Use of the Camtasia Application for Audio Visual Media in Learning Mathematics in Elementary Schools

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Abstract— This study aims to produce learning media in the form of videos and can determine the feasibility and practicality of using Camtasia studio application-based media for elementary school flat-build mathematics learning. This study uses Research and Development development research with the ADDIE model 1. Analysis, two. Design, 3. Development, 4. Implementation, 5. Evaluation. This research process has five steps: the first step of the analysis, the second design, the third development, the fourth stage of implementation, and the final stage of Evaluation. Research activities show the results of the feasibility of the material in the development of Camtasia application-based videos for elementary school mathematics are categorized as very feasible to use. It is classified as very suitable for use based on the media feasibility test that has been carried out. It is effectively used in learning to foster student interest and motivation to use video media based on the Camtasia application. The results of student responses on the net based on the questionnaire showed a figure of 93.75\%, with a significant increase from the evaluation stage. The student's score reached an average of 85.2 from a minimum of 65.

Keywords— Audio Visual, Elementary Schools, Learning Mathematics


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I. INTRODUCTION

Education is the front line for the progress of a country; without a good education program, the future development of the country will only be a discovery (Qureshi et al., 2022); even the father of Vietnam made a statement as an essential reference for the importance of education, namely: There are no teachers without education, without education, without academic and social development. This statement explains that without education, there is no economic and social development (Hamdani, 20201). Education is an activity that is carried out deliberately and planned to create a learning process with a learning atmosphere in order to be able to increase the potential of students and to
improve their spiritual, religious, noble character, and intelligence for their needs of themselves, society and the nation. (Afandi, 2011). Education is a process that prepares humans to survive in their environment (life skills). (Utami & Cahyono, 2020).

Based on the explanation above, we conclude that education is a form of activity carried out intentionally to educate the nation's children. Education is teaching and research from time to time or research for learning a set of people's knowledge, skills, and habits.

The COVID-19 pandemic is a tragedy that has befallen the entire population of the earth. Corona Virus 2019 (COVID-19) is a disease that has never been identified (Dewi, 2020). In every field of human life on this earth, there is chaos, including education. Governments in several countries have decided to close all community activities that can cause crowds, including education. The policy of stopping community activities or quarantine is done to prevent crowds that allow the spread of the coronavirus (Anugrahana, 2020). The crisis came suddenly; the governments in the world and Indonesia had to take policies to close schools on a large scale to reduce contact with people and save lives or even close schools to help keep workers safe for sustainable economic continuity. Therefore, to continue learning, the government decides whether all learning should be done online or online. (Leman & Lubis, 2021). Distance or online learning will begin in Indonesia on March 16 2020, where learning activities will be carried out online, and students will learn from their homes. Talking about online learning, the importance of mastering technology for a teacher to maintain effective online learning during the current pandemic (Yunitasari & Hanifah, 2020).

The technological progress that we are currently experiencing, which requires us to increase our ability to utilize the technological media of life in today's digital era (Gabriela et al., 2022), will feel left out if we cannot keep up with technological developments. In using technology, we must be wise because technology has positive and negative impacts; an example of a positive impact is education. For example, when this technology is used to produce learning media to support fun and practical learning. (Hadi, 2017). A technology for creating video media in learning, Camtasia Studio is an application used to capture and record screens to create interactive menus and percentage media produced. Camtasia is used to record all activities on the computer desktop. The software used as learning media is in the form of video/multimedia making learning videos.

Media is a technology that conveys a message that can be used for learning. Media is a tool for the learning process (Fitria, 2018). The use of media in general, namely: so that messages are not too verbal to be clarified by using media, to reduce the use of space, effort and time, arousing enthusiasm for learning, direct communication between students and learning resources, children will be able to learn independently according to their talents and abilities of speech and hearing they. Kinesthetic (Simbolon et al., 2019) Audiovisual learning media is a medium that allows students to receive learning using the senses of sight and hearing and makes it easier for students and teachers to achieve learning goals (Simbolon et al., 2019). Audiovisual media is information media that is audio (sound) and visual (images) (Oky et al., 2015). Learning media is a form component that contributes to implementing the learning process at the academic unit level (Yulia et al., 2021).

Learning media is a learning media as the achievement of the goals of the learning itself (Kartel et al., 2022). Learning media is a tool to convey messages used for learning activities, to convey learning material—print media, and hardware eavesdropping.

