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# Development of Multimedia Teaching Materials Through Multiliteration Based Videoscribe and Camtasia Studio Applications in Elementary Schools

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# ABSTRAK

Rendahnya kualitas pada setiap jenjang dan satuan pendidikan disebabkan karena kurangnya media pembelajaran yang membantu siswa dala belajar. Penelitian ini bertujuan untuk mengembangkan bahan ajar multimedia melalui aplikasi videoscribe dan camtasia studia berbasis multiliterasi pada siswa sekolah dasar dan mengetahui kelayakan serta respons siswa terhadap bahan ajar multimedia. Penelitian ini menggunakan metode penelitian R&D (Research and Development) dengan desain penelitian Borg and Gall yang telah dimodifikasi. Populasi dalam uji coba terbatas berjumlah 20 siswa. Teknik pengambilan sampel menggunakan teknik purposive sampling. Instrumen pengumpulan data dalam penelitian ini adalah lembar observasi, lembar angket, wawancara, dan dokumentasi. Hasil penelitian menunjukan validasi oleh ahli media mendapatkan 90,28% (sangat layak), Ahli Bahasa 99,17% (sangat layak), ahli materi 92,11% (sangat layak). Hasil dari angket respon siswa pada uji coba lapangan menunjukan 96,41% dengan kriteria sangat layak. Berdasarkan hasil tersebut, produk akhir yang berupa bahan ajar multimedia melalui aplikasi videoscribe dan camtasia studio berbasis multiliterasi pada siswa sekolah dasar yang dihasilkan sangat layak digunakan untuk kegiatan

belajar siswa kelas V SD. Implikasi penelitian ini memberikan fasilitas media pembelajaran berupa bahan ajar multimedia yang dapat menfasilitasi kebutuhan belajar siswa.

# ABSTRACT

The low quality at each level and education unit is caused by a lack of learning media that helps students learn. This study aims to develop multimedia teaching materials through the video scribe and Camtasia study applications based on multiliterate elementary school students and to determine the feasibility and responses of students to multimedia teaching materials. This study used the R&D (Research and Development) research method with a modified Borg and Gall research design. The population in the limited trial numbered 20 students. The sampling technique used the purposive sampling technique. The data collection instruments in this study were observation sheets, questionnaire sheets, interviews, and documentation. The results showed that validation by media experts got 90.28% (very feasible), language experts 99.17% (very feasible), material experts 92.11% (very feasible). The results of the student response questionnaire in the field trial showed 96.41% with very feasible criteria. Based on these results, the final product in the form of multimedia teaching materials through the multiliterate-based videoscribe and Camtasia studio applications for elementary school students is very suitable for use for learning activities of fifth-grade elementary school students. The implication of this research is to provide learning media facilities in the form of multimedia teaching materials that can facilitate student learning needs.

## 1. Introduction

The purpose of education is to grow the competence of every human being. Besides, fostering creative thinking skills is also an educational goal that essentially develops students to have noble, healthy, knowledgeable, independent, creative, and can choose and process information effectively and efficiently (Moma, 2017; Nada, Utaminingsih, & Ardianti, 2018). Education makes one go in a better

direction to make success in life (Renny, Sonbay, Yohana, 2019; Wuryandani, Sapriya, & Budimansyah, 2014). In realizing educational objectives, meaningful learning development is needed for students. Meaningful learning is influenced by several factors, namely students' interest and motivation in education and teacher readiness in preparing the learning process (Donas & Elhefni, 2016; Setyowati & Mawardi, 2018). Preparing creative and exciting learning for students is one of the challenges that every teacher must do. Many innovative learning models and media that teachers can use to support the learning process in the classroom. In this era of the industrial revolution, teachers are required to innovate using the right technology to support learning in the classroom so that learning objectives can be achieved to the maximum.

