

CHAPTER IV

RESULTS

A. Presentation of Data

1. School Identity

School Name	: UPS SMP Negeri 1 Ngantru
Headmaster	: Imam Wahyudi, S.Pd., M.Pd.
Address	: Jl. Raya Ngantru No. 142 Tulungagung
Curriculum used	: Curriculum 2013
Phone Number	: (0355) 327281
School Statistics Number	: 201051604010
School Category	: SBI/SSN
Year Founded	: 1979
Land Area	: 9,309 m ²
Building Area	: 3,446 m ²

2. A Brief History of the Founding of School

SMP Negeri I Ngantru, Tulungagung, was located in the north of the capital city of Tulungagung, on Jalan Raya Ngantru No. 142 Tulungagung. SMP Negeri I Ngantru with School Statistics Number 201051604010 was an A-accredited school with score of 91,09. The history of the establishment of SMP Negeri I Ngantru began in 1979 when SMP Negeri 4 Tulungagung (SMP Integration) was moved to the

Ngantru sub-district. At that time, every sub-district had to have its own public junior high school. Then at that time SMP Gotong Royong in Ngantru sub-district was merged with SMP Negeri 4 Tulungagung by decree dated December 17th, 1979 Number: 030/0/1979. Then with a decree dated August 24th, 1989 Number: 050/0/1989, SMP Negeri 4 Tulungagung was changed to SMP Negeri I Ngantru. And finally, with a decree dated March 7th, 1997 Number: 034/0/1997 SMP Negeri I Ngantru was changed to SLTPN Ngantru.

Over 32 years, SMP Negeri I Ngantru has changed its headmaster/principal 10 times. Currently, the principal who leads the SMP Negeri I Ngantru was Imam Wahyudi, S. Pd., M. Pd. The number of teachers and employees of SMP Negeri I Ngantru for the Academic Year 2020/2021 was 79 people, with details of the number of teachers 61 people consisting of 45 permanent teachers and 16 non-permanent teachers. The number of employees was 18 people, consisting of 1 laboratory assistant, 2 librarians, 1 school custodian, and 14 administrative staff.

3. Vision and Mission of the School

SMP Negeri 1 Ngantru formulated the school's vision and mission as presented in the table below:

Table 4. 1 Visions of SMP Negeri 1 Ngantru

<i>Visi</i>
<i>“Terwujudnya SMP Negeri 1 Ngantru menjadi sekolah yang berprestasi, berkarakter, berwawasan lingkungan dengan berlandaskan IMTAQ.”</i>

Table 4. 2 Missions of SMP Negeri 1 Ngantru

<i>Misi</i>	
1.	<i>Mewujudkan proses pembelajaran yang dinamis, aktif, kreatif, dan menyenangkan.</i>
2.	<i>Mewujudkan pengelolaan sekolah berdasarkan konsep manajemen berbasis sekolah dengan mengembangkan komunikasi kekeluargaan, kemitraan, dan kedinasan secara terpadu.</i>
3.	<i>Mewujudkan pengembangan sarana dan prasarana pendidikan yang memadai berbasis pada teknologi, komunikasi, dan informasi.</i>
4.	<i>Mewujudkan pengembangan sumber daya manusia, pendidik, dan tenaga kependidikan yang profesional, bertanggungjawab, dan berdedikasi tinggi.</i>
5.	<i>Mewujudkan pendidikan yang menghasilkan kelulusan berprestasi akademik dan non akademik, berkepribadian Pancasila dan beriman kepada Tuhan Yang Maha Esa.</i>
6.	<i>Mewujudkan kurikulum yang berkualitas, yaitu holistik, sesuai dengan potensi dan kebutuhan siswa, dan konteks sekolah.</i>
7.	<i>Mewujudkan sarana dan prasarana pendidikan yang memadai dari segi kuantitas dan kualitas.</i>
8.	<i>Mewujudkan pembiayaan pendidikan yang memadai dengan prinsip transparansi, akuntability, dan efisiensi.</i>
9.	<i>Mewujudkan sistem penilaian yang menyeluruh, otentik, obyektif, dan berkelanjutan, yang mampu mengukur kompetensi siswa secara utuh.</i>
10.	<i>Mewujudkan pengembangan monitoring dan evaluasi oleh Kepala Sekolah terhadap kinerja guru dan tenaga kependidikan.</i>
11.	<i>Mewujudkan sekolah bersih, hijau, rindang, serasi, dan asri.</i>
12.	<i>Mewujudkan pencegahan terjadinya pencemaran lingkungan sekolah.</i>
13.	<i>Mewujudkan kelestarian fungsi lingkungan hidup.</i>
14.	<i>Mewujudkan pencegahan kerusakan lingkungan hidup.</i>
15.	<i>Mewujudkan peningkatan kualitas lingkungan.</i>
16.	<i>Melaksanakan pengembangan kegiatan bidang olahraga.</i>
17.	<i>Melaksanakan pengembangan kegiatan bidang kesenian.</i>
18.	<i>Melaksanakan pengembangan kegiatan bidang kepramukaan.</i>
19.	<i>Melaksanakan pengembangan kegiatan bidang tata krama.</i>
20.	<i>Melaksanakan pengembangan kegiatan bidang keagamaan.</i>

B. Data Analysis

1. Description of Research and Development Results

a. Analysis

The first step in conducting this study was to collect data that aimed to analyze and determine the material to be included in the learning media. The research location chosen by the researcher was SMP Negeri 1 Ngantru, the data in this study were obtained by interviewed English subject teachers at SMP Negeri 1 Ngantru. Before conducted the study, the researcher consulted with one of the English subject teachers, namely Ropi'atus Sholikhah, S. Pd. about determining the class that would be used as a research subject. Mrs. Ropi'atus Sholikhah gave class VII-I as research subjects with a total of 40 students for a large group try-out and conducted a small group try-out by randomly selecting 15 students from seventh graders. This random sample selection aimed for the development of learning media to be carried out effectively.

On 3rd December 2021, the researcher interviewed with Mrs. Ropi'atus Sholikhah as an English teacher. In the interview, it could be concluded that she and other English teachers during the teaching and learning process still used conventional methods by using learning resources in the form of textbooks and worksheets. This showed that textbooks and worksheets were the main learning resources used in the learning process, even though the curriculum

used in SMP Negeri 1 Ngantru was the 2013 curriculum, and in the 2013 curriculum, students were required to think actively, creatively, innovatively, quickly, and responsive. In addition, the 2013 curriculum also contained elements of social, national, and state life, as well as religious elements that aimed to form students with good character.

Based on the results of the needs analysis questionnaire, students felt not maximal in understanding English material, especially related to mastering English vocabulary with the learning model used at this time. The monotonous learning activities tend to make students feel bored. Problems increased when online learning. But for now, SMP Negeri 1 Ngantru has applied the blended learning method. In addition, after further investigation, it turned out that most students still felt confused when they want to use words to express their ideas and feelings. When the teacher showed an English video to students, many students do not understand what was meant in the video, students always asked the teacher to translate the video into Indonesian. According to Widiati, et al. (2018) "The main constraint is students' lack of vocabulary because English is a difficult foreign language for students. When start using English, the students start ignoring or even appear unwilling to listen, because they feel they cannot understand what I am talking about. Thus, they choose not to pay attention. Therefore, classroom learning is more

frequently conducted in Indonesian (90%) than in English". From this, it could be concluded that students have difficulty understanding the material or words in English. Based on the findings of the needs analysis that arise, the researcher tried to make innovations related to learning media in the form of video based on stop motion animation. This learning video was deliberately made using two languages, namely English and Indonesian to make it easier for students to learn English vocabulary. This learning media also was designed as attractive as possible so that students were not bored and more enthusiastic when learning. In addition, the use of this learning media was very easy, could be used for independent learning, and could be accessed through the YouTube Channel.

b. Design

The next step in the ADDIE development model was to design the product. The activity carried out at this stage was to design a learning video based on stop motion animation. In accordance with the directions and suggestions of the English subject teacher during the observation, the researchers used 'things around us' material in a learning video based on stop motion animation that would be developed. The following were the stages of designing a learning video based on stop motion animation:

- 1) Formulate Core Competencies, Basic Competencies, Indicators, and Learning Objectives

Before designing a product, the procedure that needed to be carried out by the researcher was to formulate core competencies, basic competencies, indicators, and learning objectives that would be used in learning videos based on stop motion animation. All the data could be seen in the table below:

Table 4. 3 Core Competence

<i>Kompetensi Inti</i>	
<i>Kompetensi Sikap Spiritual</i>	<i>Menghargai dan menghayati ajaran agama yang dianutnya.</i>
<i>Kompetensi Sikap Sosial</i>	<i>Menunjukkan perilaku jujur, disiplin, tanggung jawab, peduli (toleransi, gotong royong), santun, percaya diri, dalam berinteraksi secara efektif dengan lingkungan sosial dan alam dalam jangkauan pergaulan dan keberadaannya.</i>
<i>Kompetensi Pengetahuan</i>	<i>Memahami dan menerapkan pengetahuan (faktual, konseptual, dan prosedural) berdasarkan rasa ingin tahunya tentang ilmu pengetahuan, teknologi, seni, budaya terkait fenomena dan kejadian tampak mata.</i>
<i>Kompetensi Keterampilan</i>	<i>Mengolah, menyaji, dan menalar dalam ranah konkret (menggunakan, mengurai, merangkai, memodifikasi, dan membuat) dan ranah abstrak (menulis, membaca, menghitung, menggambar, dan mengarang) sesuai dengan yang dipelajari di sekolah dan sumber lain yang sama dalam sudut pandang/teori.</i>

