CHAPTER IV

FINDINGS AND DISCUSSION

This study aimed to develop an educational video for sixth-grade elementary school students using project-based learning in Buleleng regency. The researcher used the D&D model by Richey & Klein (2007), which consists of four phases, analysis, design, development, and evaluation. This model is used due to the researcher only developed the prototype of the educational videos. Moreover, some instruments are used in this research to collect the data. The data were about teachers' and students' experience in English language teaching and learning, the video's blueprint, expert judgment, and students' questionnaire.

4.1 Findings

4.1.1 Development of Video

4.1.1.1 Analysis
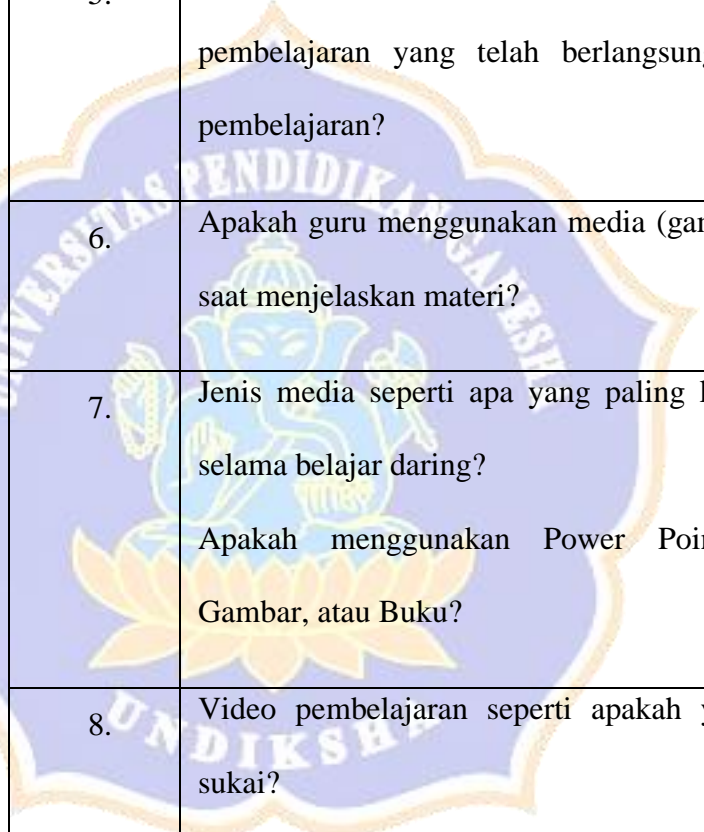
1. Interview Result

This interview guide was made to collect the data in the analysis phase. The interview guide was made for interviewing teachers and sixth-grade students of elementary schools in the Buleleng regency. The interview guide contained several questions related to teachers' and students' experience in using teaching media in the online classroom. Moreover, the interview guide also led the researcher to determine teachers' teaching styles and students' English learning needs. The interview guide used by the researcher can be seen in Table 4.1 and 4.2.

Table 4. 1 Teachers' Interview Guide

No.	Pertanyaan
1.	Apakah Ibu/Bapak pernah menggunakan media pembelajaran di kelas?
2.	Media pembelajaran apa saja yang pernah Ibu/Bapak gunakan di kelas?
3.	Apakah Ibu/Bapak pernah menggunakan video sebagai media pembelajaran?
4.	Bagaimana penerapan media pembelajaran di kelas?
5.	Bagaimana kriteria video pembelajaran yang sesuai dengan karakteristik siswa?
6.	Bagaimana penerapan penggunaan ice breaker di dalam kelas?
7.	Seberapa sering Ibu/Bapak memberikan pekerjaan rumah?
8.	Jenis pekerjaan rumah apa saja yang biasanya diberikan kepada siswa?

Table 4. 2 Students' Interview Guide

No	Pertanyaan
1.	Apakah kalian pernah bernyanyi atau bermain sebelum memulai pembelajaran?

2.	Bagaimana guru memulai pembelajaran di kelas?
3.	Apakah guru memberikan kalian kesempatan untuk bertanya dan menjawab pertanyaan di kelas?
4.	Apakah guru memberikan penjelasan materi sebelum memberikan PR (pekerjaan rumah)?
5.	Apakah guru membahas ulang aktivitas pembelajaran yang telah berlangsung di akhir pembelajaran?
6.	Apakah guru menggunakan media (gambar/video) saat menjelaskan materi?
7.	Jenis media seperti apa yang paling kamu sukai selama belajar daring? Apakah menggunakan Power Point, Video, Gambar, atau Buku?
8.	Video pembelajaran seperti apakah yang kamu sukai? Menggunakan video animasi saja / video penjelasan guru / kombinasi anatara keduanya?

The teacher responded to the questions from table 4.1 Teachers' Interview Guide above based on the activities they carried out in the school. The first question was about teachers' experience. The result

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was teachers have already used media in teaching English for 6th-grade elementary school. The second question was about the kind of teaching media that the teachers had used. The teachers said that they used various teaching media, in case during school from home they used video and PowerPoint for teaching English. Concerning the third question about teacher's experience in using video as teaching media had responded by the teachers from the previous question. The next question is about the implementation of the teaching media in the online classroom. This question showed teachers' learning style in teaching English. The teachers' average answers were only given to the media and asked the students to analyze them.

Then, the next one was questioned about teachers' opinion about the characteristic of an educational video which met with students' preferences. The teachers responded by stating that good media is a media that could attract students' attention. To make it, the last three questions from the interview guide were about the use of ice breakers and the homework given in the online classroom. The teachers responded that the implementation of ice breaker was not implemented well in the class. Some teachers rarely implemented the ice breaker, and some of them were not implemented it. It is because of the difficulty found when implemented the ice breaker during online learning. Then, the questions about assigning homework and how many times the teachers gave the homework showed that teachers frequently gave the students homework after the learning activity. The

teachers usually gave the teachers the homework to answer the worksheet, memorize dialogue, and make a list of vocabularies.

On the other hand, the students' responded to several questions from Table 4.2 Students' Interview Guide based on their experience while learning English during the pandemic era. The first and the second question were mainly about the opening of learning activities in the online classroom. Mostly, the students responded that the teacher only greets the students at the opening of the classroom. Most students experienced singing and dancing session since the learning activities. The third question was about students' chance to give and answer some questions related to English learning. The students responded that the teacher rarely gave it since they only read the material and finished the assignments.

The fourth question about the teacher and student's homework resulted in the teachers rarely giving some explanation before giving homework. The students also added that the teacher only gave the paper or PowerPoint about a related topic and asked the students to read it and finish the homework. The fifth question was about reviewing session. The students replied that the teachers gave some reviews at the end of the learning session sometimes. The sixth question was about asking the students whether the teacher had used any teaching media. The students responded that the teacher had used teaching media such as pictures and video related to the topic.

The seventh question was about students' preference towards the teaching media used in the learning activity. The researcher provided some examples of teaching media to make the students choose their preferences. There are PowerPoint, video, pictures, and books. The students' responses were then more likely to choose the video to be used as the teaching media. It is because the video contained much engaging content that made students enjoyed the learning.

The last question was about students' preference toward how the video delivered the learning material, in this case. The researcher also gave some choices for the students to be chosen. The choices were a video that contained animation only, a video that showed a tutor who explained or delivered the material, or the combination of both items (animation and tutor). The students preferred the combination of both items (animation and tutor) from the interview's result.

2. Document Study

Another instrument that is used in the analysis phase is the document study. The document that being study in this research was the syllabus of sixth-grade elementary schools. The syllabus contained ten topics of English material for sixth-grade elementary school. In developing the educational video for teaching English, especially sixth-grade students in elementary school, the researcher cooperated with the other researchers. Those ten topics were equally divided for three researchers that developed educational videos for sixth-grade elementary school.

Those topics were developed by three kinds of learning models, which were Project-based learning, Discovery-based learning, and Problem-based learning. Each researcher only developed two topics from the syllabus. This division also supported by the establishment of Keputusan Menteri Pendidikan Dan Kebudayaan Nomor 719/P/2020 Tentang Pedoman Pelaksanaan Kurikulum Pada Satuan Pendidikan Dalam Kondisi Khusus (2020). This new rule establishes that the curriculum needs to being emphasized in a certain way to make the learning activity more simple.

In line with Surat Edaran Nomor 15 Tahun 2020 Tentang Pedoman Penyelenggaran Belajar Dari Rumah Dalam Masa Darurat Penyebaran Corona Virus Disease (COVID-19) (2020) which stated that school from home was strengthen during the pandemic. Therefore, the researcher developed teaching media that simple, meaningful, and enjoyable for students who school from home.

Because the researcher developed educational videos using Project-based learning, the chosen topics can be appropriately implemented using project-based learning syntaxes. The first topic was a family introduction, and the second topic was food and drink.

After choosing the appropriate topics for implementing project-based learning, the researcher started to study each syllabus topic. The analysis using this document study was figured out some items in the syllabus: the basic competency, learning material, learning activities,

indicator, and assessment instrument. Those items were being considered to design and develop the educational video for the next phase.

1.1.1.2 Design

After analyzing the interview results and document study, the researcher started to design the educational videos in the blueprint. The researcher designed the videos based on the analysis phases' results and project-based learning in English teaching for sixth-grade elementary school. In designing the blueprint, the researcher conducted some consultation with the supervisors. This consultation helped the researcher considered to make good video content.

1. **Blueprint**

Creating the educational video's blueprints was the first thing to do by the researcher in the designing phase. The blueprint was designed based on the analysis phase's results. Another thing that being the consideration in designing the blueprint was young learners' preferences. Moreover, the blueprint also used project-based learning stages to design the learning material and activities from the beginning to the end. The researcher made two kinds of blueprint since each researcher got two materials as the video content. The blueprint was divided into several parts, essential competencies, indicators, learning objectives, and learning activities.

a. **Basic Competencies**

The fundamental competencies are the first thing that the researchers designed in making the blueprint. Those competencies

covered four based skills in the English language: listening, speaking, reading, and writing. In this stage, the researcher obtained the essential competencies for each skill from the result of the analysis phase. The result here was collected by doing a document study toward the syllabus for sixth-grade elementary school. The first blueprint was about Family and Introduction, which has seven essential competencies.

For listening skills, the essential competencies were listening to someone's identity and information about family relations. The speaking skill's basic competency was talking about the family's identity and its relation. Understanding a text or dialog about family introduction, reading aloud, and understanding family descriptions were essential reading skills. Last, the basic writing skill competency was about writing a short paragraph about the family introduction.

Then, the second blueprint used Food and Drink as the content of the video. In line with the first blueprint's essential competencies, the study's competencies result in the syllabus for sixth-grade elementary school. The fundamental competencies for the second blueprint consisted of four essential competencies. For listening skills, the basic competency was about statements and orders relating to food and drink. The speaking skill's basic competency that students had to achieve was talking about food and drink. Then, understanding the text's content in the form of reading a dialogue being a basic reading competency. Last, writing sentences about food and drink became the basic competency for the writing skill.