One of Indonesia's problems is the low quality at every level and unit of education, mainly primary and secondary education, including in universities. Also, many teachers are less using innovative technology-based media to support classroom learning (Pramana, Jampel, & Pudjawan, 2020; Wulandari, Sudatha, & Simamora, 2020). Teachers have difficulty creating the right learning media for students (Karisma, Margunayasa, & Prasasti, 2020; Siddiq, Sudarma, & Simamora, 2020). Various efforts have been made to improve the quality of national education through different training and management of teacher qualifications, curriculum improvement, procurement of books and teaching devices, improvement of other educational facilities and infrastructure, and improve management quality. Nevertheless, various indicators of academic quality have not shown a consistent improvement (Antoro, 2017). In addition, there are still many teachers who carry out Indonesian learning, science, and mathematics monotonously. They use learning time by discussing assignments and sometimes allow students to copy text or answer questions based on text. This learning process is done almost every day. Research conducted by (2019) and Rahmayani, Siswanto, & Arief Budiman (2019) stated that many teachers use conventional learning models learning. If this kind of learning is done continuously, then basic competencies and learning indicators will not be achieved to the maximum.

The ability to put together a sequence of learning activities, choose specific methods and media, and divide time into learning activities for a teacher will be the principal capital in systematically planning learning activities (Hamid, Darmadi, 2014; Utami & Hasanah, 2019). The learning delivered by the teacher should not only be relevant to the learning objectives of the subject concerned but must also be well mastered by the students being taught, and the learning activities should be exciting and varied (Bardi & Jailani, 2015; Donas & Elhefni, 2016). Related to the statement, Bahasa Indonesia, Science, and Mathematics are three subject matters that are considered boring in the content and the way they are delivered. So far, Indonesian Language, Science, and Mathematics subjects are still regarded as difficult to learn because most of the submissions are unpleasant, dull, etc. This assumption leads to a decreased interest in learning languages, conducting experiments, and counting.

One of the strategies to involve students' active role in learning Bahasa Indonesia, Science, and Mathematics is to use multimedia teaching materials that are interesting and following the student's environment. Research conducted by Suryanda, Ernawati, & Maulana (2016) and Kuswanto et al. (2017) stated that the development of multimedia learning could make students motivated and interested in learning to improve student learning outcomes. Research conducted by Satria, T. G., & Egok, (2020) also stated that mining multimedia learning could increase students' motivation in learning to improve cognitive skills in elementary school students. As it is known that the use of multimedia in learning today is a necessity. Students themselves have interacted with a touchscreen smartphone that can access all the information from the device they own. Nowadays, most of the uses of these devices to access less productive things include accessing social media, accessing online games, and other things. Therefore, the use of digital tools should be directed to productive things.

Multimedia can be interpreted as a combination of computer and video. This multimedia combines audio and visual aspects to readily be understood by students (Nazalin & Muhtadi, 2016; Pangaribuan & Saragih, 2014). A combination of at least two input or output media. These media can be audio (sound, music), animation, video, text, graphics, and images (Mayer, 2012; Sina, Farlina, Sukandar, & Kariadinata, 2019). Thus multimedia has elements consisting of text, images, sound, animation, and video. Multiliterative learning is implemented based on the optimization of language skills and media skills that can be done on a variety of learning content from various disciplines. Learning that optimizes multiliterate skills in realizing better learning situations. Multiliterative learning challenges students to learn and apply practical literacy that serves as a mediation tool to learn various concepts (Pangaribuan & Saragih, 2014; Susanti, 2019). Multilateral learning principles include: Utilization of different literacy as a means of knowledge development and triggering student activities; Learning prepares students to face the era of globalization; Learning trains the multiliterate skills and competencies of 21st-century students; and Learning involves a multilaterat environment. Based on a research by Yusnia (2019) video scribe

learning media can be applied well in literacy learning, starting from the planning stage, implementation, to assessment of learning outcomes according to the goals set.

Videoscribe is an app used to create videos with handwritten animations. There are many cool and unique animations in this app, so it will make students more like and entertained in teaching and learning activities. But not only that, this software can also be used as a means of promotion, presentation, online business, and other activities. This software will help us deliver a message because there is no need to present something old (Muskania, Badariah, & Mansur, 2019; Yusnia, 2019). Camtasia Studio is a software or application that serves to record video, sound even our face in displaying the course of the cursor or mouse or applications run by a computer screen and some video editing conversions. This software is by editing, capturing video from a computer screen, and can record our music or sound.