Table 4. 4 Basic Competence and Indicators

<i>Kompetensi Dasar</i>	<i>Indikator</i>
<i>Mengidentifikasi fungsi sosial, struktur teks, dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan</i>	<i>Memahami fungsi sosial, struktur teks, unsur kebahasaan, dan kosa kata dalam teks interaksi transaksional lisan dan tulis yang melibatkan tindakan</i>

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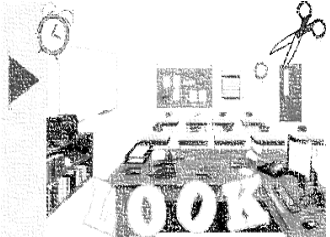
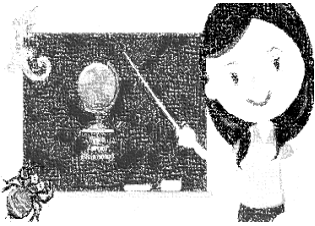
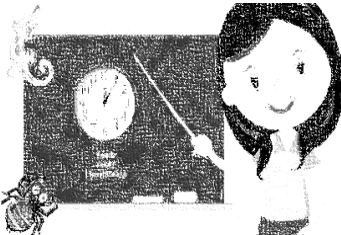
<p><i>memberi dan meminta informasi terkait nama, jumlah binatang, benda, dan bangunan publik yang dekat dengan kehidupan siswa sehari-hari, sesuai dengan konteks penggunaannya. (Perhatikan unsur kebahasaan dan kosa kata).</i></p>	<p><i>memberi dan meminta informasi terkait nama, jumlah binatang, benda, dan bangunan publik yang dekat dengan kehidupan siswa sehari-hari, sesuai dengan konteks penggunaannya.</i></p>
<p><i>Menyusun teks interaksi transaksional lisan dan tulis sangat pendek dan sederhana yang melibatkan tindakan memberi dan meminta informasi terkait nama dan jumlah binatang, benda, dan bangunan publik yang dekat dengan kehidupan siswa sehari-hari, dengan memperhatikan fungsi sosial, struktur teks, unsur kebahasaan, dan kosa kata yang benar dan sesuai konteks.</i></p>	<p><i>Menerapkan pengetahuan tentang kosa kata yang melibatkan tindakan memberi dan meminta informasi terkait nama, jumlah binatang, benda, dan bangunan publik yang dekat dengan kehidupan siswa sehari-hari.</i></p>

Table 4. 5 Learning Objectives

<i>Tujuan Pembelajaran</i>
<p><i>Mengidentifikasi fungsi sosial, struktur teks, dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait nama dan jumlah binatang, benda, dan bangunan publik yang dekat dengan kehidupan siswa sehari-hari, sesuai dengan konteks penggunaannya. (Perhatikan unsur kebahasaan dan kosa kata).</i></p>
<p><i>Menyusun teks interaksi transaksional lisan dan tulis sangat pendek dan sederhana yang melibatkan tindakan memberi dan meminta informasi terkait nama dan jumlah binatang, benda, dan bangunan publik yang dekat dengan kehidupan siswa sehari-hari, dengan memperhatikan fungsi sosial, struktur teks, unsur kebahasaan, dan kosa kata yang benar dan sesuai konteks.</i></p>

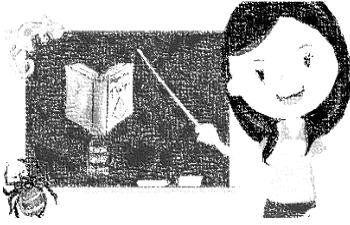
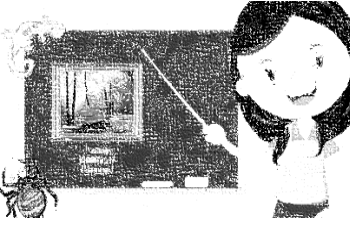
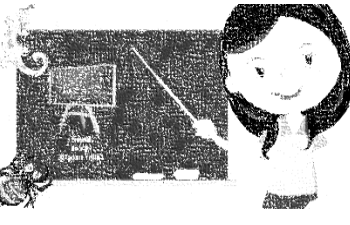
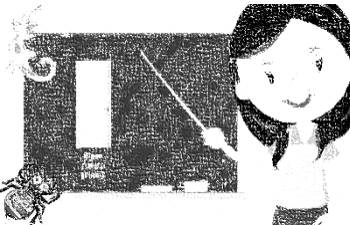
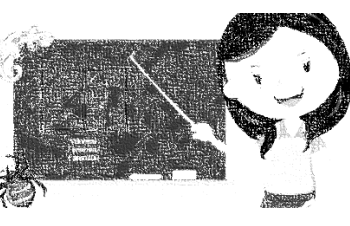
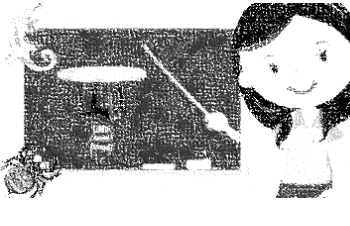
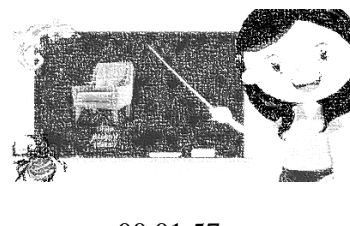
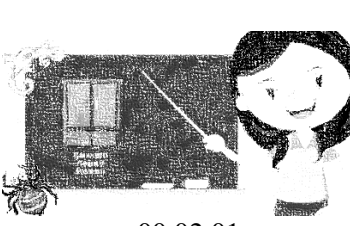
2) Creating Storyboard

Figure 4. 1 Storyboard

<p style="text-align: right;">1</p>  <p style="text-align: center;">00.00.01 Opening of the video</p>	<p style="text-align: right;">2</p>  <p style="text-align: center;">00.00.07 Pre-activity 1</p>
<p style="text-align: right;">3</p>  <p style="text-align: center;">00.00.18 Pre-activity 2</p>	<p style="text-align: right;">4</p>  <p style="text-align: center;">00.01.06 Students were asked to observe the objects in the picture (things in the classroom) and imitate the vocabulary that was spoken by the researcher according to the picture in the video.</p>
<p style="text-align: right;">5</p>  <p style="text-align: center;">00.01.25 Picture 1: Globe</p>	<p style="text-align: right;">6</p>  <p style="text-align: center;">00.01.29 Picture 2: Clock</p>

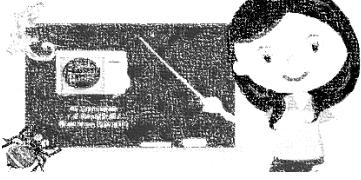

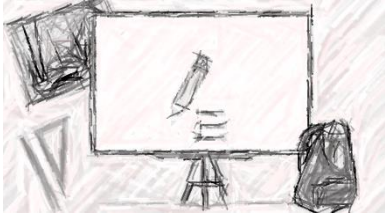
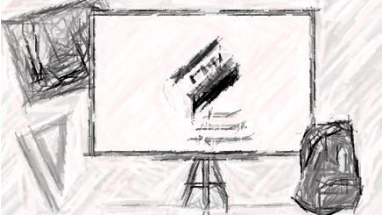

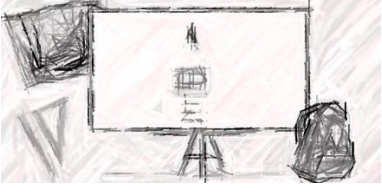
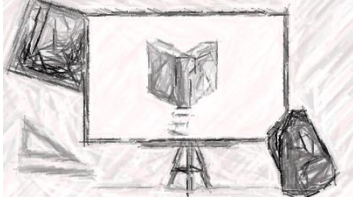
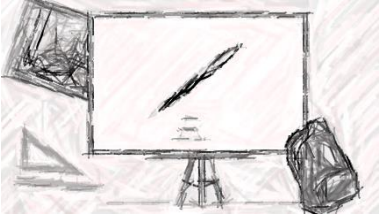
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<p style="text-align: right;">7</p>  <p style="text-align: center;">00.01.33 Picture 3: Book</p>	<p style="text-align: right;">8</p>  <p style="text-align: center;">00.01.37 Picture 4: Picture</p>
<p style="text-align: right;">9</p>  <p style="text-align: center;">00.01.41 Picture 5: Board</p>	<p style="text-align: right;">10</p>  <p style="text-align: center;">00.01.45 Picture 6: Door</p>
<p style="text-align: right;">11</p>  <p style="text-align: center;">00.01.50 Picture 7: Window</p>	<p style="text-align: right;">12</p>  <p style="text-align: center;">00.01.53 Picture 8: Table</p>
<p style="text-align: right;">13</p>  <p style="text-align: center;">00.01.57 Picture 9: Chair</p>	<p style="text-align: right;">14</p>  <p style="text-align: center;">00.02.01 Picture 10: Cupboard</p>