Those basic competencies would be based on designing the rest of the blueprint. The closest relation with these basic competencies was designing the indicator of each essential skill. The fundamental competencies played a role as the primary standard to design the indicators of each blueprint.

b. Indicators

The researcher made the indicators to synthesize the basic competency that had been made before. It led the researcher to be more specific in designing the learning activities in the blueprint. The indicators also helped the researcher design the video's content by indicating which item or information the students need to identify or analyze to fulfill the essential competencies.

The indicators for both blueprints were classified to each essential English skill. For the first blueprint, the listening skill indicators identified words related to family and words related to someone's identity, such as name, job, hobby, and physical appearance. Speaking skill indicators were about to introduce family member by talking about the name of each family member, family relative, number of a family member, the hobby of each family member, job of each family member. Moreover, the other indicators were about asking a question about each family member's name, family relative, number of a family member, the hobbies of each family member, and each family member's job. Then, reading skill indicators were about finding specific information in a text or video about a family introduction. Finally, writing a

paragraph about family introduction was the indicator for writing skill in this Family Introduction video.

The second blueprint was also made based on the essential competencies for each skill. In the listening section, the researcher made two kinds of indicators: identify the meaning of words about food and drink that are conveyed in a spoken way. Then, the second indicator for listening skill was carrying out orders related to food and drink. For the speaking skill, the indicators were about asking for something and the amount regarding food and drink, declaring the amount of food and drink (countable and uncountable noun), asking for the taste of food and drink, the expression being thankful, and its response. Next, the reading skill had one indicator, which asked the students to find information about food and drink in a dialogue. Last, the students were asked to write a statement about food and drink by the interrogative sentence given as the writing skill indicator in the second blueprint.

The indicators that had been made being the consideration in designing the learning objectives. The learning objectives can be said as fulfilled to achieve if all the indicators applied in the learning activities and students capable enough to master the material based on the indicators that made.

c. **Learning Objectives**

The learning objectives were made in purpose to set the criteria in which way students achieved the learning material given in the video.

For the first blueprint the researcher set the learning objectives as follows:

1. Students could identify the vocabularies of family in a video
2. Students could know how to introduce their family members
3. Students could ask and give information about their family members (hobby, job, name, physical description)
4. Students comprehend a reading text about family introduction
5. Students write their own family introduction paragraph based on their family tree.

Then, for the second video, the learning objectives are:

1. Students could identify the vocabularies of food and drink in a song
2. Students could know about countable and uncountable noun
3. Students could ask and give information about food and drink

Each learning objectives were represented each indicator as well as each basic English skill that the students need to achieved.

d. Learning Activities

The learning activities were made based on the essential competencies, indicators, and learning objectives. However, project-based learning as the learning model is used in designing the steps of the learning activities from the beginning until the end. In project-based learning, several stages determine the project, design a plan

for the project, create a schedule, monitor the students and the progress of the project, assess the outcome, and evaluate the learning experience. Each blueprint designed all those stages into appropriate learning activities, stimulating students to explore something by doing a project, but still based on students' needs and the indicators.

For the first blueprint, several learning activities belong to determine project stage. Those activities were the opening of the learning activity using a video about the family introduction and reviewed the video after watched it. The teacher then stated the learning objectives to make students know what they need to achieve. After that, the researcher designed a game that asked the students to fulfill the dialogue's blank space based on the video's audio.

This game was to make students know how to ask and give information about someone's family. The second stage of project-based learning was to design a project plan. In this stage, the video was designed to show the tutorial and the project's example using some videos or pictures.

The third syntax has created a schedule. In the first blueprint, this syntax only explained the project's due date, which is a week. Followed by the next stage, in monitoring the students and the project's progress, the video was designed to ask the students to send a picture of when they made the project and the project itself in

assessing the outcome, the fifth stage, the researcher designed to explain the rubric assessment as the project's quality standard. The last syntax in the first blueprint was to evaluate the learning experience. In this stage, the blueprint was designed. The tutor in the video gave some evaluation by reviewing the material. The researcher gave some questions, and students could answer them correctly.

The second blueprint had a similar design from the second syntax, which was designing the project until the last syntax, which evaluated the learning experience. However, the second blueprint had a different way of determining the project, the first syntax of project-based learning, due to both blueprints' different topic. In determining the project, the second blueprint was designed by having a song about food and drink as the opening. Then, there was a session where the tutor in the video gave some review from the song before by asking what kind of food and drink that mentioned in the video. After that, the tutor stated the learning objectives. In enriching students' vocabulary about food and drink, the researcher used a countable and uncountable noun as the learning material explained by the tutor in determining the project.

Moreover, there was a session to learn about asking and responding when someone wants to order some foods and drinks. Another video was designed to give students visual examples of ordering and responding to someone who wants to order food and

drink. Games as the exercise about food and drink were also provided in the design of determining the project. Thus the boredom that the students might experience can be avoided.

Those learning activities were being the content of the video. Many texts, images, animation, audio, songs were used to support the video to become more interactive enough. Thus, the students found the video attractive enough to be watched and they could learn and having fun at the same time. All of the learning activities were delivered using English as the language used in the video. Full English videos were made in purpose to make students familiar and easier to adjust to this kind of foreign language.

1. Final Blueprint

The expert judgments reviewed those blueprints that the researcher had made. The results of the reviews were the final blueprints that are used to develop the video. Both of the blueprints were only got revision on the grammatical. For instance, the expert judges revised the word "giving" into "give." The experts suggested changing all the first words in each instruction to become action verbs. Moreover, there was a revision that asked the researcher to emphasize the vocabularies used in the video.

For instance, in the second blueprint, the expert judges asked the researcher not to use 'pork' in dialogue videos to enrich students' vocabularies. Since the last part, the researcher did not use or mentioned 'pork' as a kind of food. The experts suggested using the same vocabulary

over and over again. Thus the students could memorize the vocabularies used in the video.

4.1.1.3 Develop

The next step following the design of the blueprint by the researcher was prototype product development. In this research, the researcher was the video editor in the development of educational videos based on project-based learning for sixth-grade elementary school .

1. **Developing the Educational Video**

After the researcher revised the blueprint that being judged by the expert judgment, the researcher and the video editor started to make the educational videos based on the final blueprints. The editor developed educational videos that can be accessed online by both students and teachers.

a. **Video Recording**

Before doing some editing in the video, the researcher started the development by recording the video first. In this case, the researcher also played a role as the English tutor in both videos. The video was recording by using Canon 60D. Other kinds of stuff used in recording the video were tripod from Excell Vipod 200 as the camera holder and stabilizer while recording the video. Then, blue and green screens were used as the background of the setting. Those had the purpose of making the editor

easier to change the background into some attractive images that support the learned topic.

The video was recorded part by part based on the stages in the blueprints. Moreover, the tutor has followed the script that being made in the blueprint. The script helped the tutor to be more on time when explained the material. In the recording section, the video and audio were recorded separately. The audio was recorded by using clip audio that connected to a smartphone recorder. It helped the editor to avoid much audio editing since the use of clip audio could reduce the noises and echoes from the audio due to the setting environment.

b. The Tutorial of Prototype Product Development

The product development was started after all the video had finished recorded. The development used some applications as the tools to edit the videos. The applications used were Adobe Premiere Pro 2019 and InShot. The tutorial in using those apps for editing the videos would be presented as follows:

1. Removing the background

The first thing to do in developing the videos was to remove the background. The editor started to edit the background. Thus, it can be replaced with various images as the background. The application used to remove the background was Adobe Premiere Pro 2019. The steps can be seen as follows:
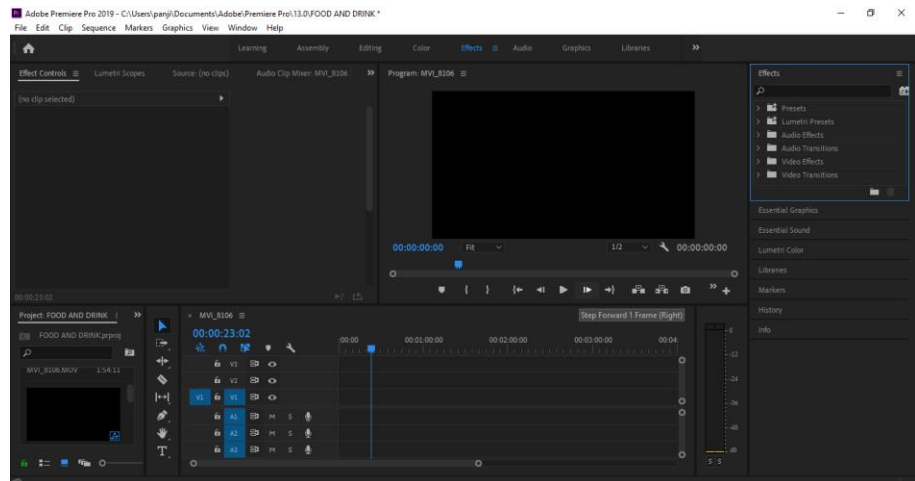
Figure 4. 1 Adobe Premiere Pro 2019's Workspace

a.   The editor was imported a video one by one to the Adobe Premiere Pro 2019.

All the videos must be edited separately due to each video had different quality of

lighting. (Import File : Ctrl + I)
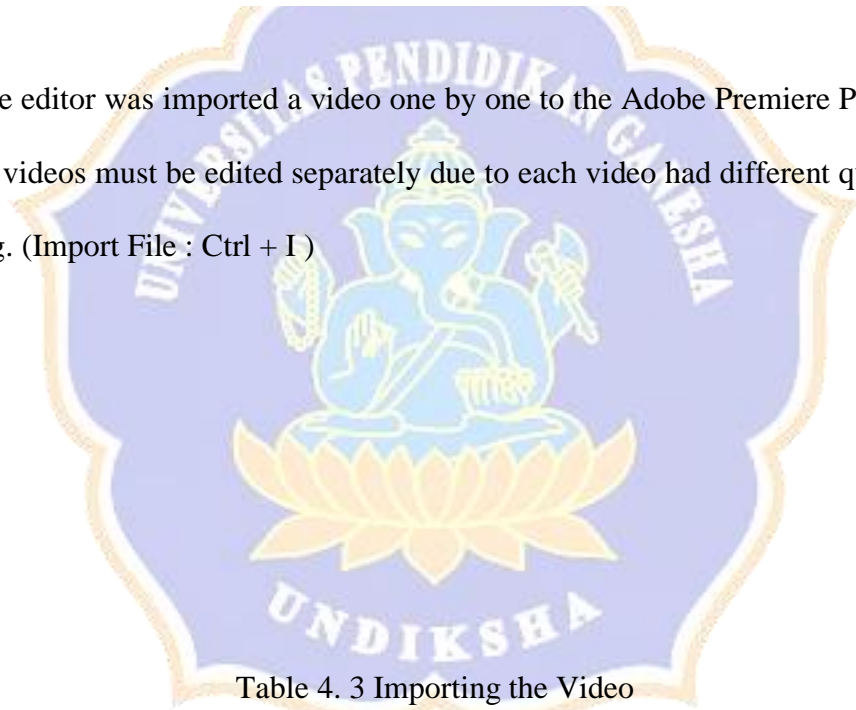
Table 4. 3 Importing the Video