Based on this, teachers should take advantage of the situation by integrating learning into the multimedia usage system in teaching materials. Students can access and learn lesson materials anytime and anywhere, as a conventional learning amplifier in the classroom that has limited space and time. This research aims to develop multimedia teaching materials through video scribe applications and multiliterate-based studio Camtasia in elementary schools. It is expected that multimedia learning can help students in learning to improve student learning outcomes.

## 2. Method

The research method used was the research and development method or Research and Development (R & D), a research method used to produce a particular product and test its effectiveness (Sugiyono, 2012). This R&D research resulted in video scribe learning and video-based studio Camtasia.

The design of research and development that was conducted refers to the design of development according to Borg and Gall (1989) that has been modified by Sugiyono, which includes 6 steps, namely problem analysis, data collection, product design, design validation, design revision, and product testing. (1) Problem Analysis. The library study is conducted with unstructured interviews to analyze the school curriculum, namely Curriculum 2013 (Kurtilas / K13). Furthermore, field studies are conducted by observation. The goal is to analyze the material or theme that is the theme 2 sub-theme 1 learning 1 in the fifth grade. This theme requires engaging learning media to be more interactive so that learning objectives can be achieved. (2) Data Collection. The data is collected in the form of library studies ranging from curriculum analysis data, material analysis, and media analysis will be used. The study of this library is expected to be collected a variety of information to be used as material for product development. (3) Product design. At this stage, the storyboard is designed, and validation instruments will be used to validate the media. The media designed is still unknown feasibility. Therefore, researchers create a validation instrument used to validate the product made to know the feasibility of the product or media. (4) Validation. Before the developed product is tested, the validation stage (expert test) must first go through a pre-made instrument. The goal is to find out if the created media meets the criteria or not. Validation includes media expert validation, linguist validation, and material expert validation. (5) Product Revision. At this stage, revisions of validation results are carried out, and criticisms and suggestions from a validation expert team through the assessment instrument. It aims to correct the weaknesses and design of the products that have been made. The revision phase will be completed once the product is said to be viable and testable. (6) Product Trials. Research products that a team of experts has validated are then followed up by conducting limited

This limited trial population was grade V students at SDN Terondol Kota Serang and the sample used was 20 students. This sampling technique used the purposive sampling technique, which was a sampling technique with specific considerations by the purpose of sampling in the study. The data collection instruments in this study were observation sheets, questionnaires, interviews, and documentation. (1) Observation Sheet. The most important thing was the process of observation and memory. Therefore, the observation was done by observing and recording the activities of teachers and students during learning. (2) Ouestionnaire Sheet. Ouestionnaire sheets were created to get assessments and suggestions or feedback as the basis for revising products so that they could be used to determine product eligibility. Product quality measurement in the questionnaire used a score range of 1 to 5 on each given statement. In addition to the expert team questionnaire, there was a questionnaire of student responses to products guided by the Likert scale rules. (3) Interview. Interviews were used as a data collection technique if researchers wanted to conduct preliminary studies to find research problems. Researchers also wanted to know things from more in-depth respondents and a small number of responses or small. Interviews used were unstructured interviews, i.e., interviews that did not use systematically structured and complete interview guidelines for data collection. (4) Documentation. Documentation was carried out to strengthen the data obtained from observations, questionnaires, and interviews. Documentation was done to record and provide an overview of the activities carried out by researchers during the study. Also, documentation was done to prove that the research conducted was correct.

## 3. Result and Discussion

This development research aimed to produce multimedia teaching materials through video scribe applications and multiliterate-based studio Camtasia in elementary schools. This research was conducted in Class V-A of SDN Terondol and was conducted from January to February 2020. The research development of learning media was carried out based on the stages of development of Borg and Gall modified by Sugiyono. The development phase includes six steps: needs Analysis, data collection, product design, expert validation/testing, product revision, and product testing.