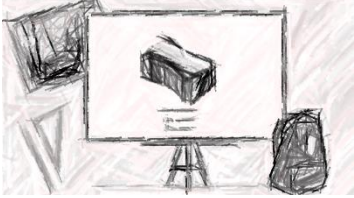
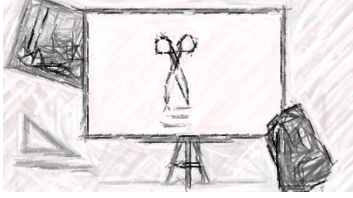
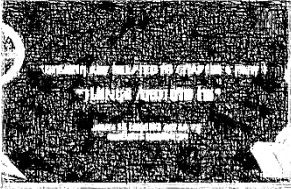
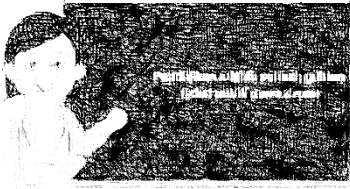
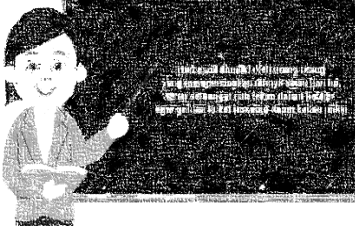

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<p style="text-align: right;">15</p>  <p style="text-align: center;">00.02.06 Picture 11: Air Conditioner</p>	<p style="text-align: right;">16</p>  <p style="text-align: center;">00.02.56 Students were asked to observe the objects in the picture (things in the bag) and imitate the vocabulary that was spoken by the researcher according to the picture in the video.</p>
<p style="text-align: right;">17</p>  <p style="text-align: center;">00.03.28 Picture 12: Pencil</p>	<p style="text-align: right;">18</p>  <p style="text-align: center;">00.03.31 Picture 13: Eraser</p>
<p style="text-align: right;">19</p>  <p style="text-align: center;">00.03.35 Picture 14: Ruler</p>	<p style="text-align: right;">20</p>  <p style="text-align: center;">00.03.39 Picture 15: Glue</p>
<p style="text-align: right;">21</p>  <p style="text-align: center;">00.03.43 Picture 16: Book</p>	<p style="text-align: right;">22</p>  <p style="text-align: center;">00.03.46 Picture 17: Pen</p>

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<p style="text-align: right;">23</p>  <p style="text-align: center;">00.03.50 Picture 18: Sharpener</p>	<p style="text-align: right;">24</p>  <p style="text-align: center;">00.03.53 Picture 19: Scissors</p>
<p style="text-align: right;">25</p>  <p style="text-align: center;">00.04.28 Pre-closing</p>	<p style="text-align: right;">26</p>  <p style="text-align: center;">00.04.46 Quotes from researcher for students.</p>
<p style="text-align: right;">27</p>  <p style="text-align: center;">00.04.52 Messages from researcher for students.</p>	<p style="text-align: right;">28</p>  <p style="text-align: center;">00.05.19 Closing</p>

The figure above was a storyboard of the learning video based on stop motion animation that would be made. With storyboard, we could convey our story ideas to others more easily because we could accompany someone's imagination to follow the images presented, thus produced the same perception of our story ideas.

c. Development

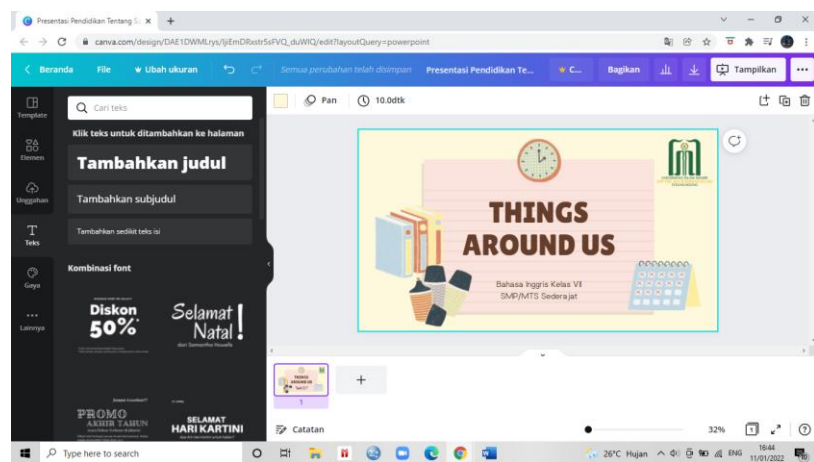
1) Making a Product of Learning Video Based on Stop Motion Animation

At this stage, a learning video based on stop motion animation was made, and the material structure that has been determined was then compiled into a stop motion animation video component based on the storyboard. Interesting materials and pictures were developed to improve student learning outcomes. The composition of colors and pictures in the stop motion animation video was adjusted to the student's character so that students were more interested in learning. The learning media developed by the researcher was made using the PixelLab, Canva, and KineMaster Pro application programs, to produce good and interesting learning media. This learning media consisted of several elements such as pictures, animation, audio, music, and written text which were combined and arranged systematically. The duration used in this media was about 5 minutes. The process of making this media was by using the stop motion technique (picture by picture), motion capture, or the creation of animated movements obtained by making picture by picture that put together, researchers obtained picture via google and pngtree. Pictures were assembled one by one and then put together with the KineMaster Pro application according

to the storyboard that has been designed. The steps in the process of developing learning media in the form of stop motion animation videos as follows:

The first step was made a cover or opening using Canva as showed below.

Figure 4. 2 How to Create Cover with Canva



After finished made the cover, the next step was to start using the PixelLab application to create the animated slide by inserted several pictures, text, and other components into the library table in the application according to the desired creative design, by selecting the "+" sign → from gallery → select the picture you want to add, it was showed below.

Figure 4. 3 Initial Display of PixelLab Application Program

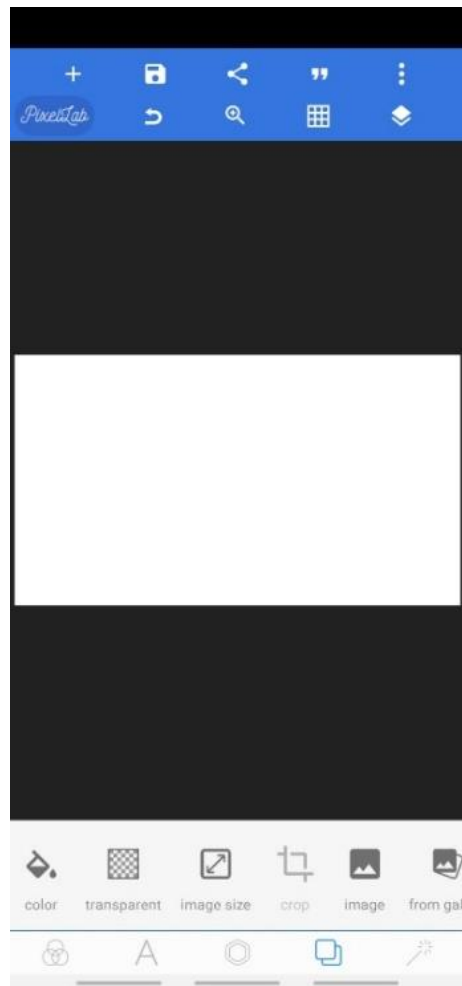


Figure 4. 4 Display of How to Insert Picture



If the picture has already appeared on the editing screen, then set the picture as desired. The addition of text was also done to clarify the material. In this PixelLab application, the text could also be changed to the font style, size, position, etc. as desired.

Figure 4. 5 Display of How to Insert Text



After the animation picture editing process was completed, then each movement of the picture was saved in the form of an image or JPG format.

Figure 4. 6 Display of How to Save Picture



The process of making this animated picture was made by making animated movements of each picture that has previously been designed and stored in a folder, which were be combined with each picture and animation movement which was called the stop motion technique.

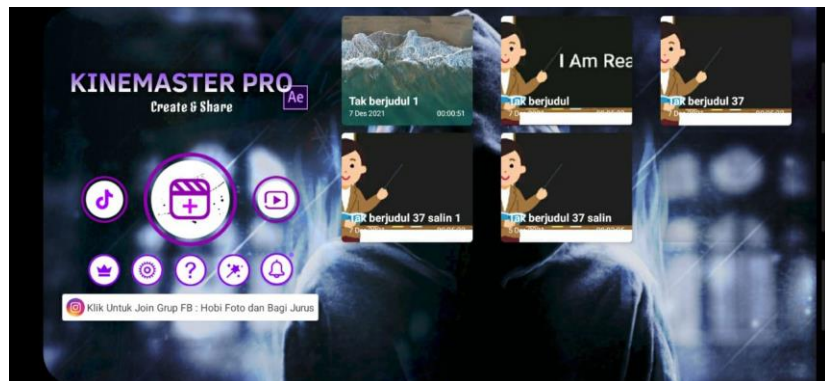
Figure 4. 7 Display of Picture Results for Each Movement



After all the desired animated pictures have been created, the next step was to make all the pictures into an animated video by editing them in the KineMaster Pro application program. The researcher used the KineMaster Pro application program because this application program was quite easy to use, its features and the resulting video was quite good. Merging each picture was done by paying attention to the design that has been made and in the appropriate order. In addition, the researcher also inserted audio, music, and some animations to produce good and interesting learning videos. The following was the process of making a stop motion animation video.