FIRST VIDEO	SECOND VIDEO
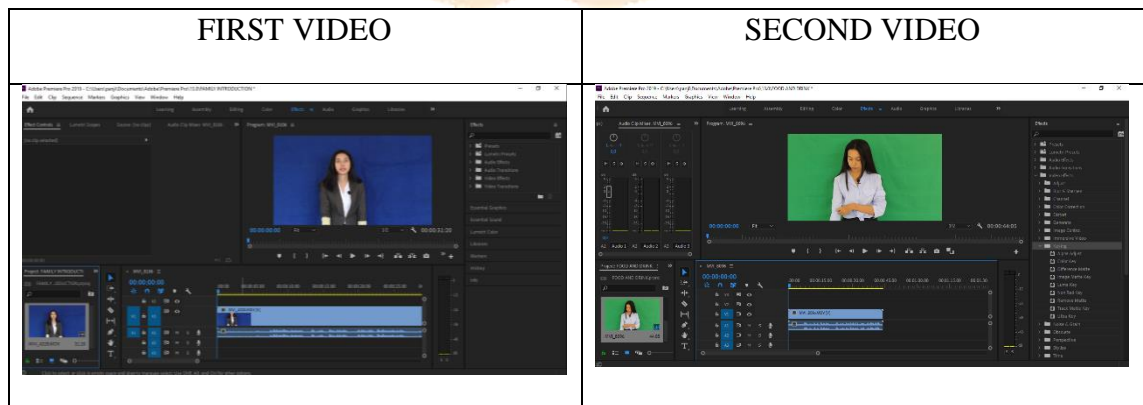
b. After importing the video, the editor unlinked the video from its audio. This step

would help the editor to put another picture as background. (Right click the video

> Unlink)

Table 4. 4 Unlinking The Video and The Audio

FIRST VIDEO	SECOND VIDEO
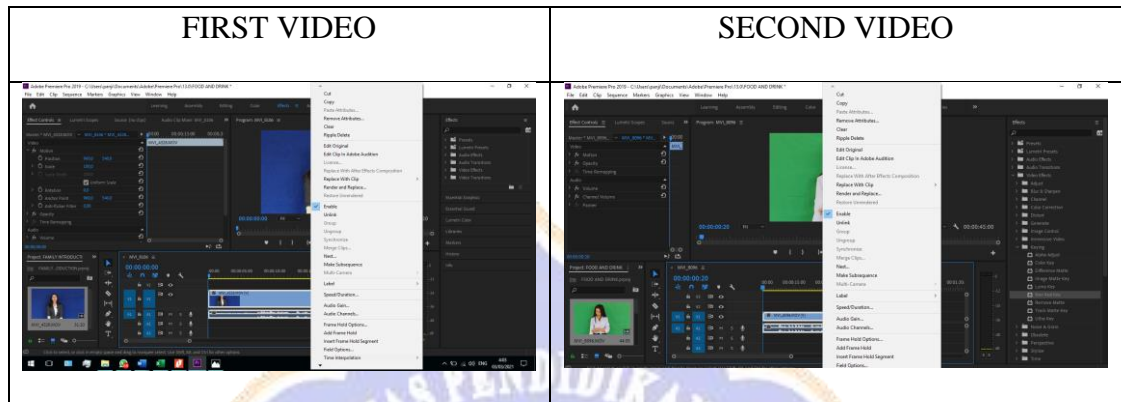
c. Move the video file to the upper track (V2). This step had purpose to enable

inserting the background picture right below the video.

Table 4. 5 Moving The Video's Track

FIRST VIDEO	SECOND VIDEO
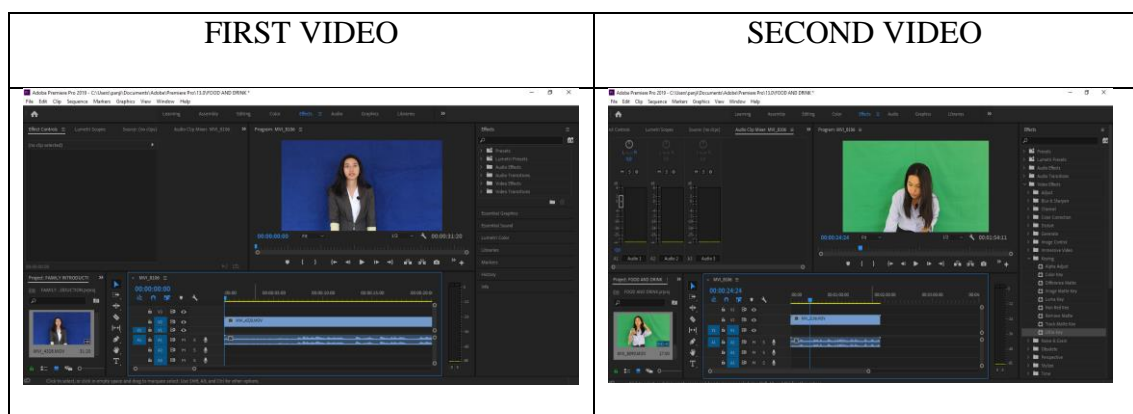
d. Import the picture that used as the background of the video. Then, put the picture

below the video file. (Import : Ctrl + I)

Table 4. 6 Importing The Picture Background

FIRST VIDEO	SECOND VIDEO
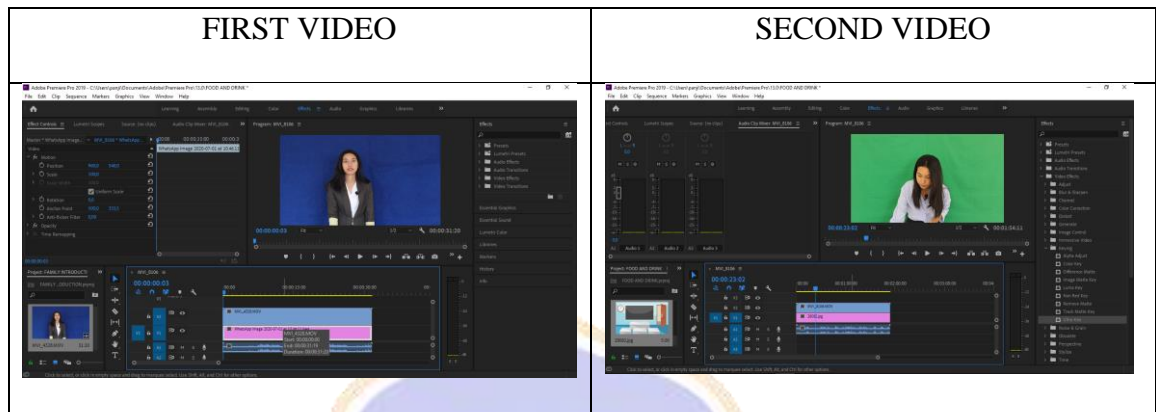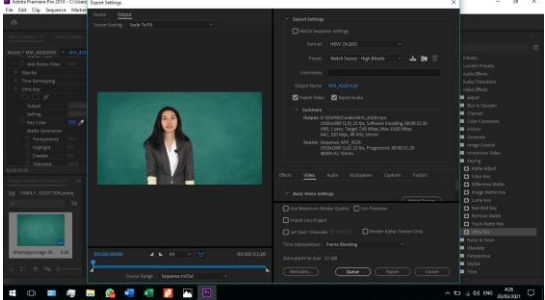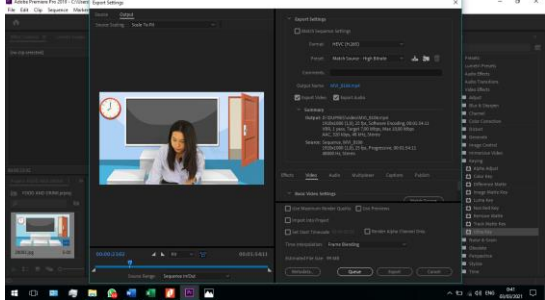
e. Then, the editor used video effect namely "Ultra Key" from Keying Folder;

Effects > Video Effects > Keying > Ultra Key

Table 4. 7 Change The Background Using The Picture Chosen

FIRST VIDEO	SECOND VIDEO
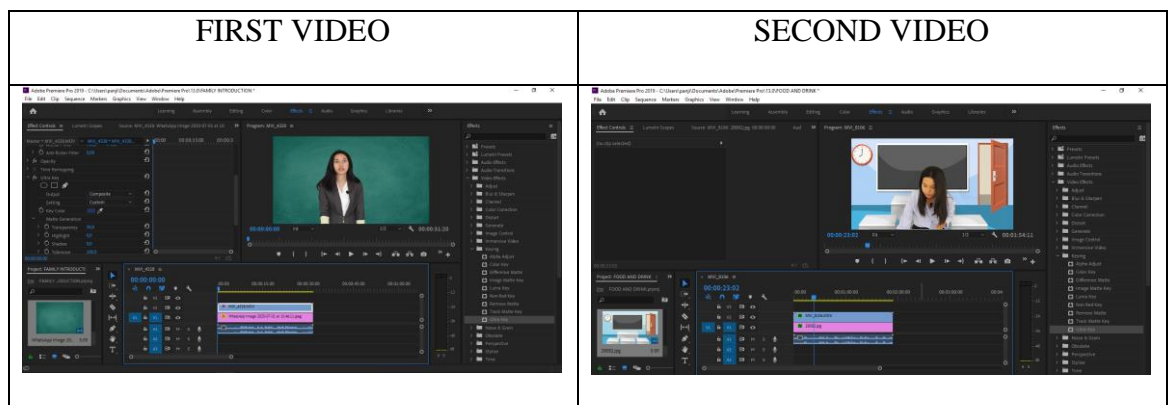
f. Last, the editor exported the video. (Export: Ctrl + M ; Format: HEVC (H.265))