Needs Analysis, the initial stage of media development was to discuss with the theme 2 Clean Air For Health, sub-theme 1 How the Body Treats Clean Air, Learning 1. At this stage, a review was conducted through literature studies and field studies. 1) Literary Studies. A literature study was conducted to analyze the curriculum used concerning content standards. This stage was the first step in this research through interviews with the school. Standard content reviews were done by designing the syllabus.

Field Studies were conducted to determine the learning media performed in the school through observation and interviews. Based on the observations in class V A conducted over one month with random observation time showed that at the time of learning in class, teachers did not use learning media to support the delivery of materials. Teachers only used worksheets and teacher books and student books when studying and using whiteboards. During the lesson, he would explain by lecture and question and answer method. Then students worked on the questions in LKS. In addition to observations, researchers also conducted structured interviews and need's questionnaires with VA class teacher speakers. The results showed that he needed learning media. He explained some difficulties in learning, namely the lack of learning media. Regarding the media, he said he had used learning media that was in-focus electronic learning media. He also explained that learning media was important because learning media can stimulate students' curiosity. When the researcher asked about the media for literacy activities, he explained no need to use the media. Still, he suggested the selection of media that can stimulate students' curiosity.

Data Collection, at this stage, collecting data and collecting information and literature studies on multimedia video scribe and Camtasia studio and multiplication learning materials. The data collected in the form of research data for multimedia video scribe and Camtasia studio teaching materials and multiliterate learning, video scribe applications, and Camtasia studio to make multimedia teaching materials products. In addition, researchers also determined the tools to be used, looking for factual data sourced from the internet related to the learning media that was being developed. Once all the data was determined, proceed to the product design stage by adjusting the data obtained.

Product Design, initial product design stage, video scribe multimedia teaching material making, and Camtasia studio theme 2 were done by storyboarding. Storyboards were created using scripts in the form of fluted images with their design captions. The design of multimedia video scribe teaching materials and multiliterate-based learning studio Camtasia in the form of storyboards had been created. The next step was to create and design multimedia teaching materials for video scribe and Camtasia studio-based multiliterate learning using several applications and others. Raw materials so that multimedia teaching materials in the form of video clerks and Camtasia studios based on multiliterate learning become more exciting and appropriate storyboard. Here is an example screenshot of multimedia teaching materials can be seen on Picture 1, Picture 2, and Picture 3.



**Picture 1.** Indonesian Literacy





**Picture 2.** Science Literacy

Picture 3. Mathematic Literacy

Expert Validation Test, multimedia teaching materials for Scribe and Camtasia Studio videos, were created, so the next step was to perform validation or expert tests. At the validation stage of multimedia video scribe and Camtasia, studio materials were done based on the design of learning media development. This expert assessment included a team of media experts, a team of material experts, and a linguists team. This validation was obtained by filling the questionnaire by the validator. The results of the assessment were then calculated using the 5-scale assessment guidelines. The results of these calculations then analyzed using assessment scale guidelines that conclude the criteria are very feasible, feasible, quite feasible, not feasible.

Media Expert Validation, media expert validation, focused on assessing the video scribe teaching materials and Camtasia Studio consisting of aspects of visual communication, media engineering, content feasibility, and technical quality. Two media experts filled media experts who became validators in this study. The following was an assessment data analysis of design expert validation can be seen in Table 1.