The first step was to open the KineMaster Pro application program so that it appeared like the picture below.

Figure 4. 8 Initial Display of KineMaster Pro Application



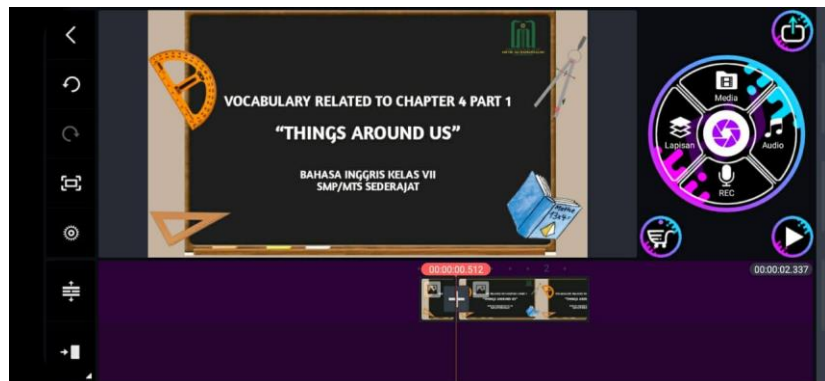
After entering the KineMaster Pro application program, then click on the 'media files' section to inserted saved pictures that would be edited into a video.

Figure 4. 9 Display of How to Insert Picture in KineMaster Pro



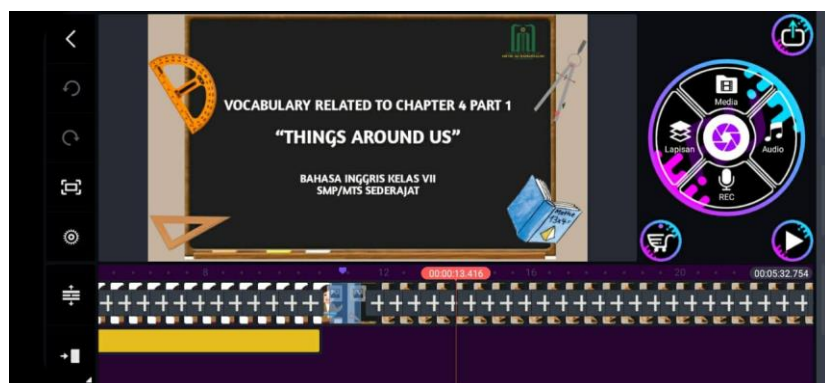
Then select the picture that would be edited in the application and click open to select the file, it would be appeared like the picture below.

Figure 4.10 Display of Picture that Has Been Inserted



After that, enter the picture to be edited from the media project into the timeline, then select 'add to project', and the image would be automatically appeared on the timeline. Next arrange the picture according to the design.

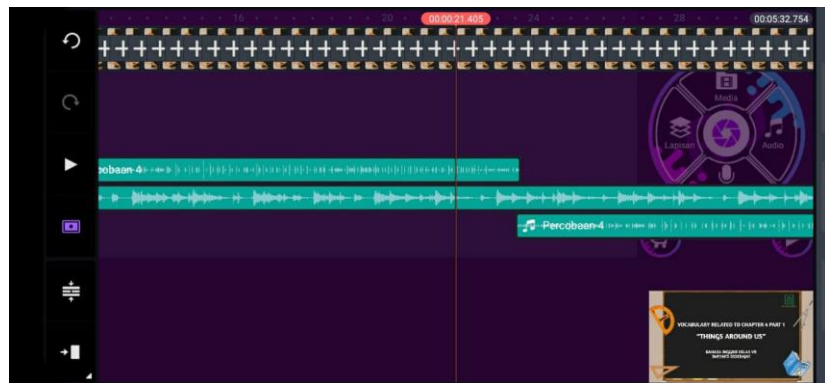
Figure 4.11 Display of Picture in Timeline



After all the pictures have been arranged according to the design, then add the previously recorded back sound and recording by clicking on the inserted back sound and dragging

it towards the timeline, and adjusting to the length of the picture. The same thing was also done in inserting the recording on the video, as showed below.

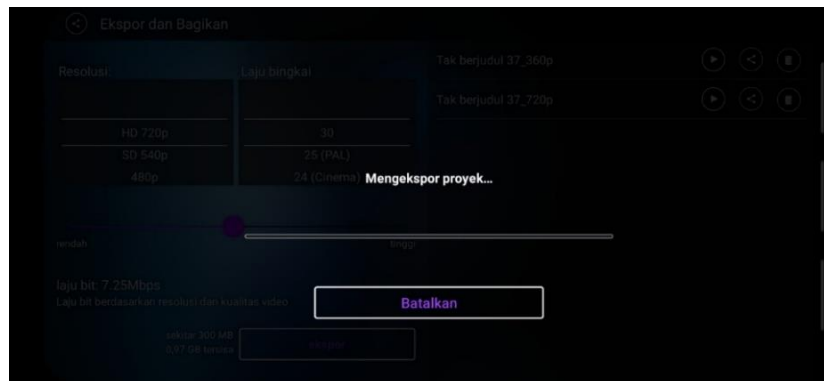
Figure 4. 12 Display of Back Sound and Recording in Timeline



After all the pictures have been combined and edited according to the design, the last process was to save the video by clicking Export. Then the picture would have appeared as below.

Figure 4. 13 Display of Saving Edited Video





Wait until the video export process was complete. When finished, the stop motion animation video was ready to be used in teaching vocabulary. To make it easier for students to accessed or watched videos without to download them, videos were uploaded on the YouTube channel as follows.

Figure 4. 14 Display of Process Uploading Videos on Youtube

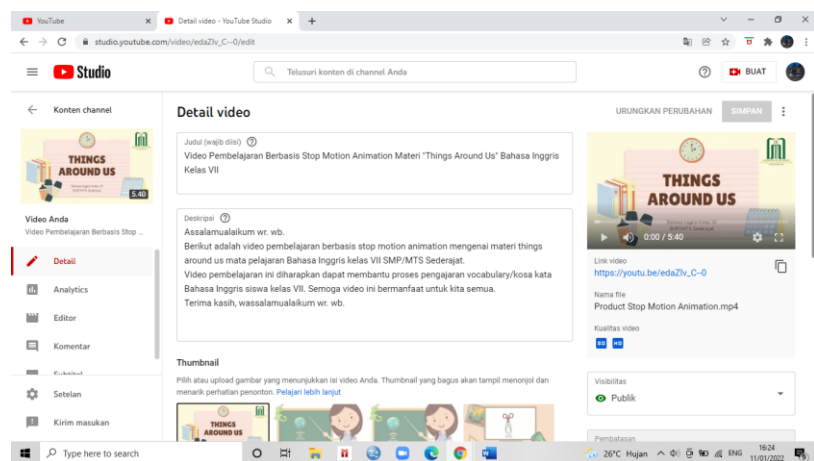
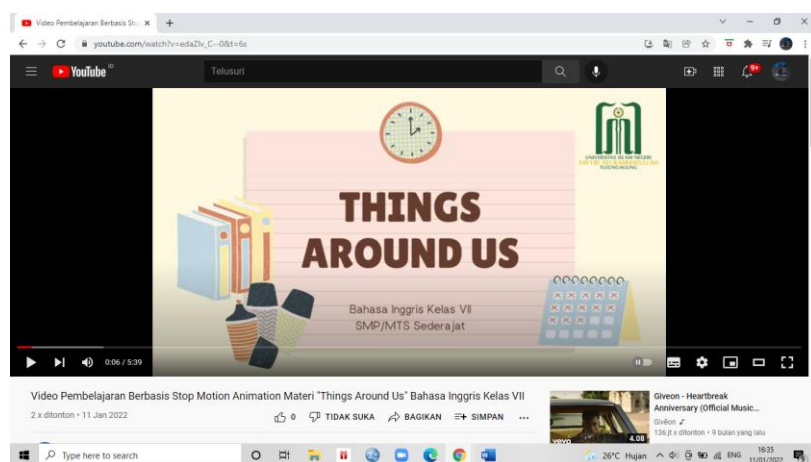
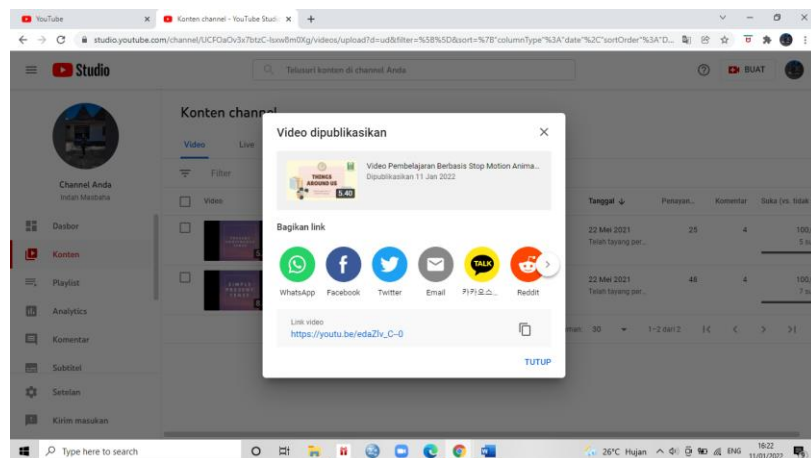


Figure 4. 15 Display of Uploaded Videos on Youtube



2) Expert Validation

After the process of making learning media was complete, the next step was to validate the learning media that has been made to find out the opinions and suggestions of the validator. Validation was carried out by expert judgment, namely media experts (a lecturer), material experts (a lecturer), and English teachers.

a) Media Expert Validation

Validation was carried out by media experts to find out the opinions of media experts regarding the feasibility and improvement of the learning media that had been developed. Validation was carried out by provided a learning video based on stop motion animation along with a validation questionnaire to media experts, namely Mrs. Umdatul Khoirot, M.Pd., as a lecturer in English Education at State Islamic University of Sayyid Ali Rahmatullah Tulungagung. The validation questionnaire consisted of 14 questions which were divided into 3 aspects, namely the language feasibility aspect, the presentation aspect, and the overall display aspect. The validation results from media experts could be seen in the following table.

