Training on the Use of Computer Applications in Making Learning Videos (Training for MTs Miftah Assa'adah Teachers)

Pelatihan aplikasi Komputer untuk pembuatan Video Pembelajaran (Pelatihan guru MTs Miftah Assa'adah)

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Abstract

This Community Service activity was carried out because they we the teacher's lack of ability in making their own learning videos. This ability is very much-needed in this pandemic, because students have to do distance learning. Universitas Pembangunan Jaya conducts training for teachers at MTs Miftah Assa'adah School located in South Tangerang area. In distance learning, the use of video media is needed by students. Teacher training is conducted using a combination of online and offline methods. The teachers were also given hand-on training to create, edit and upload the learning videos they made. Training using common applications and can be obtained easily. The applications used are also applications that do not require high computer resources, so they can be done with only standard devices. For example MS Power Point, Canva and Movie Maker, VLC and even Zoom. Of the 10 indicators used as a measure, 8 of them showed an increase of over 50%. The post-test results at the end of the training also showed an improvement in the general abilities of the training participants

Kata Kunci—*learning videos, distance learning, Ms Power Point, Canva App, Movie Maker*

Abstrak

Kegiatan Pengabdian Masyarakat ini dilakukan karena melihat masih kurangnya kemampuan guru dalam membuat video pembelajarannya sendiri. Kemampuan ini sangat dibutuhkan di masa pandemi ini, karena siswa harus melakukan pembelajaran jarak jauh. Universitas Pembangunan Jaya melakukan pelatihan terhadap guru-guru di Sekolah MTs Miftah Assa'adah yang berlokasi di daerah Tangerang Selatan. Dalam pembelajaran jarak jauh, penggunaan media video sangat dibutuhkan oleh siswa. Pelatihan terhadap guru dilakukan dengan metode gabungan online dan offline. Para guru juga diberikan pelatihan hand-on untuk membuat, mengedit, dan mengunggah video pembelajaran yang dibuat. Pelatihan menggunakan aplikasi yang umum dan bisa didapatkan dengan mudah. Aplikasi yang digunakan juga aplikasi yang tidak membutuhkan sumber daya komputer yang tinggi, sehingga bisa dilakukan dengan perangkat yang serba standar saja. Misalnya MS Power Point, Canva, dan Movie Maker, VLC dan bahkan Zoom. Dari 10 indikator yang digunakan sebagai ukuran, 8 diantaranya menunjukkan peningkatan diatas 50%. Hasil post-test diakhir pelatihan juga menunjukkan peningkatana kemampuan secara umum dari para peserta pelatihan.

Keywords—*video pembelajaran, pembelajaran jarak jauh, Ms Power Point, Aplikasi Canva, Movie Maker*

1. INTRODUCTION

The Covid-19 pandemic has a major impact in various sectors around the world, including in our country. Almost all sectors affected, starting from the economic sector, tourism sector, transportation sector, trade sector, and even the manufacturing industry sector, are overwhelmed by the Covid-19 pandemic. The education sector has also undergone drastic changes. Currently, the education sector is willing to adjust to the new system that is in effect. Although this system raises pros and cons in the wider community.

During this pandemic, the learning process turned into distance learning or virtual face-to-face. Where initially most of it was face to face. In a situation like this, the teacher must continue to carry out his obligations as a teacher, where the teacher must make sure that all students have the opportunity to gain the knowledge that is their right in the teaching and learning process.[1]

This decision about distance or online learning starts on March 16, 2020, when students start learning from their homes without the need to go to school. In distance learning, it is very important to master the science of technology for a teacher, so that distance learning can continue to run effectively during a pandemic like today. [2]

The teacher as an educator - must innovate in learning. Among them by utilizing information technology in the teaching and learning process. Since learning has been implemented at home, some teachers have learned through online media such as Whatsapp, Google Meet, LMS, and so on..