Table 1. Results of Media Experts Validation

		S	ND (0/)	
No	The Assessment Aspect	Media Expert 1	Media Expert 2	NP (%) Total
1	Visual Communication	97	92	$\frac{189}{210} \times 100\% = 90\%$
2	Media Engineering	14	15	$\frac{29}{30} \times 100\% = 96,67\%$ $\frac{29}{30} \times 100\% = 96,67\%$ $\frac{45}{50} \times 100\% = 90\%$ $\frac{53}{60} \times 100\% = 88,33\%$
3	Content Feasibility	25	20	$\frac{45}{50}$ x 100% = 90%
4	<b>Technical Quality</b>	28	25	$\frac{53}{40}$ x 100% =88,33%
Tota	al	164	152	316
NP (	(%)	$\frac{164}{175}$ x 100% =	$\frac{152}{175} \times 100\% = 86,85$	90,28%
		93,71	2.004	_
\( \sum_{Average} \)		90,28%		
Fea	sibility Criteria	•	_	Very Feasible

Based on the assessment data table of media validation above, it appeared that the first media expert obtained 164 out of 35 statements with a percentage value of 93.71%. The second media expert obtained 152 out of 35 statements with a percentage value of 86.85%. This feasibility criterion was obtained by converting qualitative data in the form of statements into quantitative data in the form of figures from each aspect of feasibility, and the total amount into a feasibility conversion table reviewed from visual communication, media engineering, and content feasibility and technical quality. Based on media validation results, it could be concluded that the video scribe teaching materials and multiliterate learning-based studio Camtasia developed to get an average percentage of 90.28% with very worthy eligibility criteria.

Linguist validation, the validation of linguists was focused on assessing the language used in multimedia video scribe and Camtasia studio materials consisting of linguistic aspects. Two media experts filled the linguists who became validators in this study. The following was an assessment data analysis of design expert validation can be seen in Table 2.

No	The Assessment	Sco	NP (%)	
	Aspect	Linguist Expert	Linguist Expert	Total
1	Language	60	59	$\frac{119}{120} \times 100\% = 99,167\%$
Total		60	59	119
NP (	%)	$\frac{60}{60} \times 100\% =$	$\frac{59}{60} \times 100\% =$	99,17%
		100%	98,33%	
\( \sum_{Average} \)		99,17%		
Feas	sibility Criteria			Very Feasible

**Table 2.** Results of Linguist Experts Validation

The table of language validation assessment data above showed that the linguist I obtained a total of 60 out of 12 statements with a percentage value of 100%. Linguists II got the number of 59 statements from 12 statements with a percentage value of 98.33%. This eligibility criterion was obtained by converting qualitative data in the form of statements into quantitative data in figures from each aspect of eligibility and the total amount into the feasibility conversion table reviewed from the linguistic aspect. Based on language validation results, the video scribe teaching materials and Camtasia Studio-based multiliterate learning developed got an average percentage of 99.17% with eligibility criteria Very Worthy.

Material Expert Validation, This material expert validation was focused on assessing the material contained in Scribe and Camtasia Studio multimedia video teaching materials consisting of material aspects. Two material experts filled the material experts who became validators in this study. The following was an assessment data analysis of design expert validation can be seen in Table 3.

**Table 3.** Results of Material Experts Validation

No	The	S	NP (%)	
	Assessment	Material Expert 1	Material	Total
	Aspect		Expert 2	
1	Material	91	84	$\frac{175}{190} \times 100\% = 92,105\%$
Total		91	84	175
NP (%)		$\frac{91}{95} \times 100\% =$	$\frac{84}{95} \times 100\% = 88,42\%$	92,11%
		95,79		
\( \sum_{Avero} \)	ige	9	2,11	-
Feasibility Criteria				Very Feasible

The table of material validation assessment data above showed that the material expert I obtained as many as 91 out of 19 statements with a percentage value of 95.79%. Material experts II obtained the number of 84 out of 19 statements with a percentage value of 88.42%. This eligibility criterion was obtained by converting qualitative data in the form of statements into quantitative data in the form of figures from each aspect of feasibility and total amounts into the feasibility conversion table reviewed from the material aspect. Based on material validation results, the video scribe teaching materials and Camtasia studio-based multiliterate learning developed got an average percentage of 92.11% with Worthy's eligibility criteria.

Product Revision, the next stage was product revision. At this stage, the media products produced and validated by the expert team were then revised according to expert advice and advice during the validation test process. According to each expert's comments and suggestions during the validation test, this stage's follow-up was to revise video scribe and Camtasia Studio multimedia teaching materials according to each expert's comments and suggestions.