Table 4. 6 Media Expert Validation Results

No	Indicators	Score of Assessment
A. Aspect of Language Eligibility		
1.	The language used is clear.	5
2.	The language used encourages students' curiosity.	4
3.	Use polite language and not reduce educational values.	5
4.	The effectiveness of sentences.	4
5.	The spelling precision.	5
6.	The precision of text with the picture in the video.	4
B. Aspect of Presentation		
1.	The presentation of the video is carried out systematically and coherently.	5

Continued

Continuation

2.	Video presentation supports students to participate in learning.	5
3.	The video presentation is very interesting.	5
C. Aspect of Overall Display		
1.	The design of learning media can give an interesting impression to students.	5
2.	The text is easy to read.	5
3.	The ease of using media in learning.	5
4.	The selected effects are appropriate and attractive.	4
5.	There is the suitability of the picture in the video and the flow of the material discussed.	5

Based on table 4.6 it could be concluded that the percentage of media expert validators for each aspect of the assessment was summarized in the table below.

Table 4. 7 Summary of Media Expert Validation Results

Validator	ASPECT			Average Score	Validity Percentage	Category
	A	B	C			
	27	15	24	22	94%	Valid

In table 4.7, a summary of media expert validation results, for each aspect that was asked in the learning video based on stop motion animation, it got an average score of 22 which indicated the percentage of validity is 94% and was included in the valid category. It stated that the learning media in the form of learning video based on stop motion animation was included in the valid category, which meant that the learning media developed has been suitable for use. The suggestion

from the validator was to compress the size of the video because the size was too large and of course, it would be required a lot of internet quota to access it.

b) Material Expert Validation

The validation of learning media to material experts aimed to obtain opinions and suggestions from material experts related to the content of the material that has been contained in the developed learning media. Opinions and suggestions from material experts were very important for researcher because they were used as guidelines and considerations in developed and improved products so that the quality of the learning media developed was good and increased. Material expert validation was carried out by provided learning videos based on stop motion animation along with validation questionnaires to material experts, namely Mrs. Anindita Badianti, M.Pd, as a lecturer in English Education at State Islamic University of Sayyid Ali Rahmatullah Tulungagung. The validation questionnaire consisted of 20 questions which were divided into 3 aspects, namely aspect of material eligibility, aspect of language eligibility, and aspect of the overall display. The validation results from material experts could be seen in the following table.

Table 4. 8 Material Expert Validation Results

No	Indicators	Score of Assessment
A. Aspect of Material Eligibility		
1.	The suitability of the content of material in the video with the purpose of the research.	5
2.	The clarity of the material presented.	5
3.	The development and ideas in the video can help students understand the material being studied.	4
4.	The material can be understood independently by students through learning media that has been developed (stop motion animation video).	4
5.	The use of pictures in the video is in accordance with the material being studied.	4
6.	The material covered in the stop motion animation video is good and appropriate.	5
7.	The use of appropriate materials and in accordance with the objectives of the study.	5
8.	Encourage students' curiosity about the learning material.	5
9.	The material presented in the video is able to increase students' knowledge of English vocabulary.	5
10.	The accuracy of the pictures and videos presented.	4
11.	The level of accuracy of the content with the material discussed.	5
12.	Media supports students to learn the material easily and fun.	5
B. Aspect of Language Eligibility		
1.	The language used is clear.	5
2.	The language used encourages students' curiosity.	4
3.	Use polite language and not reduce educational values.	5
4.	The effectiveness of sentences.	4
5.	The spelling precision.	5
6.	The precision of text with the picture in the video.	5
C. Aspect of Overall Display		
1.	The text is easy to read.	5
2.	There is a suitability of the picture in the video and the flow of the material discussed.	5

Based on table 4.8 it could be concluded that the percentage of material expert validators for each aspect of the assessment was summarized in the table below.

Table 4. 9 Summary of Material Expert Validation Results

Validator	ASPECT			Average Score	Validity Percentage	Category
	A	B	C			
	56	28	10	31,3	94%	Valid

In table 4.9, a summary of material expert validation results, for each aspect that was asked in the learning video based on stop motion animation, it got an average score of 31,3 which indicated the percentage of validity is 94% and was included in the valid category. It stated that the learning media in the form of learning video based on stop motion animation was included in the valid category, which meant that the learning media developed has been suitable for used. The comments from the validator, the pronunciation was a little bit *medhok* but it was okay, the core material and video were appropriate.

c) English Teacher Validation

The validation of learning media by English teachers aimed to find out the suggestions and opinions of English teachers regarded the feasibility of learning media being used as a source of student learning. These suggestions and opinions

were then used as a basis for revised the product which aimed to made better learning media. Validation was carried out by providing a learning video based on stop motion animation along with a validation questionnaire to the English subject teacher at SMP Negeri 1 Ngantru, namely Mrs. Ropi'atus Sholikhah, S.Pd. For English teachers, media validation questionnaires and material validation questionnaires were given. The media validation questionnaire consisted of 14 questions which were divided into 3 aspects, namely the language feasibility aspect, the presentation aspect, and the overall display aspect. While material validation questionnaire consisted of 20 questions which were divided into 3 aspects, namely aspect of material feasibility, aspect of language feasibility, and aspect of the overall display. The validation results from the English teacher could be seen in the following table.

Table 4. 10 Media Expert Validation Results by English Teacher

No	Indicators	Score of Assessment
A. Aspect of Language Eligibility		
1.	The language used is clear.	5
2.	The language used encourages students' curiosity.	4
3.	Use polite language and not reduce educational values.	5

Continued

Continuation

4.	The effectiveness of sentences.	5
5.	The spelling precision.	5
6.	The precision of text with the picture in the video.	5
B. Aspect of Presentation		
1.	The presentation of the video is carried out systematically and coherently.	5
2.	Video presentation supports students to participate in learning.	5
3.	The video presentation is very interesting.	4
C. Aspect of Overall Display		
1.	The design of learning media can give an interesting impression to students.	5
2.	The text is easy to read.	5
3.	The ease of using media in learning.	5
4.	The selected effects are appropriate and attractive.	5
5.	There is the suitability of the picture in the video and the flow of the material discussed.	5

Table 4. 11 Material Expert Validation Results by English Teacher

No	Indicators	Score of Assessment
A. Aspect of Material Eligibility		
1.	The suitability of the content of the material in the video with the purpose of the research.	5
2.	The clarity of the material presented.	4
3.	The development and ideas in the video can help students understand the material being studied.	5
4.	The material can be understood independently by students through learning media that has been developed (stop motion animation video).	5
5.	The use of pictures in the video is in accordance with the material being studied.	5
6.	The material covered in the stop motion animation video is good and appropriate.	5
7.	The use of appropriate materials and in accordance with the objectives of the study.	5

Continued

Continuation

8.	Encourage students' curiosity about the learning material.	5
9.	The material presented in the video is able to increase students' knowledge of English vocabulary.	5
10.	The accuracy of the pictures and videos presented.	5
11.	The level of accuracy of the content with the material discussed.	5
12.	Media supports students to learn the material easily and fun.	4
B. Aspect of Language Eligibility		
1.	The language used is clear.	5
2.	The language used encourages students' curiosity.	5
3.	Use polite language and not reduce educational values.	5
4.	The effectiveness of sentences.	5
5.	The spelling precision.	5
6.	The precision of text with the picture in the video.	5
C. Aspect of Overall Display		
1.	The text is easy to read.	5
2.	There is a suitability of the picture in the video and the flow of the material discussed.	5

Based on tables 4.10 and 4.11 it could be concluded that the percentage of media and material validation by English subject teachers for each aspect of the assessment was summarized in the table below.