Referring to the Ministry of Education and Culture Circular Letter Number 40 of 2020 concerning "Implementation of Education Policies in an Emergency for the Spread of Corona Virus Disease (COVID-19)", the Minister of Education and Culture, Nadiem Makarim, determined a number of policies in dealing with this pandemic. These policies include the elimination of the National Examination (UN); changes to the School Examination (US) system; changes to the regulation of New Student Admissions (PPDB); and includes learning from home designations (online or online learning). Of these policies, the determination of Learning From Home (BDR) or often called online learning is the policy that reaps the most pros and cons in society.[3]

At the start of the pandemic, parents and education observers felt that this policy was the best way to protect students from being exposed to COVID-19. However, over time, the parents began to feel uneasy. This is because the BDR period has been extended several times and in a relatively long period. This anxiety was initiated by parents who felt that it was difficult to help students with assignments from the teachers. For kindergarten and elementary school students, where the role of parents is needed to complete online learning tasks. Learning was deemed ineffective, because students considered home a place to play and relax, not a place to study like in school. Parents of students who are not tech savvy are also confused by online learning that is completely digital.[4]

Anxiety from teachers who feel that existing online learning is not effective enough to convey knowledge and build students' cognition. Some teaching materials, such as mathematics, arts, and sports, are not well conveyed through online or online processes. The teachers also do not have enough experience and provision with online learning systems so that the way of conveying and learning media tends to be very standard and less inventive. The soaring cost of internet credit has also become a source of anxiety for teachers and parents, especially when internet subsidies from schools cannot be expected. Many students also complained about the online learning system. Many students have to postpone their research because they cannot collect data in the field. Thesis consultation or last project becomes hampered. As a result, many pass targets are delayed.[5]

Online learning system is a learning system without face to face directly between teachers and students. Learning is carried out online using an internet network. Teachers must make sure that teaching and learning activities will continue, even though students are at home.

The solution, teachers are required to be able to design learning media as an innovation by utilizing online media.

Online face-to-face process can occur synchronously or asynchronously. Synchronous face to face online can use online meeting applications such as Zoom, Google Meet, Webex and so on. Meanwhile, online asynchronous face-to-face is generally via video. It would be very good if the teacher could make their own learning videos. The problem is that most teachers do not yet have the ability to make instructional videos - both in terms of learning materials, and in video making technology.

Video is part of Multimedia. Multimedia comes from the words 'multi' and 'media'. Multi means a lot, and the media means a place, means or tools used to convey information. So based on the word 'multimedia', it can be formulated as a container or unification of several media which is then defined as elements of multimedia formation. These elements such as text, images, sound, animation, and video. Multimedia is a new concept and technology in the field of information technology, in which information in the form of text, images, sound, animation, and video are put together on a computer to be stored, processed and presented both linearly and interactively.

For the definition of multimedia itself, people often refer to ;

a. According to McCormick (1996), Multimedia is a combination of three elements, sound, images, and animation.[6]
b. According to Rosch (1996), Multimedia as a combination of computers and videos.[7]
c. Another Multimedia definition is the use of computers to present and combine text, animation, sound, images and videos with tools (tools) and links so that users can navigate, interact, create and communicate.

Multimedia is often divided into types with the following groupings::

a. Interactive multimedia
b. Linear multimedia
c. Hyperactive Multimedia
d. Multimedia kits

Video is included in linear multimedia according to its characteristics. This multimedia runs straight, which means it runs without control from the user and is the most common type in society. Examples of linear multimedia are TV, videos, e-books, music and others..

The teacher's inability to make videos is a barrier for teachers to be creative in learning from asynchronous. This happens in many schools, both at Kindergarten, Elementary School, Junior High School, and Senior High School.

This Community Service activity was carried out by the Information Systems Department Team, Faculty of Technology and Design, Universitas Pembangunan Jaya - in Parigi Baru Village, Kec. Pondok Aren, South Tangerang. Community Service Partners is SMP / MTs Miftah Assa'adah. MTs. MiftahAssa'adah has No. Madrasah statistics: 121.23.67.40.035 with Madrasah status: Accredited B. Addressed at Jl. ABRI Happy Tomb Garden Gg. Education I, Parigi Baru Village, Pondok Aren District, South Tangerang City, Banten Province. Managed by the Miftah Assa'adah Education Foundation with the current Head of School, Mr. Ceceng Mumu Muhajir., MPd. It has 10 permanent teachers and several non-permanent teachers.