Table 4. 8 Exporting The Video

FIRST VIDEO	SECOND VIDEO

2. Inserting Audio Visual Material

The second stage of developing the video was inserting the audio and visual material into the video that the background has been edited. In this stage, the editor using InShot as the application. The editor used InShot instead of the other application because it is easier to use and has many features that could help the editor make the video look attractive. For instance, it has a lot of fonts, stickers, and animation. The steps of inserting the audio-visual material using InShot can be seen as follows.:

a. Splash Interface Screen

Before developing the video's primary content, the editor made the splash interface screen or the opening video. It usually affects students' first impression of the video. The opening was developed by showing the logo of the Ganesha University of Education and English Language Education. The logo could be seen in Figure 4.2 and Figure 4.3. Then, the learning model is used in the video, which is project-based learning, and the topic material of each video. The tutorial in making the splash interface screen can be seen as follows:
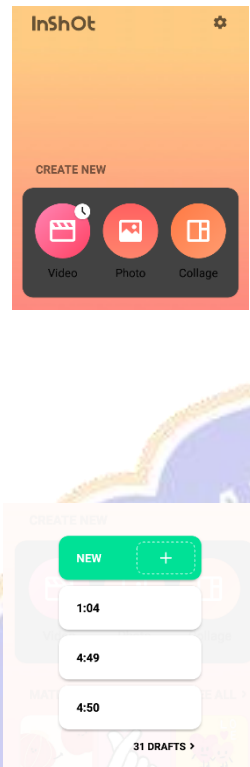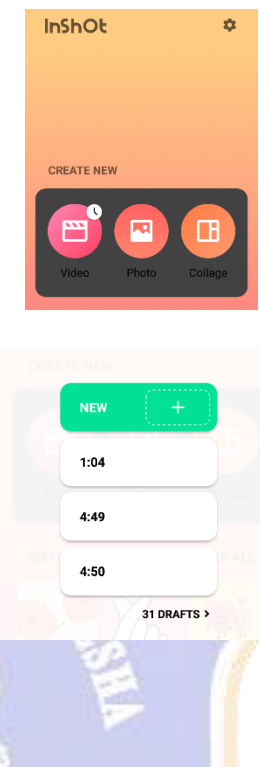
Figure 4. 2 The Logo of Ganesha University of Education

Figure 4. 3 The Logo of English Language Education

1. First, the editor was opened the InShot.application. Then, the editor select "Video" feature and click "New"

Table 4. 9 Display Inshot Application

FIRST VIDEO	SECOND VIDEO

2. After that, the editor imported a picture as the background..

Table 4. 10 Importing the Picture

FIRST VIDEO	SECOND VIDEO
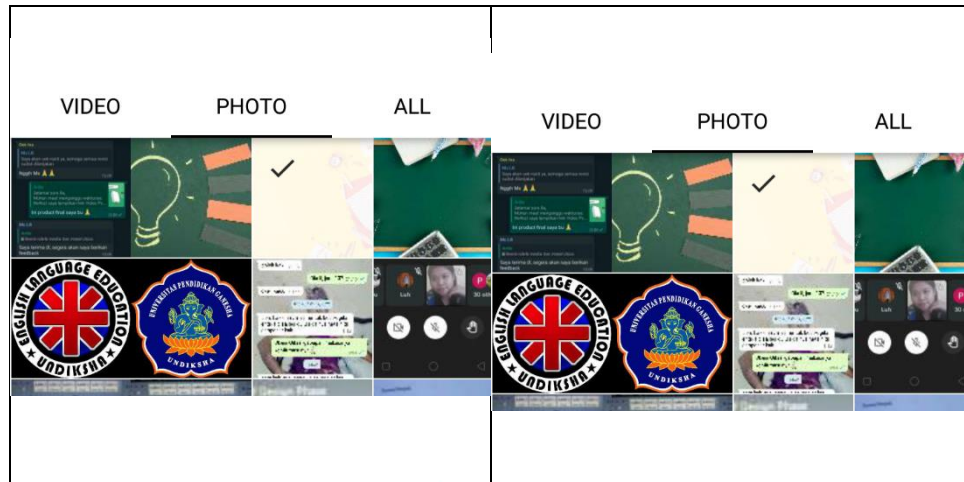
3. Third, the editor inserted the logo, pictures, and text on the background chosen. After choosing the background, the editor started to insert the visual material by clicking the "Sticker" menu. Then, click the "+" symbol to insert the picture chosen. The editor was adjusting the size of the picture. Thus the picture fits with the background. For inserting the text, the editor clicked the "Text" menu. Next, the editor was writing the text "Proudly Presents," "Learning English using Project Based Learning for Sixth Grade Elementary School," "Topic: Family Introduction" for the first video, and "Topic: Food and Drink" for the second video.

Table 4. 11 Steps Inserting the Visual Material

FIRST VIDEO	SECOND VIDEO
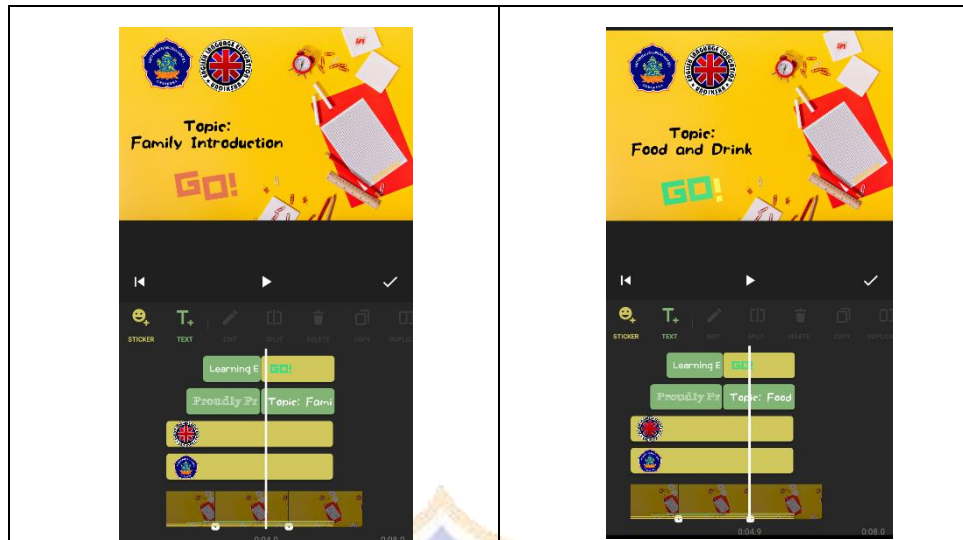
b. Inserting picture and animations for the video content

   After the splash interface screen has been made, the editor continued

to develop the video recording. The development were about inserting some

pictures, images, audio, and animations to the video that had been recorded

before. The tutorial for this stage can be seen as follows:

1. The editor inserting the video to InShot.

Table 4. 12 Inserting Video
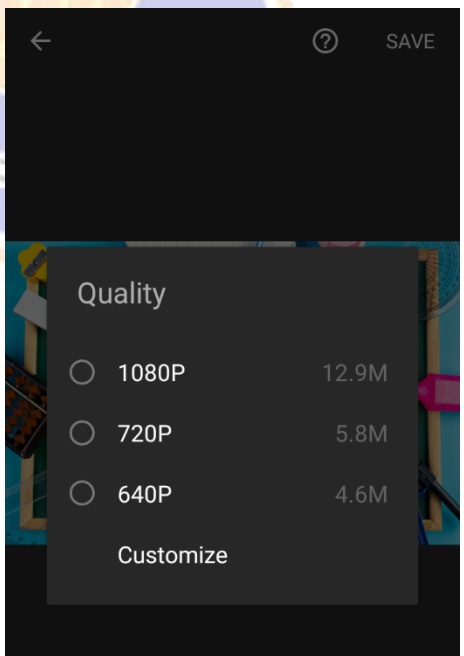
FIRST VIDEO	SECOND VIDEO
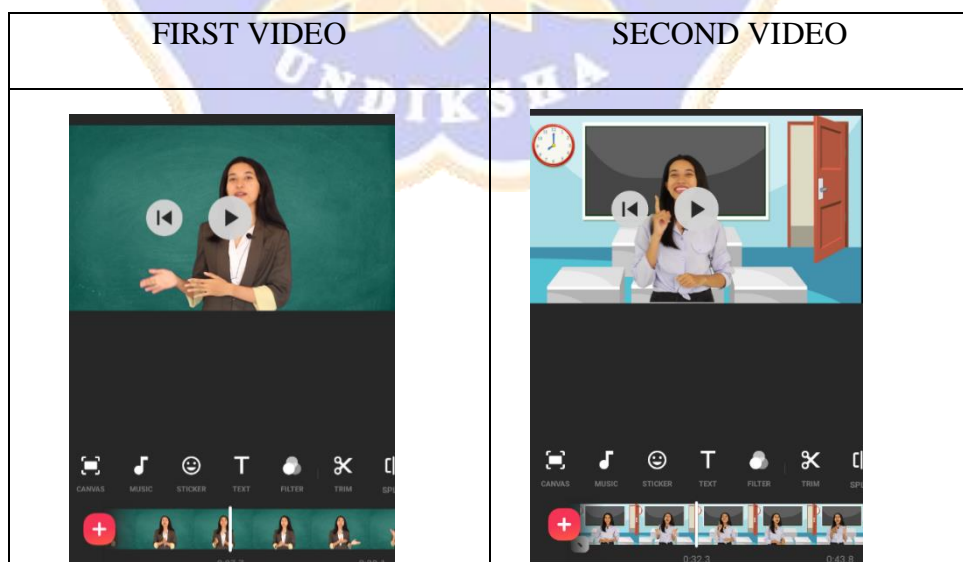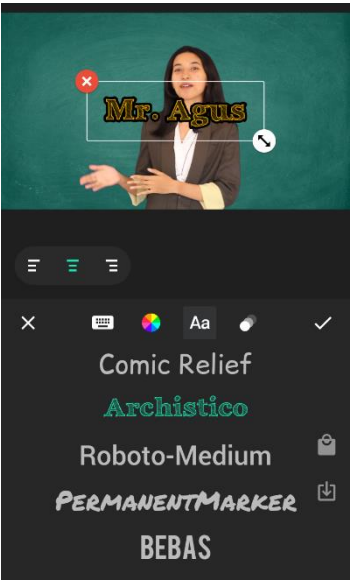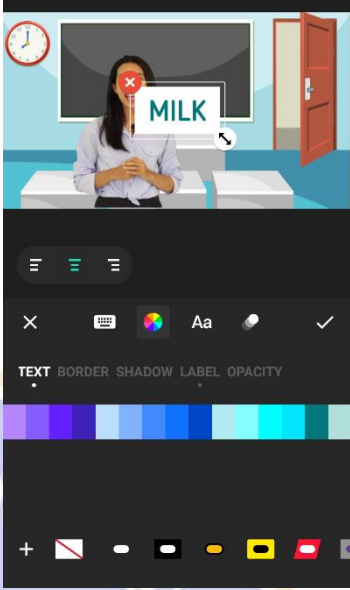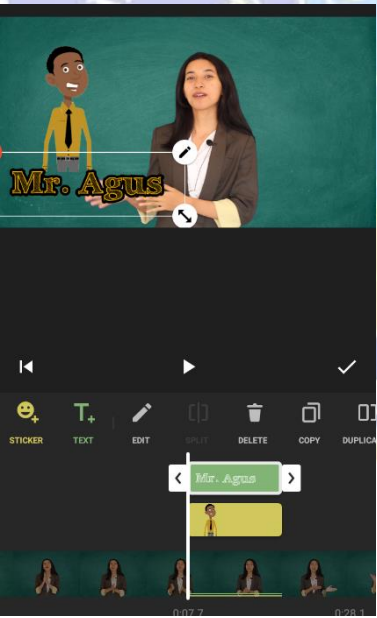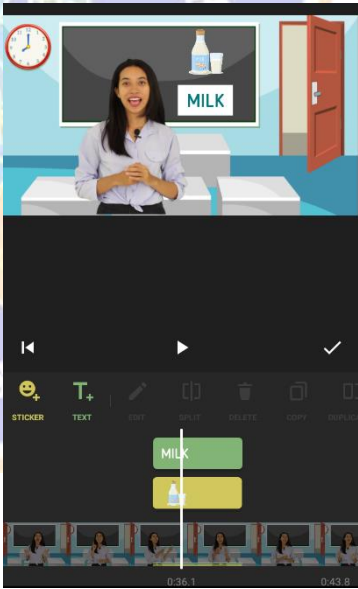
2. To insert the images, the editor clicked the "Sticker" menu. Then, imported the picture from the device file by clicking the "+" symbol. The picture would be automatically appeared on the video, thus the editor adjusted the picture to fit it with the background. The last step is clicking the "√" symbol after finish inserting the picture.