Table 4. 12 Summary of Media Validation Results by English Teacher

Validator	ASPECT			Average Score	Validity Percentage	Category
	A	B	C			
	29	14	25	22,6	97%	Valid

Table 4. 13 Summary of Material Validation Results by English Teacher

Validator	ASPECT			Average Score	Validity Percentage	Category
	A	B	C			
	58	30	10	32,6	98%	Valid

In table 4.12, a summary of media expert validation results by English teacher, for each aspect that was asked in the learning video based on stop motion animation, it got an average score of 22,6 which indicated the percentage of validity was 97% and was included in the valid category. While in table 4.13, summary of material expert validation results by English teacher, for each aspect that was asked in the learning video based on stop motion animation, it got an average score of 32,6 which indicated the percentage of validity was 98% and was included in the valid category. It stated that the learning media in the form of learning video based on stop motion animation is included in the valid category, which meant that the learning media developed has been suitable for used. The English teacher commented that the video was good for enriching students' vocabulary and pronunciation, she hoped the media could be developed again for other English skills with the same media. The suggestion from the English teacher was to compress the size of the

video because the size was too large and of course, it would be required a lot of internet quota to access it.

d) Post-Test Validation

Table 4. 14 Post-Test Validation by Material Experts and English Teachers

No	Indicators	Validators		Average Score
		1	2	
1.	The suitability of the question with the research objectives.	5	5	5
2.	The clarity of instruction for question work.	5	5	5
3.	The clarity meaning of the question.	4	5	4,5
4.	The possibility of questions can be solved.	4	4	4
5.	The sentence of question does not have a double meaning.	5	5	5
Total Number		23	24	23,5
Percentage (%)		92%	96%	94%

Table 4.14 showed validator 1 and validator 2 stating that the post-test questions were valid with a percentage of 94%. The validator also provided comments and suggestions on the post-test questions. According to the validator, the questions were in accordance with the research objectives, but for questions number 6 and number 8, the language may be simplified so that students could easily understand the meaning of the questions.

3) Revision

Based on the results of data analysis that has been obtained, the learning media product developed by the researcher required a little bit of revision. In doing revisions, the researcher also paid attention to comments and suggestions from expert validators who have provided validations. The researcher revised learning media such as compressed the size of learning media because the validator commented that the size of the learning media developed was too large and it was feared that it would be difficult for students to access.

d. Implementation

In the implementation, there were two stages of try out:

1) Small Group Try Out

After the product revision stage, until it was declared that it could be used with expert validity criteria, the next step that must be done was to conducted a small group try-out. The small group try-out was conducted on 10 students of seventh grade at SMP Negeri 1 Ngantru. Learning videos based on stop motion animation and questionnaires were given to students to determine the effectiveness of the developed learning media and student responses to learning videos based on stop motion animation. The following table presented an analysis of the effectiveness of student response questionnaires when

conducted small group try out. In the table, the frequency of students answered from each indicator, total score, and percentage were presented.

Table 4. 15 Students Response Questionnaire (Small Group Try Out)

No	Indicators	Answer Frequency					Total Score	Percentage (%)
		1	2	3	4	5		
1.	The display of learning videos based on stop motion animation is interesting.	0	0	0	4	6	46	92%
2.	The presentation of material and pictures in learning videos based on stop motion animation is very good.	0	0	0	2	8	48	96%
3.	The material presented in the learning video based on stop motion animation is very clear and easy to understand.	0	0	0	1	9	49	98%
4.	This learning video based on stop motion animation is able to encourage students' curiosity about the learning material.	0	0	0	3	7	47	94%
5.	The learning video based on stop motion animation is able	0	0	0	2	8	48	96%

Continued

Continuation

	to motivate students to learn.							
6.	The learning video based on stop motion animation makes the learning process not boring.	0	0	0	2	8	48	96%
7.	The ease of the use of learning video based on stop motion animation in learning English vocabulary.	0	0	0	3	7	47	94%
8.	With the learning video based on stop motion animation, it makes easier for students to learn independently.	0	0	0	2	8	48	96%
9.	The learning video based on stop motion animation support students to learn easily and be fun.	0	0	0	2	8	48	96%
10.	The learning video based on stop motion animation is able to increase students' knowledge of English vocabulary.	0	0	0	2	8	48	96%
Average								95%

In table 4.15 it could be seen that students' responses to the used of learning video based on stop motion animation have met the positive criteria with an average percentage of 95%, so it

could be concluded that the learning media developed has met the criteria for effectiveness and could be used.

2) Large Group Try Out

After doing a small group try out, the next step was to do a large group try out. The large group try out was carried out in class VII-I at SMP Negeri 1 Ngantru Tulungagung. This was done to determine the effectiveness of learning video based on the stop motion animation that was developed. At the end of the lesson, students were given a questionnaire and post-test questions to assess the effectiveness of learning video based on stop motion animation. The results of the analysis student response questionnaire (large group try out) were presented in the table below.

Table 4. 16 Students Response Questionnaire (Large Group Try Out)

No	Indicators	Answer Frequency					Total Score	Percentage (%)
		1	2	3	4	5		
1.	The display of learning videos based on stop motion animation is interesting.	1	0	1	14	24	180	90%
2.	The presentation of material and pictures in learning videos based on stop motion	1	1	2	9	27	179	89,5%

Continued

Continuation

	animation is very good.							
3.	The material presented in the learning video based on stop motion animation is very clear and easy to understand.	0	1	3	7	29	184	92%
4.	This learning video based on stop motion animation is able to encourage students' curiosity about the learning material.	1	0	3	12	24	177	88,5%
5.	The learning video based on stop motion animation is able to motivate students to learn.	1	1	2	11	25	177	88,5%
6.	The learning video based on stop motion animation makes the learning process not boring.	0	0	2	9	29	187	93,5%
7.	The ease of the use of learning video based on stop motion animation in learning English vocabulary.	0	0	3	13	24	180	90%
8.	With the learning video based on stop motion animation, it makes easier for students to learn independently.	1	1	3	10	25	177	88,5%

Continued

Continuation

9.	The learning video based on stop motion animation support students to learn easily and be fun.	0	1	2	12	25	180	90%
10.	The learning video based on stop motion animation is able to increase students' knowledge of English vocabulary.	0	0	4	8	28	184	92%
Average								90,25%

Based on table 4.16, student responses using learning video based on stop motion animation have included positive criteria with an average of 90,25%. This meant that learning videos based on stop motion animation have met the effectiveness criteria.

e. Evaluation

1) Measuring the Results of Pre-Test and Post-Test Score Completeness

Researcher used several methods of data collection. Some of the methods used include observation, interview, questionnaire, and test. Researcher get data by giving pre-test and post-test to students. The pre-test questions were given before the learning activity started. Table 4.17 presented the results of the pre-test and table 4.18 the results of the post-test.

Table 4. 17 The Results of Pre-Test Score

No	Name	Pre-Test	KKM	Category
1.	AAS	60	70	Failed
2.	AASE	65	70	Failed
3.	ADU	50	70	Failed
4.	APR	70	70	Failed
5.	AD	45	70	Failed
6.	AKA	55	70	Failed
7.	ADR	50	70	Failed
8.	AIR	55	70	Failed
9.	AMN	35	70	Failed
10.	CNHW	60	70	Failed
11.	DVP	60	70	Failed
12.	DFR	55	70	Failed
13.	DDAP	70	70	Passed
14.	DMP	40	70	Failed
15.	ECW	60	70	Failed
16.	EASP	70	70	Passed
17.	GPW	40	70	Failed
18.	HP	55	70	Failed
19.	JMM	40	70	Failed
20.	MBE	40	70	Failed
21.	MEFA	60	70	Failed
22.	MR	55	70	Failed
23.	MAA	65	70	Failed
24.	MMT	75	70	Passed
25.	MWAP	60	70	Failed
26.	MRA	45	70	Failed
27.	NLP	60	70	Failed
28.	NZ	75	70	Passed
29.	RZA	80	70	Passed
30.	RAA	70	70	Passed
31.	RPJP	65	70	Failed
32.	RW	55	70	Failed
33.	RAP	65	70	Failed
34.	RA	45	70	Failed
35.	SAA	60	70	Failed
36.	SDA	70	70	Passed
37.	SUJ	60	70	Failed
38.	VNS	55	70	Failed
39.	VSR	65	70	Failed
40.	YNL	45	70	Failed

Based on the analysis in table 4.17, the average pre-test score was 57,62.

Table 4. 18 The Results of Post-Test Score

No	Name	Post-Test	KKM	Category
1.	AAS	65	70	Failed
2.	AASE	70	70	Passed
3.	ADU	60	70	Failed
4.	APR	75	70	Passed
5.	AD	50	70	Failed
6.	AKA	60	70	Failed
7.	ADR	55	70	Failed
8.	AIR	60	70	Failed
9.	AMN	45	70	Failed
10.	CNHW	70	70	Passed
11.	DVP	65	70	Failed
12.	DFR	60	70	Failed
13.	DDAP	75	70	Passed
14.	DMP	45	70	Failed
15.	ECW	65	70	Failed
16.	EASP	75	70	Passed
17.	GPW	50	70	Failed
18.	HP	60	70	Failed
19.	JMM	45	70	Failed
20.	MBE	50	70	Failed
21.	MEFA	80	70	Passed
22.	MR	75	70	Passed
23.	MAA	85	70	Passed
24.	MMT	90	70	Passed
25.	MWAP	85	70	Passed
26.	MRA	80	70	Passed
27.	NLP	90	70	Passed
28.	NZ	95	70	Passed
29.	RZA	100	70	Passed
30.	RAA	90	70	Passed
31.	RPJP	90	70	Passed
32.	RW	85	70	Passed
33.	RAP	90	70	Passed
34.	RA	80	70	Passed
35.	SAA	90	70	Passed
36.	SDA	95	70	Passed
37.	SUJ	85	70	Passed
38.	VNS	80	70	Passed
39.	VSR	85	70	Passed
40.	YNL	80	70	Passed

Based on the post-test results in table 4.18, it was found an increase in student learning outcomes. The average post-test

score was 73,25 it could be concluded that the value of the post-test was higher than the pre-test.