Learning innovations are increasingly diverse following the development of science and technology so that they can be utilized in the learning process (Otoluwa et al., 2019). The purpose of using learning media is to produce fun learning and generate student learning motivation. Several studies show that students will be more enthusiastic about learning using video media than in text or book form. Also, students will be able to understand learning easily using visual media. Therefore, many teachers use media such as video media. (Batubar & Ariani, 2016). Video is learning needed as teaching material and a means of delivering interesting material to students. Video is a technology that positively influences human progress and culture. Events or material matters can be conveyed engagingly, fast and broadly using video content. The video has several elements, including audio (sound) and visual (images) (Keshav et al., 2022), with the concept and purpose of entertaining and providing knowledge and
information. Audio visual media is a media that can predict moving images and has sound. Forming a character is the same as having a unit between picture and sound. Some of the tools included in the original object tools in audiovisual media are television shows, sound, video, slides, and films (Sulistya, 2018).

From some of the points above, we can conclude that audiovisual media is a collection of tools that can sound and move in, creating a unique image when people look at it to attract that person's attention.

Mathematics is a complex subject that is taught at every level of education. Mathematics is an important thing to learn (Dewi S et al., 2022); students are expected not only to understand but to understand what they learn while studying mathematics; participants must remember not only formulas but more about using mathematics for themselves. The usefulness of learning mathematics The process is indicated by what students do and what students understand and do not understand (Agustiana et al., 2018). Mathematics is a scientific discipline that studies abstract systems formed from abstract elements, and these abstract elements cannot be described in action or a concrete pattern. (Annur & Hermansyah, 2020). Mathematics is a scientific discipline that studies abstract systems formed from abstract elements, and these abstract elements cannot be described in action or a concrete pattern. (Widyastuti, 2015). So that when the process of learning mathematics using the lecture method is less exciting and makes students bored, learning becomes more passive (Sumiyatni et al., 2018). So that when the process of learning mathematics using the lecture method will be less exciting and make students bored so that learning becomes more passive (Supriadi, 2015).

Several educational programs are consciously planned, directed and implemented efficiently through proper instruction to achieve educational goals. At the elementary school level, students must be able to understand all subjects, including learning mathematics. Mathematics is taught at all levels of education, from elementary school to university. Mathematics is a natural mental pleasure for all students; some students consider mathematics a subject that is said to be complicated, even though mathematics is a basic science from elementary school to high school. (Rahmayani, 2011). When learning mathematics, it is not uncommon for students to experience difficulties. These difficulties include understanding, applying, and calculating to solve math problems (Yusmin, 2017).

During the coronavirus pandemic (Covid19), which has hit so hard that the use of information technology with various innovations in learning is increasingly widespread, innovation in learning takes many forms. So that mathematics learning runs smoothly and students can continue to excel well, and students can continue to learn in all conditions. Several examples of learning innovations include using Google Classroom, E-learning, social media, YouTube channels, and others. However, several things must be considered from using this technology: the content must be in accordance with the substance of learning. Where in teaching content, content must be interactive so that learning can take place properly, for example, in making video content as multimedia material in learning. (Saifudin & Mubaroq, 2021). The concept that is packaged must be intriguing so that students will pay attention to the learning material that is broadcast (Indiarti & Arcana, 2019).

In modern times, technological advances and scientific developments are constantly accelerating from time to time. Therefore, technological advances also compete in the world of education. Undoubtedly, interactive media innovations can significantly impact education because they can integrate text, graphics, animation, audio and images and develop a more dynamic learning process. Utilizing multimedia technology is no longer difficult because now, all levels of society have achieved it. Elementary schools are educational institutions that must be able to keep up with progress and support technological developments, provide engaging, interactive and varied learning media, and be able to develop student knowledge and broaden their understanding of subjects (Rahmad et al., 2018).

Information technology in learning serves students so that they get learning opportunities to keep up with the times and improve the quality of teaching and learning, assisted by teachers by utilizing the Camtasia application for audiovisual media (Setiyana & Kusuma, 2021). One software that supports audiovisual media production is Camtasia Studio, which is used to record, edit and publish video presentations on a computer screen. To make it easier for students to understand online
learning, teachers need to innovate in making learning media using the Camtasia application to make interesting learning videos so that they can trigger student learning interest. Learning becomes more interesting when the methods and means used are combined correctly. A suitable learning method chosen by the teacher must be adapted to the material to leave a positive impression on students (Rahmad et al., 2018).