Table 4. 13 Inserting Images

FIRST VIDEO	SECOND VIDEO
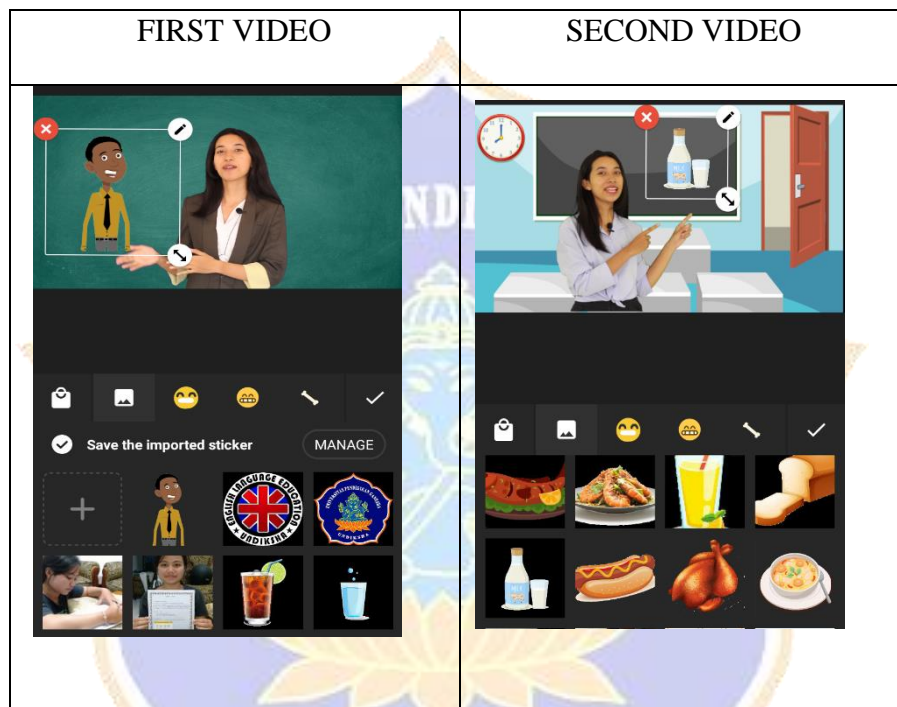
3. After importing the picture, the editor started to insert the text related to the content and the picture. By clicking "Text" menu right after finish imported the pictures. Then, click the keyboard menu to insert the text. Next, choosing the appropriate font and colour to make it more attractive. The last step is clicking the "√" symbol after finish inserting the text.
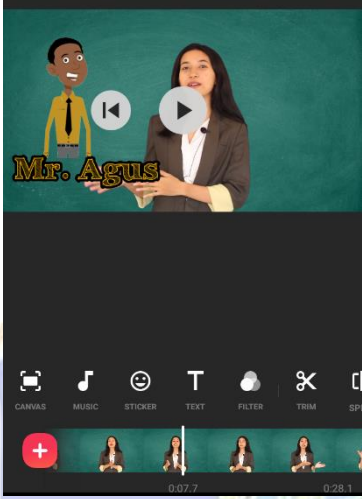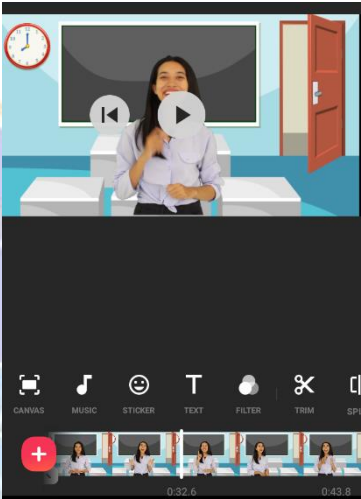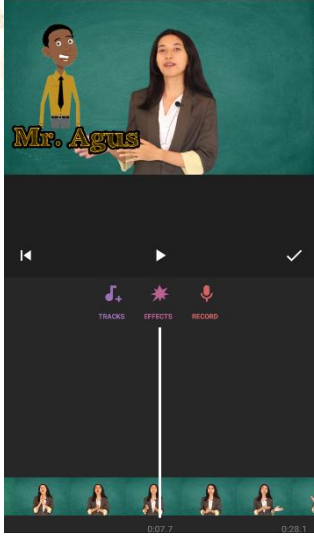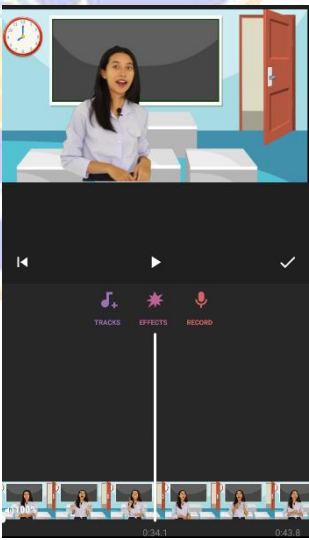
Table 4. 14 Inserting the Text

FIRST VIDEO	SECOND VIDEO

4. Last, the editor imports the audio as the back sound of the video. The editor

used "Music" menu in InShot to imported the audio and adjusted the audio

from both video and the back sound, thus the voice of the tutor would not

be smaller than the backwound or vice versa. In this step, the main thing that the editor needs to be considered is volume balance between the video and audio.

Table 4. 15 Inserting Audio

FIRST VIDEO	SECOND VIDEO
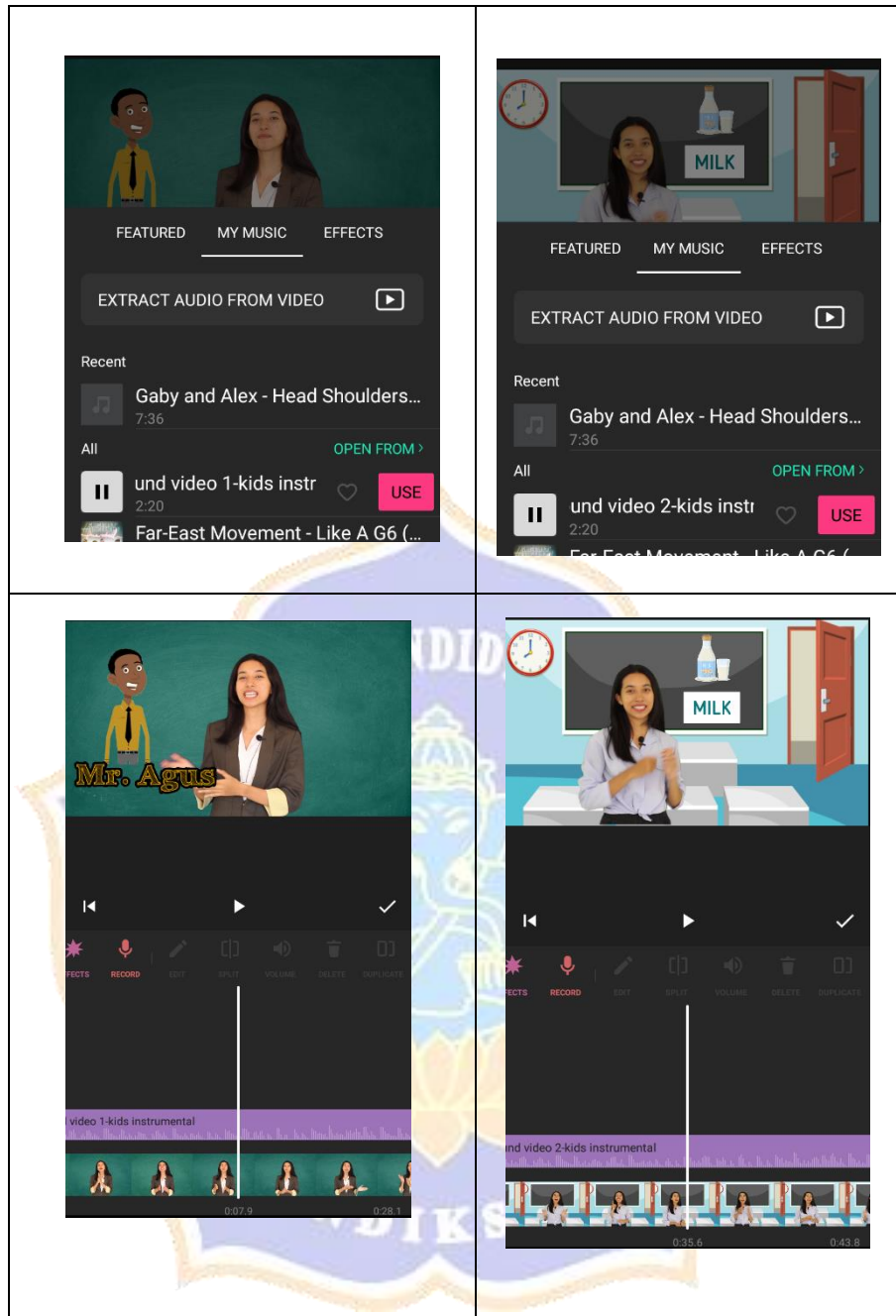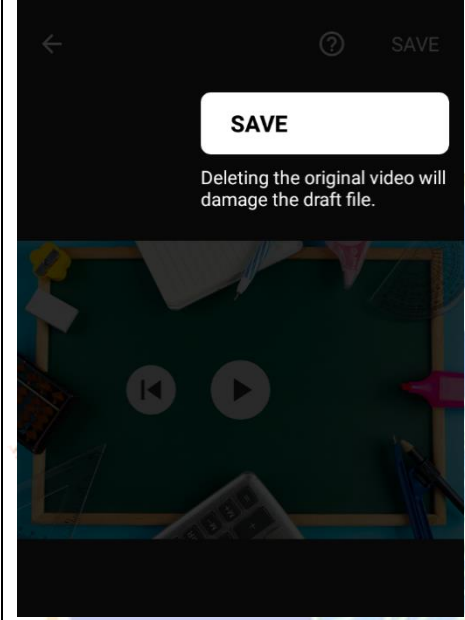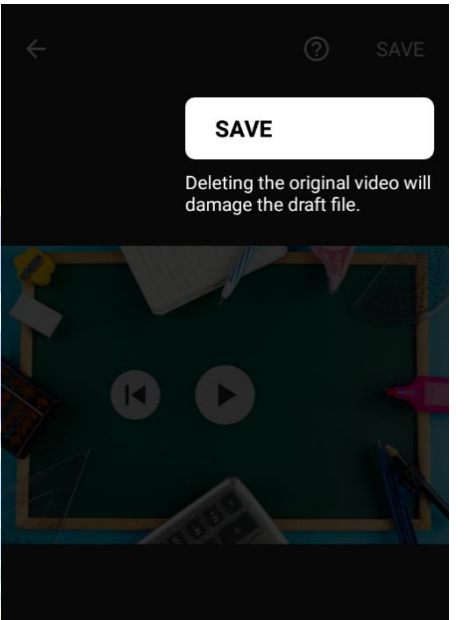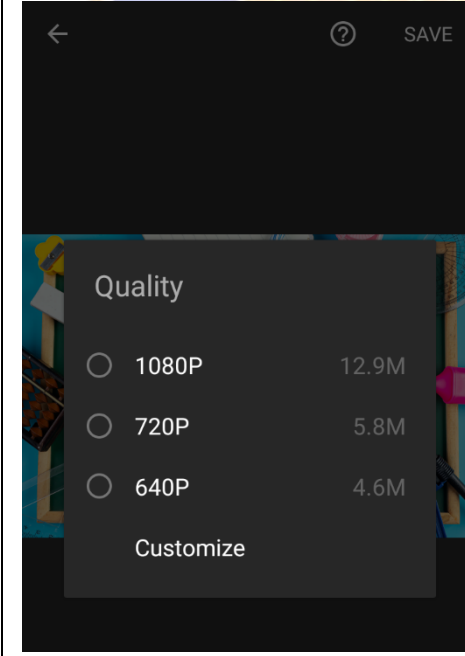
5. Exporting the video