2) Measuring Students Performance Results in the Use of Learning Video Based on Stop Motion Animation

Learning video based on stop motion animation was introduced to students and used during learning. To determine the performance of students in the use of learning video based on stop motion animation was done by observation during the learning was taking place. In table 4.19, the results of observing student activities were presented. The data analysis was carried out by the researcher to determine the level of validity of learning video based on stop motion animation which was implemented in learning.

Table 4. 19 Results of Students Activities Observation

No	N	
	1	2
1.		
2.		
3.		✓
4.		
5.	✓	✓
6.		
7.		
8.	✓	
9.		✓
10.		
11.		
12.		
13.		✓
14.		
15.		

Continued

Continuation

16.	✓	
17.		
18.		✓
19.		
20.	✓	
21.		
22.		
23.		
24.	✓	
25.		
26.		✓
27.		
28.		
29.	✓	
30.		
31.		
32.	✓	
33.		
34.		
35.		
36.	✓	
37.		✓
38.		
39.		
40.	✓	
The number of students that asked questions	9	7
Asn	22,50%	17,50%
RAS	12,50%	
Criteria	Can be used with a little revision	

Based on table 4.19, questions about learning media were presented in column N1 and questions about the understanding of the material were presented in column N2. The results of the observations showed that the percentage of students who asked questions related to learning media was 22,50% and those related to material understanding was 17,50%. So, it could be concluded that the average percentage of students asking questions (RAS) was 12,50%. Based on the table of criteria

listed in chapter III, it could be concluded that learning videos based on stop motion animation could be used with a little revision.

3) Final Product Revision

After conducted a field group try out (product validity test, practicality test, and effectiveness test) of the developed learning media, then the researchers revised the learning media that had been tested. This final revision was based on the results of a questionnaire distributed to media experts, material experts, and English teachers. This final revision was also in accordance with the criticism and suggestions from expert judgment. The revision according to suggestions from expert judgment was reducing the size of the learning video and uploading the learning video on the YouTube Channel to make it easier for students to access. The final results of the developed learning media could be seen on the YouTube link presented in the appendices.

2. Results of Validity Testing

a. Construct Validation

According to Djaali and Pudji (2008), in determining construct validation on the instrument, it had to be studied theoretically through the concept of the variable to be measured, starting from the formulation of the construct, determining the dimensions and

indicators to the elaboration and the writing of instrument items. The following was a table of construct validation results from 3 validators consisted of media expert validators, material expert validators, and English teachers.

Table 4. 20 The Results of Construct Validation from Validator

No	Validators	Results
1.	Media Expert Validator	Could be used without revision
2.	Material Expert Validator	Could be used without revision
3.	English Teacher Validator	Could be used with a little revision

In table 4.20 above, the validator of media experts, Umdatul Khoirot, M.Pd., stated that the developed learning media could be used without revision. Furthermore, the material expert validator, Anindita Badiani, M.Pd., also stated that the developed learning media could be used without revision. Lastly, the English teacher, Ropi'atus Sholikhah, S.Pd., stated that the developed learning media could be used with a bit of revision. With these results, it could be concluded that the developed learning media could be used with a little bit of revision.

b. Results of Students' Activities Observation

Learning video based on stop motion animation was introduced to students and used during learning. To determine the performance of students in the used of learning video based on stop motion animation was done by observation during the learning was

taking place. In table 4.21, the results of observing student activities were presented. The data analysis was carried out by the researcher to determine the level of validity of learning video based on stop motion animation which was implemented in learning.

Table 4. 21 Results of Students' Activities Observation

No	N	
	1	2
1.		
2.		
3.		✓
4.		
5.	✓	✓
6.		
7.		
8.	✓	
9.		✓
10.		
11.		
12.		
13.		✓
14.		
15.		
16.	✓	
17.		
18.		✓
19.		
20.	✓	
21.		
22.		
23.		
24.	✓	
25.		
26.		✓
27.		
28.		
29.	✓	
30.		
31.		
32.	✓	
33.		
34.		

Continued

Continuation

35.		
36.	✓	
37.		✓
38.		
39.		
40.	✓	
The number of students that asked questions	9	7
Asn	22,50%	17,50%
RAS	12,50%	
Criteria	Can be used with a little revision	

Based on table 4.21, questions about learning media were presented in column N1 and questions about the understanding of the material were presented in column N2. The results of the observations showed that the percentage of students who asked questions related to learning media was 22,50% and those related to material understanding was 17,50%. So, it could be concluded that the average percentage of students asking questions (RAS) was 12,50%. Based on the table of criteria listed in chapter III, it could be concluded that learning videos based on stop motion animation could be used with a little revision.

Based on the indicators in table 4.21, the RAS value was 12,50%, which meant that learning video based on stop motion animation was in the very good category and the results of student activities observation showed that learning video based on stop motion animation could be used with a little revision. Therefore,

learning videos based on stop motion animation could be categorized as valid.

3. Results of Practicality Testing

Practicality testing was carried out to know whether this learning video based on stop motion animation has met the practical category or not. The product developed could be called practical if it had indicators: 1) The results of the student responses stated that the product was practical to used, 2) The validator stated that the product needs a bit of revision or without revision, 3) The tabulation of the test evaluation results met the good or very good criteria, and 4) The results of data analysis on student observation sheets showed that the product was suitable for use with a bit revision or without revision.

a. Results of Students' Response Questionnaire

The practicality of the learning media developed could be seen from the student response questionnaire to the use of learning video based on stop motion animation. The results of the student response questionnaire were presented in the following table.

Table 4. 22 Results of Students Response Questionnaire

No	Indicators	Answer Frequency					Total Score	Percentage (%)
		1	2	3	4	5		
1.	The display of learning videos based on stop motion animation is interesting.	1	0	1	14	24	180	90%
2.	The presentation of material and	1	1	2	9	27	179	89, 5%

Continued

Continuation

	pictures in learning videos based on stop motion animation is very good.							
3.	The material presented in the learning video based on stop motion animation is very clear and easy to understand.	0	1	3	7	29	184	92%
4.	This learning video based on stop motion animation is able to encourage students' curiosity about the learning material.	1	0	3	12	24	177	88,5%
5.	The learning video based on stop motion animation is able to motivate students to learn.	1	1	2	11	25	177	88,5%
6.	The learning video based on stop motion animation makes the learning process not boring.	0	0	2	9	29	187	93,5%
7.	The ease of the use of learning video based on stop motion animation in learning English vocabulary.	0	0	3	13	24	180	90%
8.	With the learning video based on stop motion animation, it makes easier for students to learn independently.	1	1	3	10	25	177	88,5%
9.	The learning video based on	0	1	2	12	25	180	90%

Continued

Continuation

	stop motion animation support students to learn easily and be fun.							
10.	The learning video based on stop motion animation is able to increase students' knowledge of English vocabulary.	0	0	4	8	28	184	92%
Average								90,25%

Based on table 4.22 above, the results of student responses got a percentage of 90,25% which meant that the learning media developed was practical and could be used in learning.

b. Results of Observation with Practice Questions

The researcher used several methods of data collection. Some of the methods used include observation, interview, questionnaire, and test. The researchers got data by giving pre-test and post-test to students. The pre-test questions were given before the learning activity started. Table 4.23 presented the results of the pre-test and table 4.24 the results of the post-test.

Table 4. 23 The Results of Pre-Test Score

No	Name	Pre-Test	KKM	Category
1.	AAS	60	70	Failed
2.	AASE	65	70	Failed
3.	ADU	50	70	Failed
4.	APR	70	70	Failed
5.	AD	45	70	Failed
6.	AKA	55	70	Failed
7.	ADR	50	70	Failed
8.	AIR	55	70	Failed
9.	AMN	35	70	Failed
10.	CNHW	60	70	Failed
11.	DVP	60	70	Failed
12.	DFR	55	70	Failed
13.	DDAP	70	70	Passed
14.	DMP	40	70	Failed
15.	ECW	60	70	Failed
16.	EASP	70	70	Passed
17.	GPW	40	70	Failed
18.	HP	55	70	Failed
19.	JMM	40	70	Failed
20.	MBE	40	70	Failed
21.	MEFA	60	70	Failed
22.	MR	55	70	Failed
23.	MAA	65	70	Failed
24.	MMT	75	70	Passed
25.	MWAP	60	70	Failed
26.	MRA	45	70	Failed
27.	NLP	60	70	Failed
28.	NZ	75	70	Passed
29.	RZA	80	70	Passed
30.	RAA	70	70	Passed
31.	RPJP	65	70	Failed
32.	RW	55	70	Failed
33.	RAP	65	70	Failed
34.	RA	45	70	Failed
35.	SAA	60	70	Failed
36.	SDA	70	70	Passed
37.	SUJ	60	70	Failed
38.	VNS	55	70	Failed
39.	VSR	65	70	Failed
40.	YNL	45	70	Failed

Based on the analysis in table 4.23, the average pre-test score was 57,62.