Media Expert Revision, the validation results of media experts, showed that the learning media developed fallen within the criteria "very feasible" to use, but still needed to be improved on the learning media based on media experts' comments and suggestions. Some comments and suggestions from media experts as well as improvements made can be seen in Table 4.

Table 4. Comments and Suggestions of Media Expert

Media Expert	Comments and Suggestions		
Respondent 1	Feasible to use		
Respondent 2	1. The sound of music is adjusted to the age of elementary school children 2. Size and font is adjustable		

The revised results of media experts obtained comments and suggestions from media experts 2, who said that music's sound was adjusted to the age of elementary school children, and the size and typeface were adjusted. Therefore, the researchers revised the accompaniment music's sound according to the age of the elementary school child. The second comment and suggestion were that the size and typeface customized. The researchers' follow-up was to increase the font size and enlarge it so that it could be read clearly and choose an easy-to-read typeface on the multimedia display so that the display's delivery of information was more optimal. Other than voiceover explanations.

Linguist revision, the results of the validation of linguists showed that the learning media developed was included in the criteria "very feasible" to use, but still needed to be improved on the language used in the learning media comments suggestions given by linguists. Comments and suggestions from linguists and improvements made could be seen in Table 5.

**Table 5.** Comments and Suggestions of Linguist

Media Expert	Comments and Suggestions	
Respondent 1	Feasible to use	
Respondent 2	Attention to the use of capital letters	

The result of linguists' revision got comments and suggestions from linguists 2 to pay attention to capital letters. Therefore, researchers correct things that need to use capital letters based on the applicable spelling guidelines.

Revision of Material Experts. The results of the validation of material experts indicate that the learning media developed falls within the criteria "Very Suitable" for use but still needed to be improved on the content of the material used, based on comments and suggestions given by the material expert. Some comments and suggestions from material experts and improvements made could be seen in Table 6.

**Table 6.** Comments and Suggestions of Material Expert

Media Expert	Expert Comments and Suggestions	
Respondent 1	Feasible to use	
Respondent 2	<ol> <li>Adding indicators for achieving scientific literacy competencies</li> <li>Clarify the material to the power of three</li> <li>Some questions have not measured HOTS</li> </ol>	

The revision of material experts' results obtained comments and suggestions from material experts 2, who said that the addition of indicators of achievement of science literacy competencies, clarification of materials to rank 3, and some questions had not measured HOTS. Therefore, researchers added indicators of the triumph of science literacy competencies. The second comment and suggestion were to clarify the third rank material. The researcher's follow-up was to provide examples of material-related questions in the third rank. The third comment and suggestion was a matter of not yet measuring HOTS. The follow-up conducted was to sum the questions characterized by HOTS, such as questions that used the question word why and how.

Product Trials, the video scribe teaching materials, and multiliterate-based learning studio Camtasia validated and revised based on each validation expert's comments and suggestions were then conducted limited trials. This little trial was conducted to measure students' responses to multimedia

teaching materials, video scribes, and multiliterate learning-based studio Camtasia. This limited trial was conducted on a small or limited scale shown against 20 grade V-A students at SDN Terondol. In the limited trial, students were given a student response questionnaire consisting of three aspects. This was done to determine students' responses and assessments. Furthermore, after this limited trial will be produced the final product in the form of multimedia teaching materials, video scribes, and Camtasia studio multiliterate-based learning for grade V students of SDN Terondol on theme 2 clean air for health subtheme 1 how to take care of the body, clean air, learning 1. The results of the Analysis of student response data of researchers can be seen in Table 7.

**Table 7.** Results of Student Response Data Analysis

Students -	Aspects			Score Total
Students -	Display	Interesting	Benefits	
Score Total	272	230	77	579
Final Score	97.14%	95.83%	96.25%	96.41%

The data table of student responses above to multimedia teaching materials, video scribes, and Camtasia studio multiliterate-based learning obtained an average score of 96.41%. Based on the research results, it could be concluded that multimedia teaching materials developed are worth applying in the learning process. This is due to several factors, namely the following.