   After inserting all the audio and visual materials to the video, the editor would begin to exporting the video. The video that being exported would being revised by the expert judgment. In order to export the video, the editor still using the InShot as the application. The editor pressed "Save" menu in

the InShot, then chose the video resolution and the videos are being exported.

Table 4. 16 Exporting Video

FIRST VIDEO	SECOND VIDEO
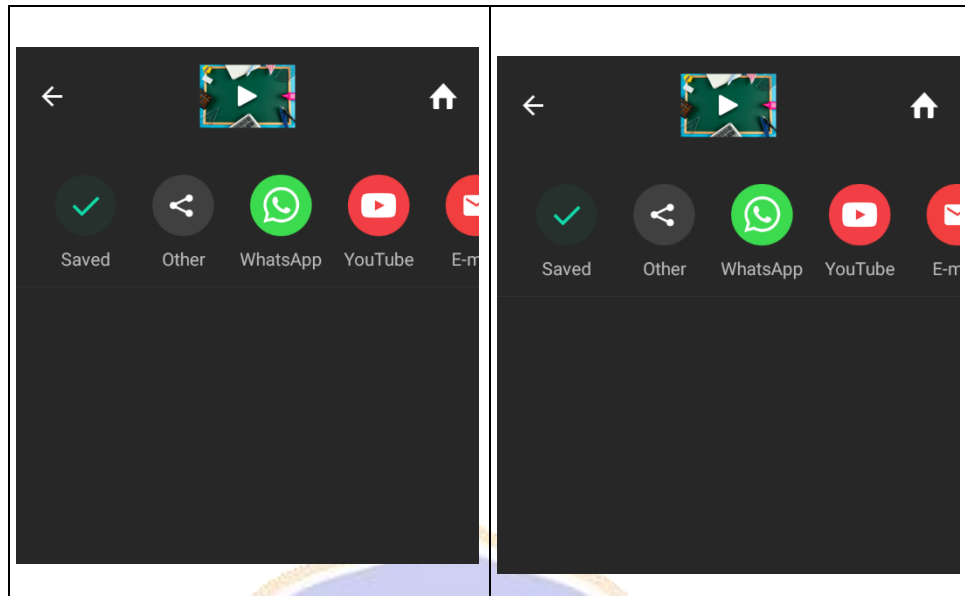
1. Prototype Product Before and After Revision

There was some part of the videos that is revised by the experts' judgment. In the first video, which talks about 'Family Introduction,' the experts revised the exercise's animation. The experts suggested that the answer list and the question list should be in a different color. Thus the students would be more accessible and attracted to the content of the exercise and could differ which one is the answer and which one is the question. Moreover, the experts also found out that the questions in Question and Answer about family introduction using 5W+1H need to be revised. The revision was about the questions that need to be in proper order, such as from the easier one to the complex one—starting from who question until what question and lastly by how question.

The experts also gave the second video prototype that delivered material about food and drinks some corrections and suggestions. The experts suggested consistency of singular or plural phrases in the word "Countable Noun and Uncountable Noun." Other than that, the experts also suggested consistency

when using the distractor in the exercise—moreover, the revision of the second video also about completing the explanation. Thus, the students would understand the meaning of the pictures displayed and explain it in the video. The rest of the revision was about some mistakes in the audio editor; thus, some words are repeated twice.

Table 4. 17 Before and After Revision (1st Video)

BEFORE REVISION	AFTER REVISION

Table 4. 18 Before and After Revision (2nd Video)

BEFORE REVISION	AFTER REVISION
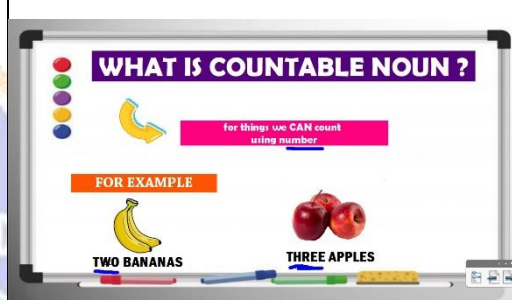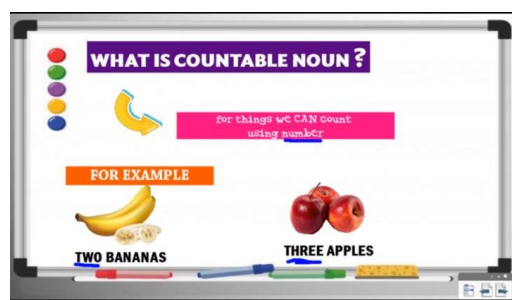
2. Expert Judgement

After the researcher done the revision of the video, the expert judgment rubric was given to the education experts for being evaluate. The first expert judgment rubric was filled by Prof. Dr. Putu Kerti Nitiasih, M.A. , the second rubric was filled by Luh Gd Rahayu Budiarta, S.Pd., M.Pd , and the third one was filled by Ni Luh Putu Era Adnyayanti, S.Pd., M.Pd. After the experts done evaluated the prototype, the researcher measured the result of the judgment by using a formula that being adapted from Nurkancana & Sunartana (1992) as a guidance. The details of the formula was presented in Table 4.19.

Table 4. 19 Formula adapted from Nurkancana & Sunartana (1992)

Score	Criteria
$X \geq M_i + 1.5\ sdi$	Excellent Media
$M_i + 0.5\ sdi \leq X < M_i + 1.5\ sdi$	Good Media

M*i* - 0.5 *sdi* ≤ X < M*i* + 0.5 *sdi*	Average media
M*i* - 1.5 *sdi* ≤ X < M*i* - 0.5 *sdi*	Below Average Media
X < M*i* - 1.5 *sdi*	Poor media

Notes:

$M i = \frac{1}{2}$ (Score Max + Score Min)

$Sd i = \frac{1}{3}$ (Mi)

M*i* = the Ideal Mean

Sd*i* = the Standard of Deviation

x = the score of the expert

46 items were provided in the expert judgment rubric that used by the researcher. The score of the rubric was represented by the comparison criteria. The maximum score was 5 meanwhile the minimum score was 1. The total maximum score for this rubric was 230 and for the minimum score was 46.

For measurement, the researcher needed to find out the value of M*i* and Sd*i* of this rubric. It was obtained by using the formula:

$M i = \frac{1}{2}$ (Score Max + Score Min)

$Sd i = \frac{1}{3}$ (M*i)*

For Mi value, the researcher added the total maximum and minimum score for this rubric.

Mi = 1⁄2 (230 + 46)

Mi = 138

After that, the value of Sdi could be formulated as follow:

Sdi = 1⁄3 (138)

Sdi = 46

After the researcher found the value of Mi and Sdi, those value would be inputed in order to determine the criteria of the product. In the formula, there were 5 categories given, they were excellent media, good media, average media, below average media, poor media. The formula for each category was described as follows:

1. Excellent Media

    $X \geq M i + 1.5 \, Sd i$

    $X \geq 138 + 1.5 \, (46)$

    $X \geq 138 + 69$

    $X \geq 207$

2. Good Media

    $M i + 0.5 \, Sd i \leq X < M i + 1.5 Sd i$

    $138 + 0.5 \, (46) \leq X < 138 + 1.5 \, (46)$

    $138 + 23 \leq X < 138 + 69$

$161 \leq X < 207$

3. Average Media

$Mi - 0.5\ Sdi \leq X < Mi + 0.5\ Sdi$

$138 - 0.5\ (46) \leq X < 138 + 0.5\ (46)$

$138 - 23 \leq X < 138 + 23$

$115 \leq X < 161$

4. Below Average Media

$Mi - 1.5\ Sdi \leq X < Mi - 0.5\ Sdi$

$138 - 1.5\ (46) \leq X < 138 - 0.5\ (46)$

$138 - 69 \leq X < 138 - 23$

$69 \leq X < 115$

5. Poor Media

$X < Mi - 1.5\ Sdi$

$X < 138 - 1.5\ (46)$

$X < 138 - 69$

$X < 69$

Table 4. 20 The Categories in Rating the Material in the Prototype of Educational Video

Score	Criteria
$X \geq 207$	Excellent Media
$161 \leq X < 207$	Good Media

$115 \leq X < 161$	Average Media
$69 \leq X < 115$	Below Average Media
$X < 69$	Poor Media
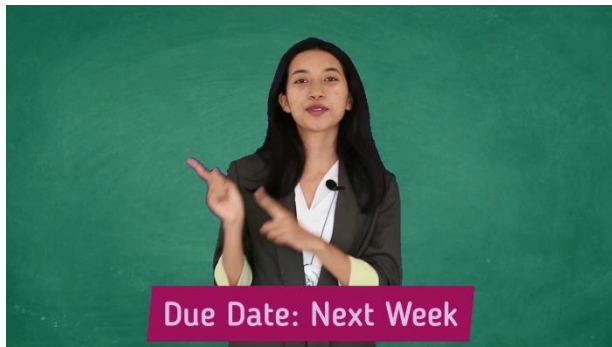
Based on the result of the expert judgment rubrics, the researcher found that the total score given by the first expert were 224 and 225 for the first and second video. Then, the second expert gave 222 for the first video and 220 as the total score for the second video. The third expert gave 216 as the total score for the first video and 223 for the second video. The final videos could be categorized as "Excellent Media".