Table 4. 24 The results of Post-Test Score

No	Name	Post-Test	KKM	Category
1.	AAS	65	70	Failed
2.	AASE	70	70	Passed
3.	ADU	60	70	Failed
4.	APR	75	70	Passed
5.	AD	50	70	Failed
6.	AKA	60	70	Failed
7.	ADR	55	70	Failed
8.	AIR	60	70	Failed
9.	AMN	45	70	Failed
10.	CNHW	70	70	Passed
11.	DVP	65	70	Failed
12.	DFR	60	70	Failed
13.	DDAP	75	70	Passed
14.	DMP	45	70	Failed
15.	ECW	65	70	Failed
16.	EASP	75	70	Passed
17.	GPW	50	70	Failed
18.	HP	60	70	Failed
19.	JMM	45	70	Failed
20.	MBE	50	70	Failed
21.	MEFA	80	70	Passed
22.	MR	75	70	Passed
23.	MAA	85	70	Passed
24.	MMT	90	70	Passed
25.	MWAP	85	70	Passed
26.	MRA	80	70	Passed
27.	NLP	90	70	Passed
28.	NZ	95	70	Passed
29.	RZA	100	70	Passed
30.	RAA	90	70	Passed
31.	RPJP	90	70	Passed
32.	RW	85	70	Passed
33.	RAP	90	70	Passed
34.	RA	80	70	Passed
35.	SAA	90	70	Passed
36.	SDA	95	70	Passed
37.	SUJ	85	70	Passed
38.	VNS	80	70	Passed
39.	VSR	85	70	Passed

Continued

Continuation

40.	YNL	80	70	Passed
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Based on the post-test results in table 4.24, it was found an increase in student learning outcomes. The average post-test score was 73,25 it could be concluded that the value of the post-test was higher than the pre-test.

4. Results of Effectiveness Testing

In effectiveness testing, the developed learning media after try out and getting pre-test and post-test scores, then the data obtained were analyzed using IBM SPSS Statistics 26 for the windows application program.

a. Normality Testing

Normality testing was conducted to know whether the research data was normally distributed or not. If the data has been normally distributed, then the T-test was carried out. The data used in the normality test was the result of the scores from the pre-test and post-test conducted in class VII-I. The following table presented the pre-test and post-test scores for classes VII-I.

Table 4. 25 Pre-Test and Post-Test Scores

No	Name	Pre-Test	Post-Test
1.	Achmad Affan Sutejo	60	65
2.	Ahmad Aris Setiawan	65	70
3.	Alung Dimas Urbaningrum	50	60
4.	Alvina Putri Rahmawati	70	75
5.	Angga Darmawan	45	50

Continued

Continuation

6.	Angger Kusuma Ayudhia	55	60
7.	Anya Dila Rosita	50	55
8.	Ardaffa Irsyad Razaan	55	60
9.	Ayu Maulidia Nuraini	35	45
10.	Claresta Nasywa Hibi Wijaya	60	70
11.	Deswara Vino Praditya	60	65
12.	Dhika Febry Rahman	55	60
13.	Dianto Dimas Aditya Putra	70	75
14.	Dwi Melina Puspitasari	40	45
15.	Endang Citra Wati	60	65
16.	Evan Anggara Setiawan Putra	70	75
17.	Galang Pandu Wujaya	40	50
18.	Happy Prasetyo	55	60
19.	Jesica Madelin Matar	40	45
20.	Meitera Bunga Enjelita	40	50
21.	Melania Echa Findi Andika	60	80
22.	Mohamad Rafi	55	75
23.	Muhamad Ariya Ardiansyah	65	85
24.	Muhamad Mansur Tohir	75	90
25.	Muhamad Wafa Arga Putra	60	85
26.	Muhammad Rizky Adhitya	45	80
27.	Novita Lutfi Pranasya	60	90
28.	Nurhaziqah Zahira	75	95
29.	Rafael Zidan Alvino	80	100
30.	Rangga Adhi Ananda	70	90
31.	Rangga Praditya Jatmico Putra	65	90
32.	Revan Wibisono	55	85
33.	Reyga Amanda Putri	65	90
34.	Rika Adelya	45	80
35.	Shandy Aurrelya Azzahra	60	90
36.	Susana Dwi Anjani	70	95
37.	Syifa Us Jahro	60	85
38.	Vanesya Nasrifa Syaifullah	55	80
39.	Viola Shinta Rahmadhani	65	85
40.	Yesica Novita Lestari	45	80

Then table 4.26 below presented the output of normality testing for class VII-I using the Kolmogorov-Smirnov formulas.

Table 4. 26 Results of Normality Testing**One-Sample Kolmogorov-Smirnov Test**

		Pre-Test	Post-Test
N		40	40
Normal Parameters ^{a,b}	Mean	57.63	73.25
	Std. Deviation	11.035	15.793
Most Extreme Differences	Absolute	.135	.140
	Positive	.099	.099
	Negative	-.135	-.140
Test Statistic		.135	.140
Asymp. Sig. (2-tailed)		.063 ^c	.045 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on table 4.26, it showed that the Asymp. Sig. (2-tailed), with pre-test score was 0,063 and the post-test score was 0,045, which meant the value was $> 0,05$. So, it could be concluded that the results of normality testing stated that the data was normally distributed.

b. Hypothesis Testing

After doing normality testing and getting data that was normally distributed, the next step was to do hypothesis testing. Hypothesis testing was carried out to find out the difference in the improvement of students' abilities and understanding during learning activities and after using learning video based on stop motion animation. The pre-test and post-test scores were presented in table 4.27 below.

Table 4. 27 Results of Pre-Test and Post-Test Score of VII-I

No	Name	Pre-Test	Post-Test
1.	Achmad Affan Sutejo	60	65
2.	Ahmad Aris Setiawan	65	70
3.	Alung Dimas Urbaningrum	50	60
4.	Alvina Putri Rahmawati	70	75
5.	Angga Darmawan	45	50
6.	Angger Kusuma Ayudhia	55	60
7.	Anyu Dila Rosita	50	55
8.	Ardaffa Irsyad Razaan	55	60
9.	Ayu Maulidia Nuraini	35	45
10.	Claresta Nasywa Hibi Wijaya	60	70
11.	Deswara Vino Praditya	60	65
12.	Dhika Febry Rahman	55	60
13.	Dianto Dimas Aditya Putra	70	75
14.	Dwi Melina Puspitasari	40	45
15.	Endang Citra Wati	60	65
16.	Evan Anggara Setiawan Putra	70	75
17.	Galang Pandu Wujaya	40	50
18.	Happy Prasetyo	55	60
19.	Jesica Madelin Matar	40	45
20.	Meitera Bunga Enjelita	40	50
21.	Melania Echa Findi Andika	60	80
22.	Mohamad Rafi	55	75
23.	Muhamad Ariya Ardiansyah	65	85
24.	Muhamad Mansur Tohir	75	90
25.	Muhamad Wafa Arga Putra	60	85
26.	Muhammad Rizky Adhitya	45	80
27.	Novita Lutfi Pranasya	60	90
28.	Nurhaziqah Zahira	75	95
29.	Rafael Zidan Alvino	80	100
30.	Rangga Adhi Ananda	70	90
31.	Rangga Praditya Jatmico Putra	65	90
32.	Revan Wibisono	55	85
33.	Reyga Amanda Putri	65	90
34.	Rika Adelya	45	80
35.	Shandy Aurrelya Azzahra	60	90
36.	Susana Dwi Anjani	70	95
37.	Syifa Us Jahro	60	85
38.	Vanesyia Nasrifa Syaifullah	55	80
39.	Viola Shinta Rahmadhani	65	85
40.	Yesica Novita Lestari	45	80

The results of hypothesis testing were presented in table 4.28 below.

Table 4. 28 Results of Hypothesis Testing

		Paired Samples Test							
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		T	Df	Sig. (2-tailed)
Pair					Lower	Upper			
1	Pre-Test Post-Test	-15.625	10.451	1.652	-18.967	-12.283	-9.456	39	.000

Based on table 4.28, the value of Sig (2-tailed) was 0,000, which meant $< 0,05$, it could be concluded that there was a difference in the average student learning outcomes between before and after using learning video based on stop motion animation.

5. Learning Process

Research and development referred to the process of investigation and experimentation that was useful in creating a new nuanced product or improving a product that has been created previously (Triwidiyanti, 2019: 89). Learning using the product of learning video based on stop motion animation was carried out in class VII-I of SMP Negeri 1 Ngantru. The researcher conducted research during the Covid-19 pandemic so that the learning that took place was carried out using blended learning (online and offline) in 2 meetings. The details were as follows:

- a. The first meeting was to distribute student need questionnaires, deliver materials (without developed learning media), and conducted pre-tests.
- b. The second meeting was to deliver the material (using the developed learning media), conducted a post-test, and distributed student response questionnaires.

The learning process took place actively and interactively by conducting discussions and asking questions about the material being taught. Based on the learning procedures that have been carried out by researcher, the learning media developed have succeeded in meeting the objectives of making learning media and could be declared capable of being used as learning media. This could be seen from the post-test scores which has increased significantly. Increasing the student scores could certainly be a benchmark that learning video based on stop motion animation was able to teach vocabulary and improve students' vocabulary learning outcomes. In addition, learning videos based on stop motion animation could facilitate researchers and educators in the process of delivering material to students. This happened because learning media could help and make it easier for students to understand the material.