere. The final video was uploaded to YouTube, and Edpuzzle was used to add interactive features such as questions and teacher comments in the learning video.

Results of Local Wisdom-Based Animation Media Design for Student Reading Fluency

At this stage, it is carried out when the analysis and design stages have been completed. At this stage, the design and preparation of this story is carried out through several Canva applications, Freepik, and other supporting applications with the following product specifications:

1. The story contained in the animation video is about the story of local wisdom of the surrounding area. The stories in the animated video in the Mari Kita Mengenal Kata (MAKUTA) section, namely "The Origin of Rancaekek", "The Holiday of Si Cepot", and "The Origin of Batu Kuda". The stories were chosen to train students' reading fluency as well as the introduction of regional local wisdom, especially West Java. Visualization of animated videos in the form of text, images, video, audio, simulation, animation and simple games with problems and phenomena in everyday life.
2. The number of videos made consists of 3 stories. The MAKUTA story about reviewing words is 3 minutes long and consists of 15 scenes. The story of the origin of Rancaekek is 6 minutes long consisting of 5 scenes and there are 90 syllables needed by students. Si Cepot's Holiday cheer is 6 minutes long consisting of 8 scenes and there are 150 syllables needed by students. The origin story of Batu Kuda is 6 minutes long consisting of 9 scenes and there are 200 syllables needed by students.
3. The font used is Arial Rounded Font size 24 pt for the title at the beginning of the video and Arial Rounded Font size 18 pt for the reading text that will be read by students. The size is used because it is proportional enough to be used in accordance with the video made by not being too big and not too small, so that the appearance presented is good.
4. The background color of the animation media uses a composition of soft and bright color gradations such as dark blue, light blue, green, white etc. which are adjusted to be comfortable.
5. The final format of this media is using youtube and edpuzzle applications to create interaction with students and can be used on laptops and phones.
6. The creation of animated videos is supported by various applications, such as Microsoft Word for storyboarding, Canva and Freepik for image reference, Adobe Illustrator for image processing, Adobe After Effects for animation, Dolby On for voice over, Adobe Premiere for sound and animation merging, YouTube for video publication, and Edpuzzle to add interactive features in learning.

Feasibility Test Results of Local Wisdom-Based Animation Media for Student Reading Fluency

The animation media that has been made is validated by two experts, namely media experts and linguists, and validated by 12 respondents to assess its feasibility. Material experts assessed the content and aspects, while media experts assessed the technical and graphic aspects. The assessment by media experts on technical and graphic aspects received a percentage of 92.5%. It can be concluded that the technical and graphical feasibility has an interpretation of "Very Feasible". This shows that the technical and graphic quality of the animated media developed is very good to support the reading fluency process of elementary school students. Furthermore, the aspects validated by linguists are linguistic aspects. The linguistic aspects assessed include straightforwardness, communicative, dialogical, compatibility with learner development, and conformity with language rules. The assessment by language experts on the linguistic aspect gets a percentage of 88.54%, it can be concluded that the feasibility of language has an interpretation of "Very Feasible". This

shows that the language used in this animation media is good, and in accordance with the provisions for the use of language in Phase A elementary school students.

Based on the recapitulation of the overall assessment by all validators, namely media experts and linguists on each aspect of local wisdom-based animated media for fluent reading of elementary school students, the final recapitulation is 90.52%. With the recapitulation results, the animated media developed is "Very Feasible" to be used in the fluent reading process in elementary schools. The feasibility of the animated video is in accordance with Afifah's research 2020. This research discusses the use of animated videos which results in research showing that the use of animated videos can increase student interest and motivation to learn. In addition, the opinion of (Furió et al., 2015) more than 520,000 educational applications are available for download in 2022 and the development of innovative and interactive technology applications has changed learning methods.

User Response to the Use of Animated Media Based on Local Wisdom for Student Reading Fluency

Teacher and student responses to the animated media were obtained through the implementation stage, which was carried out at SDIK Nur Alifa, Rancaekek, Bandung Regency with two stages: before (pre-test) and after improvement (post-test), each for three days. During the pre-test, the use of this local wisdom-based animation video was carried out on Tuesday, June 20, 2023, June 21, 2023, and June 22, 2023, while the implementation of the post-test, was carried out on Tuesday, July 18, 2023, Thursday, July 20, 2023, and Friday, July 21, 2023 to 4 Phase A elementary school students.

In the pre-test and post-test stages, students watched and read local wisdom-based animated videos, such as MAKUTA, the origin of Rancaekek, Si Cepot's Holiday, and the origin of Batu Kuda. Activities were conducted in groups, with students reading in turn and pronunciation recorded using the Edpuzzle application. Despite some technical difficulties and ambient disturbances, the learning went smoothly and students showed high enthusiasm for the animated media.