As is characteristic of the situation of MTs teachers in general, the teachers here also do not have the ability to make their own video lessons, as stated by the Principal of MTs. To overcome this, the authors and a team from the Information Systems Study Program, Universitas Pembangunan Jaya held a training in making instructional videos for teachers. The participants are teachers who become permanent teachers at the MTs. Just like most teachers, the teachers at this MTs also lack knowledge of making instructional videos. Generally, they use content obtained from Youtube as a complement to online learning at the school's LMS (Learning Management System). The use of YouTube-sourced material sometimes causes several problems, such as: [8][9];

a. The material obtained is not completely appropriate to the needs, sometimes there is content that is not good.

b. Sometimes there are advertisements in the video.
c. Duration more than 15 minutes, making it difficult for students with limited connections.
d. Display that is not necessarily appropriate.
e. Fillers are people who are not known by students.
f. Sometimes associated with inappropriate links.

By participating in the training for making instructional videos, it is hoped that the participating teachers can make their own learning videos and can overcome these problems, such as;

a. The material is made in accordance with the material to be conveyed.
b. Videos with a duration of 10 to 15 minutes for each subsection, so that students can follow them well. The resources used to carry out the download are also still within the reach of most students.
c. Display aesthetics can be adjusted according to environmental conditions at MTs.
d. The filler of the material is someone the student knows, so that it is more likely for the student to understand it - because generally they already understand the student's characteristics well.

The purpose of this community service is to provide training to teachers so that they can make their own learning videos. With this video, it is hoped that this media will be more on the target as a medium of learning for students, both in terms of content, and in terms of student accessibility. The hardware and software tools used are tools that are easily accessible or accessible to teachers. For video recording hardware, you can use a HP camera or a Web camera on a laptop or computer. To make the learning material, the Microsoft Power Point software application (version 2007 and above) is used which is quite familiar to the teachers. Variety of media using Canva software which can be run online from the Canva.com site. Meanwhile, for finishing or combining multimedia parts, Windows Movie Maker, VLC or the Zoom application are used which can be downloaded for free and run on the Windows operating system. Linux, or Android. ..

2. IMPLEMENTATION METHODS

This training combines online methods with face-to-face computer labs. In addition to learning with theory and presentations, hand-on training was also provided. In a pandemic era like now, face to face in full, and for a long time, is not possible.

For things that can be done online, will be done online. As for matters that require a face-to-face meeting, it will be carried out face-to-face - with the standard protocol for handling covid-19.

The training stages are as follows [10]:

a. Online training using the ZOOM application. In this session the teacher prepares the material to be included in the video learning media. The teacher makes material according to the subject being taught and put it in a presentation format file, for example Ms PowerPoint or Libre Office.
b. The next session is an off line face-to-face meeting. In this meeting, teachers are directed to try to improve presentation files that have been created using templates from other applications, namely Canva. Canva were chosen because they are more varied and colorful. Teachers download Canva templates according to their needs and wants. The template chosen is more of a free template. Then convert the presentation file that has been made, so that it is more interesting.
c. Next, the finished presentation will be returned to the Ms PowerPoint format to be made into a Window Meta Video or MPEG4 file format.
d. The next step is to combine various multimedia components into one video using Movie Maker, or VLC, or Share Screen from the Zoom application.
e. After the videos are merged, they are checked for tidiness and video content - if there are still problems, the video is repaired again and re-converted.

f. After completing and fulfilling the proper requirements as a learning video, the video is uploaded to YouTube as proof of the success of making teacher learning media, and it is also used for the learning of individual students.