Video is a variable type of mobile media that varies depending on auditory and visual sensations. Younger graders usually learn half of what they hear and see. Through videos, teachers can turn math lessons considered difficult to learn into enjoyable learning by memorizing numbers. If a lesson uses video and makes it interesting by utilizing children's shows or movements, it can make learning functional and fun and can be interesting. (Hikmah & Purnamasari, 2017). Therefore, the purpose of this research is to create a learning media in the form of video based on Camtasia Studio and to be able to identify students' responses to video learning media with the Camtasia Studio application.

II. PAGE LAYOUT

This research strategy uses an innovative work system by utilizing techniques to create or approve items used in learning. Experimental techniques are strategies that specialists use to gather research information. This exploration consists of several stages: Examination, Plan, Progress, Execution, and Assessment. The items that emerge from this exploration will be used to work on the nature of teaching and learning. The subject of this review is elementary school students.

Methods of gathering information based on perceptions, meetings and polls/surveys. To follow the nature of the instrument, a quality assessment and approval must be obtained. The instruments used were the discussion content master approval poll, media master approval survey, student reaction survey, and student reaction survey if the matrix compiled was met. The method of checking the information in this review is to use a rate equation to find qualifications.

\[
P\% = \frac{\text{Score achieved}}{\text{Perfect score}} \times 100\%
\]

Here are some steps or techniques for collecting data in video media research on learning mathematics in elementary schools as follows:

1. Field inspection / Observation
   The first step is the observation technique to collect data at the school that will be studied; this research is carried out in elementary schools, namely elementary schools to make observations; some of the information we get about how the process of learning mathematics in elementary schools is in elementary schools, namely information about the use of learning media in elementary school mathematics learning.

2. Immediate Review
   The second stage is conducting direct surveys. In some cases, structured site surveys are a measurement method of great interest to researchers. In realistic situations or assignments, the researcher knows that behaviour is unique and promotes planned procedures for discovering, ordering and recording behaviour. These activities will be carried out during the teaching and learning process.

3. Interview
   The next step is an interview; the interview is collecting data obtained from informants or debriefing with people around the school, such as school principals or teachers. In conducting research, interviews are carried out randomly or in an unstructured manner.

4. Documentation
   This study conducted documentation in the form of photos of data from respondents and other documents to help support the research. Several types of documentation are usually in the form of items arranged like textbooks, as rules or guidelines for photos, etc.

5. Questionnaire or questionnaire
   The questionnaire is a set of questions presented in writing to obtain information, and those who fill out the questionnaire usually have some information about personal matters or something they can understand.

   The survey strategy used to determine students' needs in the learning system by utilizing Camtasia learning recordings examines the requirements of educators in completing continuous learning steps. To find out student reactions, a polling method is needed to develop social media video media for learning mathematics in elementary schools.

   a. Student questionnaire sheet
Data from filling out student questionnaires generates quantitative data with an assessment score that is obtained based on the research results of student questionnaire filling. Then, we analyze with various references that adjust using problems. The questionnaire will determine the feasibility of using visual video media using the Camtasia application. Student questionnaire sheets were distributed to students to carry out learning by utilizing the visual video media for learning mathematics; students filled out the questionnaire without coercion and assistance from others. Questionnaire sheets that were distributed to students were in the form of questions with yes or no answers.

b. Validation sheet
The validation sheet is in the form of an assessment from material experts and media experts, and the contents are in written form by simply filling in a checkmark. The function of validity sheet is used to get validity from material experts and media experts about the quality of the material used and the quality of the media used in the audiovisual video using the Camtasia application for learning mathematics. The quality and feasibility of the learning videos are described in several sections or indicators that are further developed. There are two parts to the validation sheet: the learning material expert validation sheet and the media expert validation sheet.

c. Eligibility questionnaire sheet
The data obtained is based on the eligibility sheet for learning video media filled in by the teacher. The data is quantitative, and we will analyze it later. This feasibility questionnaire sheet is used to determine the feasibility of using video media using the Camtasia application for learning mathematics in elementary school classes. The feasibility questionnaire was given to the teacher after learning using the Camtasia maa-based audiovisual video in the fifth-grade elementary school mathematics lesson.