3. **Final Prototype Product**

After finished a lot of revision and also being judged by the expert, the final prototype product of educational video using Project-Based Learning for sixth grade elementary school in Buleleng regency is already done. The detail of the prototype product could be seen in Table 4.21 and 4.22.

Table 4. 21 Final Prototype Product of The 1st Video (Family Introduction)

Descriptor	Layout
Splash Interface Screen	
Determine The Project	
Design A Plan For The Project	

Create A Schedule	Due Date: Next Week
Monitor The Students And The Progress Of The Project	Note: Send the picture and the project to your teacher (vie e-learning, WhatsApp group, or personal chat)
Assess The Outcome	

The image in the "Assess The Outcome" row shows a rubric table:

	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)
Following Project Directions	All directions are followed	Most directions are followed	Only few directions are followed	None of the directions are followed
Creativity	Draw varies character for each member in the family tree	Draw only two kind of characters for each member in the family tree	One character for each member in the family tree	Not drawing at all
Effort	Put additional ornament/pictures and submit the project on time	Put only few additional ornaments/pictures and submit the project on time	Put only few additional ornaments/pictures and submit the project late	Not put any ornaments/pictures and submit the project late
Grammar	Shows excellent understanding and application of grammar concepts in interogrative sentences	Shows great understanding of grammar concepts, but sentences lack full clarity and mastery of interogrative sentences	Shows basic understanding of grammar concepts, but fail to recognize and use proper structure to form interogrative sentences.	Shows insufficient understanding of interogrative sentences that conflict with unit goal expectations.
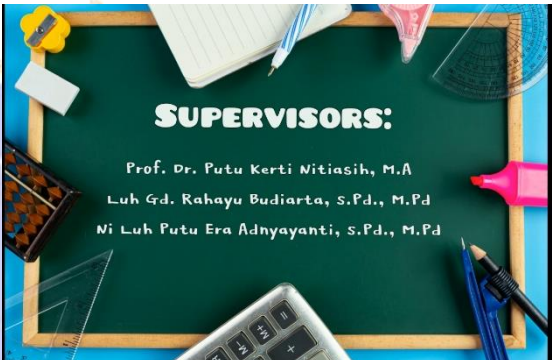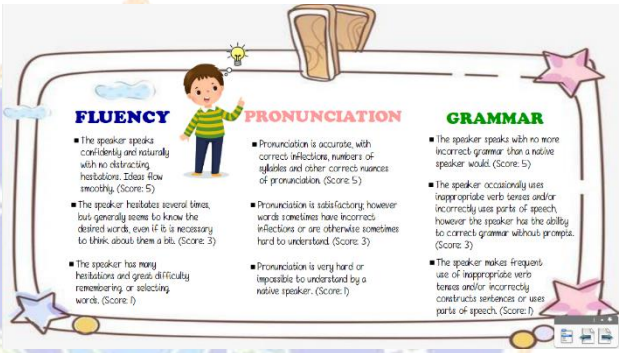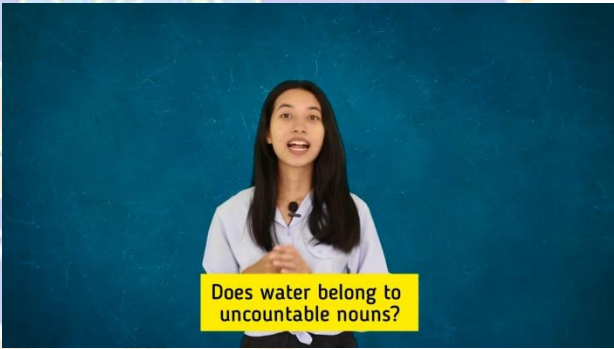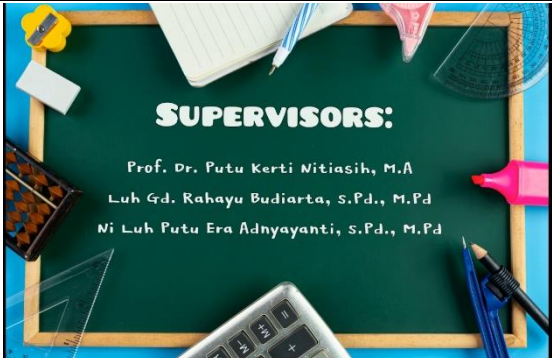
Evaluate The Learning Experience	
Closing	

Table 4. 22 Final Prototype Product of The 2nd Video (Food and Drink)

Descriptor	Layout
Splash Interface Screen	

Determine The Project	
Design A Plan For The Project	
Create A Schedule	

Monitor The Students And The Progress Of The Project	
Assess The Outcome	
Evaluate The Learning Experience	
Closing	

4.1.1.4 Evaluation

In the evaluation stage, the researcher distributed the questionnaire to the teachers and students. This questionnaire are given to evaluate the final prototype based on teachers and students' point of view. The teachers' questionnaire focused on some educational aspects, such as the effectiveness of the video, instructional design attributes, language attributes, presentation attributes, and subject matter attributes. Meanwhile, the students' questionnaire is made to figure out students' impression toward the prototype. The result of the evaluation stage would be the measurement to develop and design the video later on.

1. **Teacher's Questionnaire**

   The teacher's questionnaire was made using the same form with the expert judgment. It was consisted of 46 items with Likert scale to measure the quality of the prototype. In the measurement, the researcher used formula by Nurkancana & Sunartana (1992) as a guidance. The range of the scores to determine the criteria or quality of the prototype can be seen on Table 4.16.

   In the formula, there were 5 categories given, they were excellent media, good media, average media, below average media, poor media. The formula for each category was described as follows:

   4. Excellent Media

      $X \geq M_i + 1.5\ Sd_i$

      $X \geq 138 + 1.5\ (46)$

      $X \geq 138 + 69$

$X \geq 207$

5. Good Media

$Mi + 0.5\ Sdi \leq X < Mi + 1.5Sdi$

$138 + 0.5\ (46) \leq X < 138 + 1.5\ (46)$

$138 + 23 \leq X < 138 + 69$

$161 \leq X < 207$

6. Average Media

$Mi - 0.5\ Sdi \leq X < Mi + 0.5\ Sdi$

$138 - 0.5\ (46) \leq X < 138 + 0.5\ (46)$

$138 - 23 \leq X < 138 + 23$

$115 \leq X < 161$

7. Below Average Media

$Mi - 1.5\ Sdi \leq X < Mi - 0.5\ Sdi$

$138 - 1.5\ (46) \leq X < 138 - 0.5\ (46)$

$138 - 69 \leq X < 138 - 23$

$69 \leq X < 115$

8. Poor Media

$X < Mi - 1.5\ Sdi$

$X < 138 - 1.5\ (46)$

$X < 138 - 69$

X < 69

Table 4. 23 The Categories in Rating the Material in the Prototype of
Educational Video

Score	Criteria
X ≥ 207	Excellent Media
161 ≤ X < 207	Good Media
115 ≤ X < 161	Average Media
69 ≤ X < 115	Below Average Media
X < 69	Poor Media

Based on the result of the questionnaire, the researcher found that the
total score given by the teacher were 224 and 226. The final videos could be
categorized as "Excellent Media".

2. **Students' Questionnaire**

The students' questionnaire was distributed by using Google form due
to the pandemic. before filling the form, the researcher sent the link of the
videos. The videos were watched by the students as the base of the videos'
evaluation. After that, the researcher sent the link through WhatsApp
message. The students were already being explained about the purpose of
the questionnaire and how to fill the form before they filled the form by their
own. The questionnaire was consisted of 5 items which using Likert scale
to measure the quality of the video. The maximum score was 5 meanwhile
the minimum score was 1. The total maximum score for this rubric was 25
and for the minimum score was 5.

For measurement, the researcher needed to find out the value of Mi and Sdi of this rubric. It was obtained by using the formula:

Mi = $\frac{1}{2}$ (Score Max + Score Min)

Sdi = $\frac{1}{3}$ (Mi)

For Mi value, the researcher added the total maximum and minimum score for this rubric.

Mi = 1/2 (25 + 5)

Mi = 15

After that, the value of Sdi could be formulated as follow:

Sdi = 1/3 (15)

Sdi = 5

After that, the researcher started to counted the score and classify the result into the criteria. There were 5 criteria given, they were excellent media, good media, average media, below average media, poor media. The formula for each category was described as follows:

1. Excellent Media

X $\geq$ Mi + 1.5 Sdi

X $\geq$ 15 + 1.5 (5)