After the implementation, students filled out questionnaires to assess the animated media, the results of which showed that the media was very effective and suitable for students' reading fluency. The language, design and interactive features were considered interesting and easy to use. This media not only increases reading interest, but also helps teachers deliver materials in an innovative and fun way. Overall, the animated media developed was deemed feasible and successful in improving primary school students' fluent reading skills.

The purpose of fluent reading is to train how to read well and correctly in accordance with the rules of language. Based on reading fluency according to Eny et al. (in Masmuah, 2019) reading fluently is reading without stuttering, namely reading with correct intonation and pronunciation and paying attention to punctuation marks. With the development of this animated media, it is also able to develop innovative learning media that can be used by teachers. The functions of learning media include: helping to make it easier for students to learn, as well as making it easier for teachers to teach, providing a more real experience (Umar, 2014). As for improving the quality of fluent reading through the use of using animation media in accordance with showing that the use of interactive animation media can increase children's interest in reading (Damayanti & Yuanta, 2018).

The Impact of Local Wisdom-Based Animation Media on Students' Reading Fluency

The results of the impact of users of local wisdom-based animation media development for reading fluency of elementary school students, namely there is a difference, as evidenced by the results of the t test calculation showing a significant difference between the pre-test and post-test. The results of the t test show a significance value of $0.001 < 0.05$. Students who initially read stammering became more confident, able to pronounce correctly, and understand punctuation. This media also provides many positive impacts, such as interactive learning, interesting, flexible to use anywhere, cost-effective, and easily accessible via the web without the need for application installation. In accordance with the opinion The advantages of using tools or utilizing learning media in the teaching and learning process have an influence on the effectiveness of student learning, can also arouse desire and interest for students, and develop effective reading programs in students (Chauhan, 2017).

However, this media also has disadvantages, such as limited internet access in remote areas, lack of technology education for teachers and students, and possible errors when accessing videos online. Nevertheless, overall, this animation media is very useful in improving reading skills while introducing local culture to students.

5. CONCLUSION

The process of designing local wisdom-based animated media for elementary school students' reading fluency is designed using the Design and Development (D&D) type 2 Product and Tools Research method through several stages. The stages in the process of designing this animated media go through the stages of preparing a development schedule, determining the resources needed, determining the story, preparing a media program outline (GBPM), preparing storyboards, and preparing interactive video devices. Based on the results of the design of local wisdom-based animated media for elementary school students' reading fluency is an interactive video for students' reading fluency which is packaged through various media such as reading text, images, audio, and interactive videos that connect the application and students. This animated video can be used on a laptop or hone that is accessed using the internet. Based on the feasibility of local wisdom-based animation media for elementary school students' reading fluency, the results of the validation were obtained. The validation was carried out by media experts and linguists on each aspect of local wisdom-based for reading fluency of elementary school students who got the interpretation "Very Feasible" used for reading fluency of elementary school students. In addition, there are suggestions and input from expert validators which include improvements to punctuation, writing, navigation planes, text presentation, back sound songs supporting videos, stages of using animated videos, and implementation of using videos. Based on the results of the recapitulation of teacher and student responses through questionnaires and interviews of animation media users on each aspect of the use of animation media in elementary schools received a positive response in using animation media for reading fluency. Based on the impact of animated media that has been implemented, there are advantages and disadvantages in the development of local wisdom-based animated media for reading fluency of elementary school students. The advantages of animation media consisting of six advantages and disadvantages consist of 3 shortcomings of animation media.