After several steps and results have been taken, the percentage of the final n scores is categorized as a feasibility table. Some of the data we collected is then analyzed by calculating the score obtained from filling out the questionnaire. Calculating the percentage results The survey rate will be given to media experts, material experts, educator reaction polls and student reaction polls using definitive data tests with the following stages:

1. The data we get from media expert validation and material expert validation with content validation is in the form of qualitative data and transformed into quantitative data using score guide tables 1, 2, 3, 4, and 5

<table>
<thead>
<tr>
<th>Assessment Guide from Media Experts, Measurement Experts, Questionnaires and Teacher Responses</th>
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<tbody>
<tr>
<td>Explanation</td>
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<tr>
<td>Very well</td>
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<td>Well</td>
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<th>Student Response Questionnaire Score Guide</th>
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<tr>
<td>Explanation</td>
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<tr>
<td>Yes</td>
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<td>No</td>
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1. We can calculate the score after the data is collected from the results of the questionnaire that has been filled in
2. After all aspects of the questionnaire have been filled in, the ideal score is obtained from the highest score.
3. Perform data calculations with the percentage of numbers from the data being analyzed
4. The data that has been obtained is then analyzed into qualitative sentences.
5. The eligibility criteria for learning video media can be determined in the following way in Table 3.

<table>
<thead>
<tr>
<th>Table 3. Quality of Eligibility</th>
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<tbody>
<tr>
<td>Percentage</td>
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<tr>
<td>85% - 100%</td>
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<td>65% - 79%</td>
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<td>59% - 65%</td>
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<td>51% - 55%</td>
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<td>31% - 39%</td>
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III. RESULTS AND DISCUSSION

During the COVID-19 pandemic, several government countries implemented guidelines for sending students to online learning. (Waruwu et al., 2020). Research conducted in elementary schools was conducted both online and offline. Please send it as a learning video via the whatsapp group or other online grub in the online system. Meanwhile, offline system researchers visited the homes of several students. Achievement of student learning objectives is increased by using learning media. Using animation video media with the Camtasia Studio application supports learning mathematics with a flat shape.

Determination of usability to help improve learning media because of innovative advances that empower the use of learning media that are used as teaching aids at various levels of education because video media is one of the media that moves and has sound elements. Doing mathematics learning by utilizing learning video media is very functional. It can stimulate students' views and movements (Masykur et al., 2017). Camtasia Studio is a studio that includes several editing, capture, and conversion recording tools for professional video designs, memos, and presentations—an improved user interface that new users would expect to try to make easier to learn. The Camtasia Studio Version 8 application is used in this survey.

The advantages of learning video media products using Camtasia Studio have a display that can attract the attention of students, and to use impressive animations and use an accurate display of images that are often seen in the students' home environment, so this audiovisual video media can we take it anywhere, with learning videos it makes it easier for students to study independently and can also be accompanied by students' parents. In this learning video, there are also questions, and students can do exercises to check the extent to which the learning objectives of the material being taught are achieved. Camtasia-based learning video media is packaged attractively to attract students' attention. This learning video is also arranged as a learning CD so students can easily access it. The results of the questionnaire from the results of the material validation test and the results of the video media test, the results of the teacher's response questionnaire and the results of the student response questionnaire. From there, you can see the feasibility results of the video media.

This exploration is a follow-up research or so-called innovative work (Research and development). Delivering material as a video learning medium depends on the Camtasia application on level material for grade 5 basic arithmetic. Learning material depends on Ability Guidelines: explaining the properties of shapes or relationships between shapes, and Basic Skills: distinguishing the properties of level shapes. The determination to learn video media to be enlivened depends on the problems of elementary school learning.


The higher level is the plan. In this development, it is essential to classify programmed learning systems that have been planned so that the program can be relied upon to achieve targets in learning. Next, determine the learning experience that students will have on the exam. Item configuration adapts to the student's personality to solve learning problems following common learning objectives. Then, at that time, a variety of information and material for broadcast in the video media was energized.

Next is the repair stage. This stage is a stage of presenting structured learning media. Some have been prepared at the planning stage, such as various information and materials to be processed into learning media items. The media used is Camtasia video media for level material for grade 5 arithmetic. Next is an illustration of the display of images using the Camtasia application in learning arithmetic for elementary schools.

Camtasia's application of audiovisual media in learning is designed based on steps. It has been planned so that a product is formed in the form of interactive multimedia learning media with flat wake properties. Display on this media is arranged in a structured manner, consisting of executable
submenu. When choosing from the available menus, the first step is an introduction to the material being discussed and for whom to work.

A discussion of the contents of the material is provided, accompanied by a voice recording, played automatically when opening the page. Each sub-material is also equipped with many examples of images, such as flat images so that students can easily understand each explanation of the material.