Before starting the training, and after attending the training, the teachers were asked to fill out a questionnaire about their ability to use the software to make an online learning video. The results of the questionnaire were used to see if there was a significant change in their abilities after attending the training. In addition, teachers are also asked to provide input on the training that has been carried out so that they can be used for improvement in further training.

For the training method used a combination of activities:
a. Online training using the Zoom application.
b. Face to face training and discussion.
c. Independent assignment
d. Hand on training in the computer laboratory.
e. Interactive online training using the Zoom application.
f. Online guided self-assignment.
g. Communication through group social media..

3. RESULT

Training begins with an online briefing. In this briefing, teachers are asked to prepare teaching materials that will be converted into a video form. Video material begins with an objective explanation or learning objectives to be achieved (in the form of specific instructional goals or competency standards to be achieved).

Before starting the lesson, a survey was conducted to fill out a questionnaire regarding the teacher's ability to several applications and concepts to be studied. Questions include:
a. Ability to use the Ms PowerPoint application in making learning materials
b. Ability to use the Canva application to create learning materials
c. Ability to Use the Zoom Application in making Videos
d. Ability to Use Movie Maker Applications to Make Videos (Finishing)
e. Ability to use the VLC application to create videos
f. Video Merge Editing and Finalizing Ability with Movie Maker
g. Sound editing capabilities in Video completion
h. Understanding of Uploading Videos to Youtube or InstaGram social media
i. Understanding of the process of making learning videos
j. Ability to Create Learning Videos and distribution for general use

Based on the list of questions, and using a scale of 5 (based on the Likert scale), the assessment table is compiled as follows:

Tabel 1, List of questions for evaluation of Users ability on using tools form making Video

List of Questions for Pre test and post test

No	Indikator Kemampuan	Sebelum	Sesudah	Peningkatan	% Peningkatan
1	Kemampuan Menggunakan Aplikasi Ms PowerPoint dalam membuat materi pembelajaran				
2	Kemampuan Menggunakan Aplikasi Canva dalam membuat materi pembelajaran				
3	Kemampuan Menggunakan Aplikasi Zoom dalam membuat Video				
4	Kemampuan Menggunakan Aplikasi Movie Maker untuk membuat Video (Finishing)				
5	Kemampuan Menggunakan Aplikasi VLC dalam membuat Video				
6	Kemampuan Mengedit dan Penyelesaian Penggabungan Video dengan Movie Maker				
7	Kemampuan mengedit suara dalam penyelesaian Video				
8	Pemahaman Mengunggah Video ke media sosial Youtube atau InstaGram				
9	Pemahaman proses pembuatan video pembelajaran				
10	Kemampuan Membuat Video Pembelajaran dan distribusi untuk digunakan secara umum				

Menggunakan Skala 5

1. Belum Mengerti
2. Sedikit Mengerti
3. Pemahaman Rata-rata
4. Pemahaman Baik
5. Pemahaman Baik Sekali

The main part of the material, made with estimates can be explained in just 7 to 11 minutes. The final section contains conclusions, and practice questions. The total Powerpoints ranged from 8 to 12 minutes when presented. So that after adding the opening video and closing video, it is estimated that it will not take more than 15 minutes.
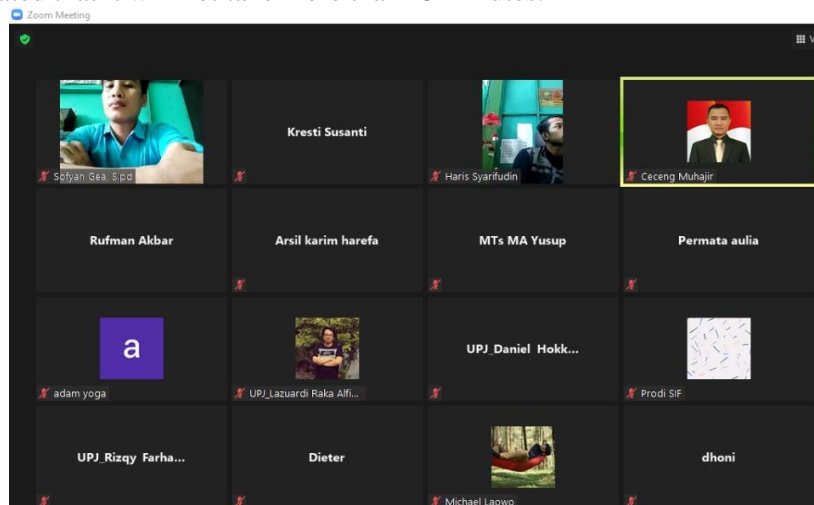