First, multimedia teaching materials developed were worth applying because it increased students' interest in learning. Multimedia video scribe teaching materials and multiliterate-based studio Camtasia were designed to have several components: images, audio, video, and animation, which is an exciting medium to support multiliterate learning. It was under the explanation (Purbasari, Kahfi, & Yunus, 2013) which stated that the characteristics of media in multiliterate learning, among others, 1) multi-form, multi-creative and multifunctional. 2) rich in nature, i.e., reflecting all the authentic literacy media that exist in everyday life; 3) child friendly, according to the authentic experience of the child and following the characteristics of other children; 4) elaborative and; 5) comprehensive, i.e., this media discusses various scientific fields or cultural contexts. These components can increase students' interest in learning. Research conducted by Sofyan, Rustono, & Hamdu (2016) stated that multimedia could stimulate students in learning because students are interested in learning media that presents learning materials with audio and visual. Research conducted by Kariadnyani, Suartama, & Sumantri (2016) stated that multimedia could increase students' interest in learning to impact students' improved learning outcomes.

Second, multimedia teaching materials developed were worth applying because it facilitates students in learning. The multimedia teaching materials, video scribes, and multiliterate-based studio Camtasia sets the students as the *center of learning* (Manurung & Panggabean, 2020; Riyanto & Gunarhadi, 2017). It was in line with the research of Masyithah, Muchtar, & Mahmud (2015), which explained that the application of multimedia Camtasia studio was a patterned media that provided direct learning to students because they do it themselves and also pay attention to animations that describe the actual events. By using this app, the learning process puts students at the center of the activity. Students learned about something and actively discovered, performed, paid attention, observed, and experienced a learning activity. They were making it easier for students to understand learning materials. In the learning process, students used all their abilities and environment. Teachers only acted as motivators and facilitators in developing students' creativity without uniformity or compulsion to follow the teacher's understanding. Students were given free space to realize their potential and display their characteristics.

Third, multimedia teaching materials developed were worth applying because it coud improve the competence of students. Multifunctional video scribe teaching materials and multiliterate-based studio Camtasia were also under Gardner's theory (Sukitman, 2016) which showed that every child has many different ways to be smart. Each child has eight bits of intelligence (multiple intelligence) with different levels, namely: spatial (thinking in pictures and images), linguistic (thinking in words), interpersonal (thinking through communication with others), music (thinking in rhythm), and melody), naturalist (thinking through sensations and physical movements), intrapersonal (self-reflective thinking), logical-mathematical (thinking with reason) and existential (sensitivity and ability to answer the most profound problems of human existence or existence). Learning that optimized multiliterative skills in realizing better learning situations. Multiliterative learning challenges students to learn and apply practical literacy that serves as a mediation tool to learn various concepts (Pangaribuan & Saragih, 2014; Susanti, 2019).

Research conducted by Kariadnyani et al. (2016) showed that multimedia learning could improve students' learning outcomes. A study conducted by Manurung & Panggabean (2020) stated that multimedia learning could improve students' thinking skills in problem-solving. Research conducted by Sugianto (2014) also showed that multimedia learning could improve the mastery of science concepts and literacy in students. It could be concluded that multimedia learning increased students' interest and motivation in learning so that it will have an impact on students' improved learning outcomes. The implications of this research provided learning media facilities in the form of multimedia teaching materials that could facilitate students' learning needs so that students were facilitated in learning. In this case, it would improve the competence of students' knowledge.

## 4. Conclusion

Multimedia video scribe and multiliterate-based studio Camtasia were conducted through development research (R&D) method with stages from Borg and Gall. The results showed that validation by media experts, by linguists, by material experts included in the criteria was very feasible. The result of the students' response questionnaire on field trials showed very worthy measures. It can be concluded that video scribe and Camtasia studio multiliterate-based *learning* was very suitable for use in grade V elementary school students' learning activities and can be an alternative learning medium that could be used in multiliterate learning.

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