At the end of the video, there is an exercise for students to look for examples of flat shapes around them. Students can work on practice questions the teacher gives, and the teacher assesses students.

The next stage is implementation, more precisely, the preparation of teaching materials. For this situation, the designed media items are carried out for learning. Before being implemented, the material has been understood by material experts and media experts. The new assessment results reached 57.5% for media approval and 55.71% for material approval with a reasonably practical application class. Apart from sound, the flat-screen display has also been revised. Then correct the images by citing image references, because there are many copied images from the Internet, and improve the images on flat shape material by clarifying the nature of each flat shape. Based on the media and material validation test phase, the media expert validation results were obtained with a ratio of 95% and the material expert validation results with a ratio of 91.25%.

Media expert validation results
The media expert validation stage is the stage in order to be able to determine the feasibility of making Camtasia-based video media products for elementary school mathematics learning class V on material about flat shapes and flat wake properties. In this stage, a validation test is carried out on two validator experts in media experts. To carry out media validation, the researcher provided a media expert validation questionnaire sheet to make it easier for the validator to provide an assessment. The following are the results of validation by the media expert validator in the early validation stages.

Based on the results of the analysis based on the assessment of media experts at this early stage, the percentage obtained with a ratio of 57.7% is entirely feasible; in this first stage, media experts provide criticism and direction, namely videos regarding Camtasia-based learning, namely on media images. The source used is clarified because some of the images used are taken from the Internet. After the first stage of validation, the second stage was carried out by the second media expert.

After the second stage of validation, the results of the media assessment analysis obtained the percentage results with a total score ratio of 95% with the very feasible category and media experts who in the second stage received comments so that the media could be used for research or field trials.

After validating the media in the initial and second stages, we can compare the results with 57.3% and 90% percentages, with the criteria being quite feasible and very feasible. After making improvements, the results are in a very feasible category with a percentage of 90%, and the product can be ready for field practice.

Material Expert Validation Results
The next stage is to validate the material expert, where two stages are carried out, namely the first validation stage and the second validation stage. The aim is to validate the material on video media using Camtasia in learning mathematics in grade V (five) elementary schools. The purpose of validating the material for learning videos in this observation is to determine the feasibility of the completeness of the material in the video. Test the validity of media work by distributing a material expert validation questionnaire sheet.

In conducting the validity of the material, there is an initial stage of the researcher obtaining a percentage ratio of 55.71% in the CL category (decent enough). The initial stage in the validity of the material was carried out by material experts, who obtained ideas and suggestions from the validator in particular so that they could clarify the material and accompany the sources of the material presented in the learning videos using the Camtasia application for learning mathematics for class V (five). So it is necessary to revise the learning video media based on suggestions and criticisms obtained from the comments by the first validator. Moreover, further improvements were made to validate the material expert's second stage to check the material's feasibility in the video again.

After the second validation stage was carried out, the results of the validation of the material experts were obtained with a percentage ratio of 95.75% for the SL category (very feasible). In the second media
validation, criticism and guidance are received on media suitable for use and ready for field practice.

Two validators carried out two stages of the material expert validation test. In the first stage, the results obtained were a percentage of 55.71% with a reasonably decent category, and in the second stage, a percentage ratio of 93.33 was very feasible. So the class V (five) learning video product is feasible and ready for field testing.

Teacher Response Questionnaire Results
To test the feasibility of learning video media using the Camtasia application for mathematics lessons on flat shapes, it is necessary to collect data through a questionnaire from teacher responses. An analysis of the assessment of students' responses to the mathematics learning video media using the Camtasia application obtained a total percentage of 97.5% in the Very Eligible category.

Therefore, the video product made by the researcher has the feasibility of video media using the Camtasia application in mathematics lessons about flat shape material and the characteristics of elementary school flat shapes. From filling out the questionnaire, the teacher's response also received an assessment in mathematics learning material.

The assessment results from the teacher's response questionnaire got a percentage score ratio of 100% for the SL category (very decent). So the video product developed by the researcher is very suitable for use in the learning process of mathematics for grade V (five) elementary schools.

Questionnaire Results Student responses
To see how students respond to Camtasia-based learning video media for mathematics subjects about shapes and the properties of flat shapes in elementary school classes, we can look at the results of the student response questionnaire.

Based on the results of the questionnaire analysis that has been carried out, video media is suitable for use in learning; students can learn independently and help teachers achieve learning goals.