Figure 1. Screen Shoot Online training, using Zoom Application

Participants are given one week to prepare the material script. In material preparation, they were given the opportunity to discuss through the WA group. One week later, a face-to-face session was held at the Universitas Pembangunan Jaya computer laboratory for hand-on training, and compilation of parts of the video that had been prepared.

The next part of the training is a hand on workshop. In this session, participants learn to use the Canva application. This application is accessed online from the Canva.com website, by first creating an account using the participant's Gmail account. Participants can choose various presentation templates that suit their wishes or the material to be used. Then convert it to a Ms PowerPoint format template, using the existing facilities at Canva.com. The learning material

document that has been created has been transferred from the standard Ms Power Point template to the template created with Canva. Participants use Canva and Ms PowerPoint interchangeably. The result is a Ms PowerPoint file retrieved from the Canva template. The flexibility of the Ms PowerPoint application is combined with the beauty of Canva.

Figure 2. Hand on Offline Training in Computer Lab.

The next stage is training to convert the Ms Power Point that has been made into a video. The conversion uses the commands in Ms Power Point and the results obtained are in the form of MPEG4 video format or Window Media File.
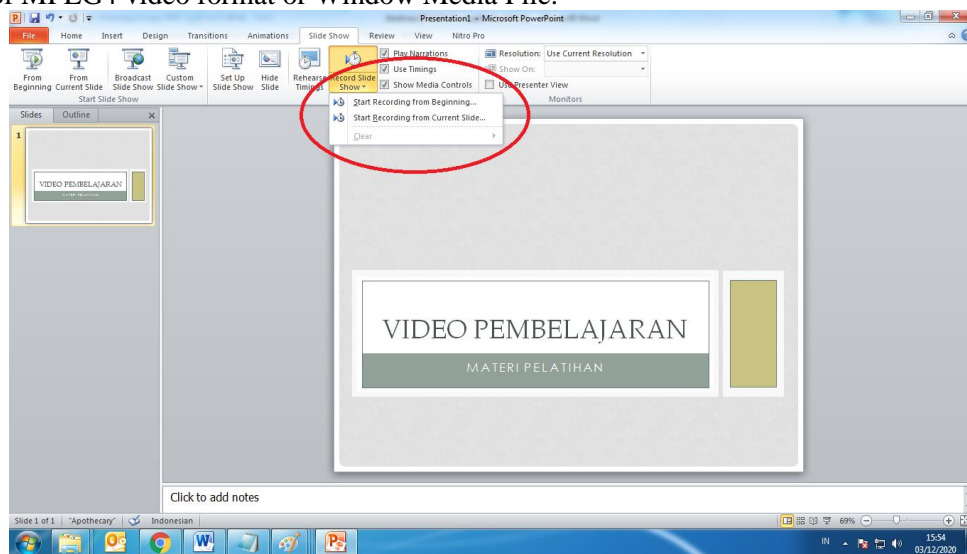