6. REFERENCES

- Abidin, Y., Mulyati, T., & Hana Yunansah. (2017). *Pembelajaran Literasi*. Bumi Aksara.
- An, S. (2013). Schema theory in reading. *Theory and Practice in Language Studies*, 3(1), 130–134. <https://doi.org/10.4304/tpls.3.1.130-134>.
- Basam, F., & Sulfasyah. (2018). Metode pembelajaran multisensori Vakt sebagai upaya meningkatkan kemampuan membaca lancar siswa kelas i/. 1(1), 18–24.
- Chauhan, S. (2017). A meta-analysis of the impact of technology on learning effectiveness of elementary students. *Computers and Education*, 105, 14–30. <https://doi.org/10.1016/j.compedu.2016.11.005>.
- Chotitham, S., & Wongwanich, S. (2014). The reading attitude measurement for enhancing elementary school students' achievement. *Procedia - Social and Behavioral Sciences*, 116, 3213–3217. <https://doi.org/10.1016/j.sbspro.2014.01.737>.
- Damayanti, R., & Yuanta, F. (2018). Media animasi interaktif untuk meningkatkan minat baca anak. *Jurnal Autentik*, 2(1), 1–8.
- Dewi, F. F., & Handayani, S. L. (2021). Pengembangan media pembelajaran video animasi en-alter sources berbasis aplikasi powtoon materi sumber energi alternatif sekolah dasar. *Jurnal Basicedu*, 5(4), 2530–2540.
- Furió, D., Juan, M. C., Seguí, I., & Vivó, R. (2015). Mobile learning vs. traditional classroom lessons: A comparative study. *Journal of Computer Assisted Learning*, 31(3), 189–201. <https://doi.org/10.1111/jcal.12071>.
- Hilda Hadian, L., Mochamad Hadad, S., & Marlina, I. (2018). Penggunaan media big book untuk meningkatkan keterampilan membaca kalimat sederhana. *Didaktik : Jurnal Ilmiah PGSD STKIP Subang*, 4(2), 212–242. <https://doi.org/10.36989/didaktik.v4i2.73>.
- Masmuah. (2019). Peningkatan hasil belajar bahasa Indonesia sub pokok membaca lancar melalui metode struktur analisis sintesis (SAS) di Kelas II sekolah dasar. *Membaca*, 4(1), 17–26.
- Mayana. (2015). Peningkatan hasil belajar membaca lancar melalui penggunaan alat peraga kartu huruf dalam pelajaran bahasa indonesia pada siswa kelas I SDN 05 Nan Sabaris. *Jurnal Konseling Dan Pendidikan*, 3(November), 8–12.
- Nurjanah, S., Nurrohmah, E., & Zahro, I. F. (2018). Meningkatkan kemampuan keaksaraan awal anak usia dini melalui media animasi. *Ceria*, 1(1), 393–398.
- Pramesti, F. (2018). Analisis faktor-faktor penghambat membaca permulaan pada siswa kelas 1 SD. *Jurnal Ilmiah Sekolah Dasar*, 2(3), 283. <https://doi.org/10.23887/jisd.v2i3.16144>.
- Pratama, A. P., & Hardini, A. T. A. (2022). Pendidikan dan

- konseling. *Jurnal Pendidikan dan Konseling*, 4(6), 1707–1715.
- Rafika, N., Kartikasari, M., & Lestari, S. (2020). Analisis kesulitan membaca permulaan pada siswa sekolah dasar. *Prosiding Konferensi Ilmiah Dasar*, 2, 301–306. <https://doi.org/10.47353/bj.v2i1.50>.
- Richey, R. C., & Klein, J. D. (2014). *Design and development research: Methods, strategies, and issues*. Routledge.
- Ridwan, M. (2017). Profil kemampuan penalaran matematis siswa ditinjau dari gaya belajar. *KALAMATIKA Jurnal Pendidikan Matematika*, 2(2), 193. <https://doi.org/10.22236/kalamatika.vol2no2.2017pp193-206>.
- Sawiyah. (2019). Upaya meningkatkan kemampuan membaca lancar dengan menerapkan model pembelajaran cooperative learning tipe make a match siswa kelas III semester 2 SD Negeri 64/IV Kota Baru Jambi. *Jurnal Ilmiah Universitas Batanghari Jambi*, 19(2), 315. <https://doi.org/10.33087/jiubj.v19i2.650>.
- Shufa, F., Khusna, N., & Artikel, S. (2018). Pembelajaran berbasis kearifan lokal di sekolah dasar: sebuah kerangka konseptual. *Inopendas Jurnal Ilmiah Kependidikan*, 1(1), 48–53.
- Sukiyasa, K., & Sukoco. (2013). Pengaruh media animasi terhadap hasil belajar dan motivasi belajar siswa materi sistem kelistrikan otomotif. *Pendidikan Vokasi*, 3(1), 126–137.
- Turmuzi, M., Sudiarta, I. G. P., & Suharta, I. G. P. (2022). Systematic literature review: Etnomatematika kearifan lokal budaya Sasak. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 6(1), 397–413. <https://doi.org/10.31004/cendekia.v6i1.1183>.
- Ulfa, M., M. Daud, R., & Khasinah, S. (2021). Penggunaan media big book terhadap kelancaran membaca siswa pada tema diriku kelas I MIN 8 Aceh Besar. *Primary Education Journal (Pej)*, 5(1), 15–23. <https://doi.org/10.30631/pej.v5i1.35>.
- Umar. (2014). Peran dan fungsi media pembelajaran. *Jurnal Tarbiyiyah*, 11(1), 131–144.
- Wallot, S. (2016). Understanding reading as a form of language-use: A language game hypothesis. *New Ideas in Psychology*, 42, 21–28. <https://doi.org/10.1016/j.newideapsych.2015.07.006>.