X $\geq$ 15 + 7.5

X $\geq$ 22.5

2. Good Media

   $Mi + 0.5\ Sdi \leq X < Mi + 1.5Sdi$

   $15 + 0.5\ (5) \leq X < 15 + 1.5\ (5)$

   $15 + 2.5 \leq X < 15 + 7.5$

   $17.5 \leq X < 22.5$

3. Average Media

   $Mi - 0.5\ Sdi \leq X < Mi + 0.5\ Sdi$

   $15 - 0.5\ (5) \leq X < 15 + 0.5\ (5)$

   $15 - 2.5 \leq X < 15 + 2.5$

   $12.5 \leq X < 17.5$

4. Below Average Media

   $Mi - 1.5\ Sdi \leq X < Mi - 0.5\ Sdi$

   $15 - 1.5\ (5) \leq X < 15 - 0.5\ (5)$

   $15 - 7.5 \leq X < 15 - 2.5$

   $7.5 \leq X < 12.5$

5. Poor Media

   $X < Mi - 1.5\ Sdi$

   $X < 15 - 1.5\ (5)$

   $X < 15 - 7.5$

   $X < 7.5$
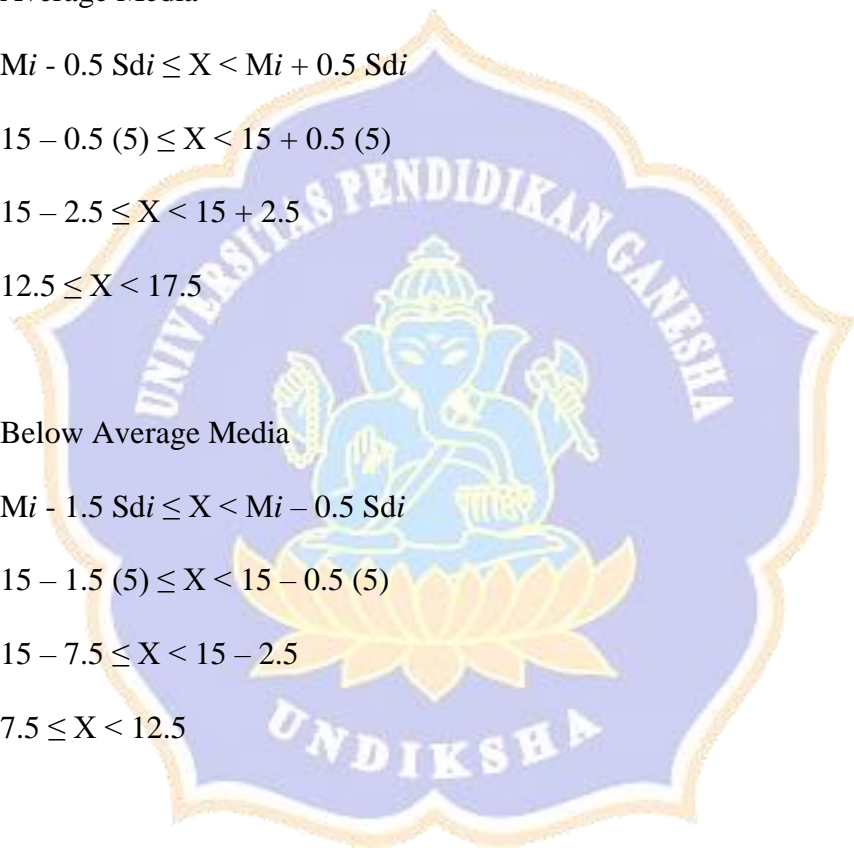
Table 4. 24 The Categories in Rating the Material in the Prototype of Educational Video

Score	Criteria
X ≥ 22.5	Excellent Media
17.5 ≤ X < 22.5	Good Media
12.5 ≤ X < 17.5	Average Media
7.5 ≤ X < 12.5	Below Average Media
X < 7.5	Poor Media

Based on the result of the students' questionnaire, the researcher found that the total score given by the students were 23, 25, 24, 25, and 23 for both videos. The final videos could be categorized as "Excellent Media".

4.2 Discussion

This research purposed to develop educational videos using project-based learning for sixth-grade elementary school as teaching media for elementary school students in Buleleng regency. The media made in this research was two videos based on the analysis from the interview and document study conducted by the researcher. In conducting this research, the researcher used the design and development method that was adapted from Richey & Klein (2007). There are four steps to conduct the research using the design and development model. Those were analysis, design, development, and evaluation. In this research, the research only develops prototype videos that can be improved on the following research.

The teacher's interview in the analysis phase showed that the teacher already uses teaching media in the learning activity. Since teaching media could attract students' attention, avoid boredom, and make the students easier to absorb the information (Mahadewi, P., W. et al., 2018). From the teacher's interview result, it also can be found that the teacher had ever used video as the learning media during this school from home. It is because the video contains audio and visual material that could make students enjoy the class activity. Apart from textbooks and other exciting and engaging activities, English language teachers use various audio-visual resources to promote the teaching process, which ensures student-centric, freedom, collaboration, and access to a specific theme, and videos such as instructional video, movies, songs, and PowerPoint presentations are commonly used in EFL classrooms (Dewanti et al., 2017).

From the interview, the teacher also gave some video criteria that appropriate to students' characteristics. The criteria are must contain a lot of images, colors, and fewer words. Those statements as relevant to Buchner (2018), which stated that to develop instructional video, and the developer needs to integrate illustration with spoken text, highlight details, keep it clear, brief, and to the point, provide structure, and show and display a story.

However, the students' interview showed that the students were lack on exposure to the teacher's explanation about learning material. Moreover, the students have not had an ice breaker since online learning. The ice breaker was a beneficial thing that the teacher can do to avoid students' boredom. Panggua (2016) stated that ice-breakers are beneficial to students of all ages as they're a part of innovative, strategic, and critical thinking. It is also an effective teaching tool for

teachers to build a happy and healthy learning environment. The other result from students' interviews was about the frequency of the teacher gave the students homework. Homework allows the students to develop their learning habits, performance, and academic achievements (Songsirisak & Jitpranee, 2019). The interviews showed that the students frequently got the homework from the teacher. However, it would not help the students learn the material since there is no teacher's explanation. An explanation is a crucial thing to consider by the teacher since it was about content-related: the analogy and models (Schoenfeld, 2010). Without the explanation, the students found some difficulties in understanding the learning materials taught since there was no clear analogy and model that the teacher explained.

The interview guide also asked students about what kind of video they preferred as the teaching media. Most of the students choose educational videos using a tutor and supported by some audio-visual material, in line with Almurash (2016), which stated that watching videos in the classroom can help students gain new perspectives and knowledge from the interactions portrayed in the video and improve their fluency in using simple English expressions.

As mentioned in the findings, the use of educational videos could make students enjoy the learning activity. It proved by using video as teaching media in the learning activity and students' preference to use video as teaching media rather than the other media, such as PowerPoint and textbook. The benefits are the ability for students to pause, rewind, and control the study timeline. Furthermore, unlike the conventional classroom approach, learners who use an educational video may

not miss their teacher's explanation since they have time to watch and recheck the videos whenever they need it (Beheshti et al., 2018).

It can be seen that these educational videos gave a lot of benefits for the students and teachers. For the teachers, it can be their source as the learning material. One of the advantages of making instructional videos for teachers is reusing videos for those other courses and semesters (Brame, 2015). Moreover, the students experienced a fun and meaningful learning in learning by using educational video. Using video as learning media gave some positive impacts such as interactive learning activity, excitement during the learning activity due to audio and visual given in the video, students could work in group and individually, and made students more focused also motivated in the learning process since something is engaging in the video (Jannah et al., 2020).

Furthermore, children's attention spans are limited. Children are only capable of being attentive for 15 to 20 minutes. The classroom exercises should be varied and fun to avoid boredom, and the time allotted for each activity should be adjusted to fit the children's attention span. It was, therefore, essential to employ teaching media and create a positive learning environment (Musthafa, 2010). The education developed by the researchers already contained a lot of fun material, such as some pictures and animation were added in the video as the illustration for the example toward the related topic. Then, some exercises were given in the videos with colorful design and enjoyable way. Thus, these prototypes, which mainly had more than 15 minutes duration, positively impacted and could avoid students' boredom. It is also supported by the evaluation phase's result, especially the students' questionnaire that shows the prototypes were excellent media.

This video development also matches young learners' characteristics, which they learn by using audio and visual material. Moreover, the video tutor repeated some vocabularies and reviewed the learning activity at the end of the video. Sukarno (2008) supported this argument, which stated that young learners learn about rules and grammar through examples and repetition. It also argued that in teaching young learners, the teacher needs to consider the sensory input in the learning activity through auditory and visual mode and ask them to do some projects.

Unlike educational videos in familiar ways, this research was developed educational videos that used a learning model. The learning model that used in this research was Project-Based Learning. This learning model could improve students' creativity and communication, and critical thinking to solve a problem. The theory supports it from Astawa et al. (2018), which stated that project-based learning leads the students to work on the project by planning, implementing, reflecting, and evaluating the project as they acquire the knowledge.

This video development also supports the existence of 21st-century learning. 21st-century learning is showed the existence of critical thinking, problem-solving, creativity, innovation, communication, and collaboration as the skills that developed in the learning activity (Padmadewi et al., 2019; Fadel, 2008). It also argued that literacy, media literacy, and ICT (Information, Communications, and Technology) literacy are among the other skills. It is related to educational development as a teaching media that uses ICT to promote the learning process.

The blueprint was made for designing the educational video in this research. The blueprint was made based on the syllabus provided by an elementary school in Buleleng regency. The blueprint was designed using several items, such as the essential competencies, indicators, learning objectives, and project-based learning syntaxes. The experts analyzed the blueprint that had been completed and finished. The experts gave some suggestions and corrections toward the content of the blueprint. Thus, the researcher did some revisions to the blueprint, and the result of the revision was the final blueprint. This final blueprint played a role as the base of the video development. It means the video's content was made by using the material in the blueprint since it being the design of the video itself.

The video development was as a prototype product. The researcher developed the video prototype. In this stage, the experts gave some suggestions and corrections to improve the video's content quality. After the final prototype being developed, the experts judge the whole video using an expert judgments rubric. The formula by Nurkancana & Sunartana (1992) was used to classify the media quality. The criteria to classify the video were excellent media, good media, average media, below average media, and poor media.

Based on the expert judgment rubrics result, the researcher found that the total scores given by the first expert were 224 and 225 for the first and second video. Then, the second expert gave 222 for the first video and 220 as the total score for the second video. The third expert gave 216 the total score for the first video and 223 for the second video. The final videos could be categorized as "Excellent Media." Moreover, the result of the teacher and students' evaluation showed that the video was also an excellent media. It can be seen from the scores provide for

both evaluations was 224 and 226 from the teacher's questionnaire. Then, each student's total score was 23, 25, 24, 25, and 23. Those scores were categorized as Excellent Media.

The video prototypes have already fulfilled the elements of educational video as instructional materials. Things that need to be considered in making instructional materials were instructional design attributes, language attributes, presentation attributes, and subject matter attributes (McAlpine & Weston, 1994)

The teachers and students also evaluated the final video prototypes. The teachers evaluated the video using the same rubric with expert judgment. It results that the score given by the teacher were 224 and 226, which means the prototype video was "Excellent Media." Meanwhile, the students evaluated the video prototype by using a questionnaire. The result of the questionnaire was the students classify the video prototype as "Excellent Media." The measurement of the scores given used the formula by Nurkancana & Sunartana (1992). Furthermore, the result of this research was the educational videos using project-based learning for teaching English at 6th-grade elementary school in Buleleng regency.

4.3 Implication

This research was about developing educational videos using project-based learning for teaching English in elementary school, especially for sixth-grade in Buleleng regency was still not perfect enough. Some weaknesses in the videos, such as the tutor still did some incorrect pronunciation for several words.

Moreover, developing the videos was not an easy task since the developer needs to have basic editing and recording video skills. Therefore, if some schools

are willing to produce a lot of this product, they need to look for someone who is already an expert in making an educational video. It is because the consideration in making ordinary videos and educational videos was the difference. In making an educational video, we need to consider students' distinctive and learning material design. Thus, the educational video could be appropriate to use as teaching media.

However, it was equal to the advantages of the video itself. As it would help the teachers deliver the material in a fun and exciting way, it also makes students easier to acquire knowledge since video provides audio and visual material. Those materials would help the students to understand the material and memorize the learning material that is delivered.

Even though this research was only conducted in some schools in the Buleleng regency, the video prototype could be used outside the Buleleng regency. Since the syllabus used to design the blueprint was flexible enough.