Figure 3. Screen Shoot file convertion to Video standart

Another application that can be used in the process of making a video from this presentation file is using the Zoom application. The characteristics of the Zoom application, if used to stand alone, are infinite time and facilities for storing recordings on the local computer hard disk. By activating the sharing screen facility, and saving everything on the screen in the form of a video, we get a video file based on what is displayed on the computer screen.
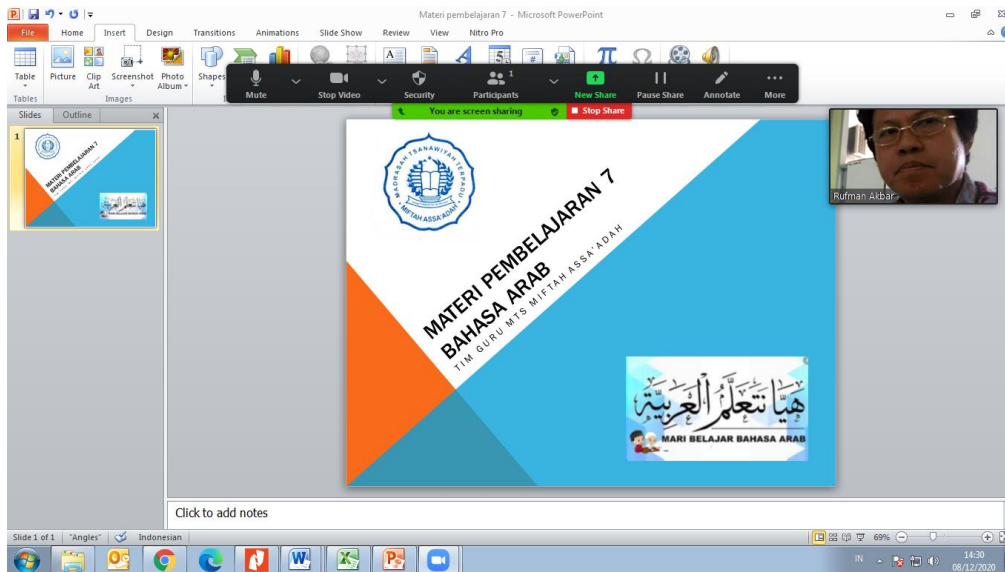
Figure 4. Screen Shoot file convertion to Video using Zoom application

The material created in Ms PowerPoint is then converted into video format. The conversion process can use the menu in the Ms PowerPoint application, or use the menu in the Zoom application. The next stage is to combine the learning material with an opening video and a closing video. To merge, use the Movie Maker application. This application was chosen because it runs on various operating system platforms, various versions of Windows, and the main thing is that it can be downloaded for free and does not require high specifications when it is run.
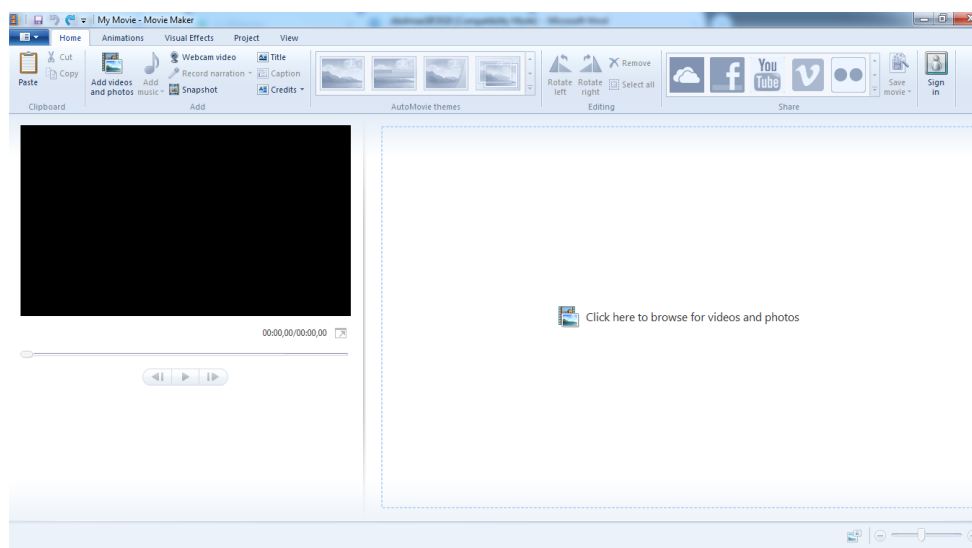

Figure 5, Screen Shoot Movie Maker

With this Movie Maker application, participants learn to combine videos and images that have been made into one complete new video (there is an opening, content and closing or thank-you notes).