The next stage is Evaluation; after the assessment and modification stages can provide very satisfying results, this Camtasia application-based learning video media is suitable for use in elementary school mathematics learning. These items are used as learning media during the learning and training time in mathematics class V (five). The benefit of using energized video media is that students can concentrate when learning is centred on the video media we display. Because the introduction video needed to be bigger, several problems arose in the learning exercises, especially students who sat behind were challenging to see, so students became less involved. In addition, another problem is that students who are not fluent in reading are not yet eligible to take part in lessons with enthusiastic recordings, considering that the video will continue to be played until the video is finished. So to overcome this problem, educators need to re-clarify the material in the video about flat shapes and flat wake properties so that all students can learn.

The final stage of Evaluation (Evaluation) is a process to find out more about the impact on learning by using learning videos so that you can measure the extent to which the objectives of developing learning video products have been achieved and measure what things can be achieved and look for information on how students can achieve the maximum result(Al Azka et al., 2019), in the final stage of Evaluation, which is the stage of giving value to the learning media products that have been developed. In the ADDIE model, the evaluation stage can be carried out in the long term by looking at the learning process. Evaluation is done to see the comparison of student learning outcomes.

Given the perception, the learning system runs positively. The use of video media in learning can help teachers present learning material to participants. Instructors will be able to more easily explain learning material because students pay attention to explanations and can also improve their perceptions through the senses of sight and hearing. With this, the material presented can be easily understood by students. In addition, video media is also beneficial for students. The convergence of students increases because students need to focus on listening and reading so that students' perspectives can be centred on the video media being communicated. Students will feel happy. They have a little new knowledge because they discover new things. By utilizing media, the learning system is more regular, and several examples who hear or see broadcasts through video media get a similar impression; the teacher's weight in further clarifying the learning subject matter decreases. Furthermore, in the learning system, student activity is increasing; this tends to be seen from their fortitude to ask questions about material that has not been felt.
From the description above, it is clear that the lively video media carried by the Camtasia application benefits educators and students. As per Jubilee-Enterprise (2015), the Camtasia application may be programmed will record everything that happens on the screen. Products used in making instructional exercise videos or introductory videos. Camtasia to make exciting videos using pictures and sound and attractive Camtasia recordings that will be used as a learning tool for students.

IV. CONCLUSIONS

Based on these tests, video media using Camtasia studio software for learning mathematics in grade 5 elementary schools can be used as a learning medium. A learning video product was produced using the Camtasia studio application for mathematics lessons on flat shapes and the properties of flat shapes for grade five schools. Media and material expert validation tests carry out the feasibility of video learning media. The results of the validity of the learning material experts obtained the percentage of eligibility for the initial validity, and the second validity got 57.3 and 90% with the CL (reasonably feasible) and SL (very feasible) categories. Another thing is also the second validation gets a ratio of 95% with the SL category (very decent). The results of the validity of the learning material expert obtained a feasibility score with the initial and second validators getting a ratio of 55.71% and 93.33% in the Fairly Eligible and Very Eligible categories so that Camtasia-based learning video media was valid to use. The teacher's response questionnaire results in the media and material got a score percentage of 97.5% and 100%. The results of student responses in the net based on the questionnaire showed a percentage of 93.75% with a very decent category.

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REFERENCES


Dewi, W. A. F. (2020). Dampak COVID-19 terhadap Implementasi Pembelajaran...


Kartel, A., Charles, M., Xiao, H., & Sundi, D. (2022). Strategies for Parent Involvement During Distance Learning in Arabic Lessons in Elementary Schools. *Journal International of Lingua and Technology*, 1(2), 99–113. [https://doi.org/10.55849/jiltech.v1i2.82](https://doi.org/10.55849/jiltech.v1i2.82)

Keshav, M., Julien, L., & Miezal, J. (2022). The Role Of Technology In Era 5.0 In The Development Of Arabic Language In The World Of Education. *Journal International of Lingua and Technology*, 1(2), 79–98. [https://doi.org/10.55849/jiltech.v1i2.85](https://doi.org/10.55849/jiltech.v1i2.85)


Qureshi, M., Mahdiyyah, D., Mohamed, Y., & Ardchir, M. (2022). Scale For Measuring Arabic Speaking Skills In Early Children’s Education. *Journal International of Lingua and Technology*, 1(2), 114–130. [https://doi.org/10.55849/jiltech.v1i2.81](https://doi.org/10.55849/jiltech.v1i2.81)