After the merging process is complete, and the editing process is complete, the finishing results are saved in a format to be accessed using an Android-based smartphone. This choice is because most students use cellphones rather than computers or laptops. The storage results with the Android Medium standard can still be accessed either via a computer or cellphone with other operating systems
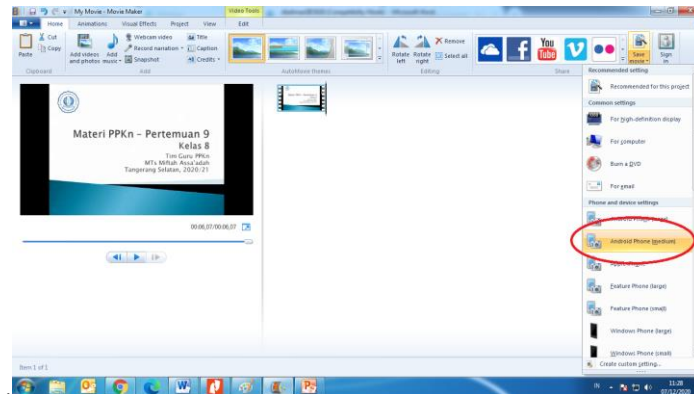
Figure 6, . Selection of the selected setting when saving the video

Apart from being able to display the video in the Movie Maker application, the results of this video can also be displayed directly using other applications such as Windows Media Player. The goal is to see in its entirety, how the video results after editing and finishing.
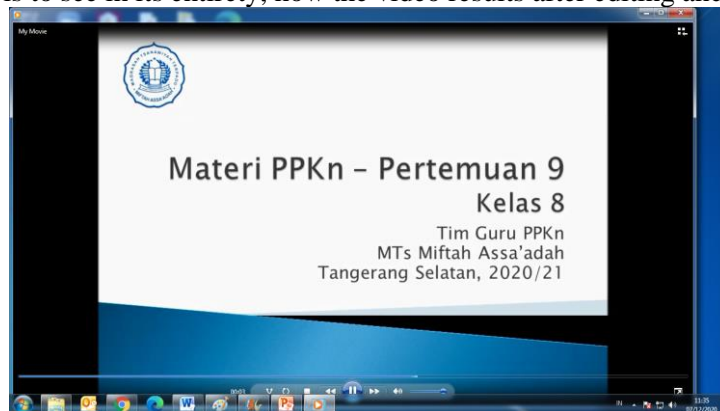

Figure 7. Display using Windows Media Player

After the learning video is ready, the next step is uploading it to social media. Basically, because of its short duration, this video can be shared via social media communication such as WhatsApp, but also through other social media which are common for videos such as Youtube or InstaGram. Uploads to WhatsApp can be used if usage is limited to group members only. If you want to see the video more widely, then upload it to Youtube or InstaGram

Figure 8. View of YouTube channel MTs Miftah Assa'adah

To evaluate learning outcomes, pre-test and post-test were conducted on the teachers' abilities regarding the material being taught. The results are;

Tabel 2, List of result of Users ability on using tools form making Video, Pre & Post Test

Pre Test

No	Pertanyaan	A	B	C	D	E	F	G	H	Rata2
1	Butir 1	3	2	3	3	2	3	3	3	2,75
2	Butir 2	1	1	2	1	1	1	1	2	1,25
3	Butir 3	1	1	1	1	1	1	1	1	1
4	Butir 4	1	2	2	1	1	2	2	1	1,5
5	Butir 5	1	1	1	1	1	1	2	1	1,125
6	Butir 6	1	1	1	1	1	1	2	1	1,125
7	Butir 7	1	1	1	1	1	1	1	2	1,125
8	Butir 8	3	3	4	2	3	2	2	2	2,625
9	Butir 9	1	1	2	1	1	1	1	1	1,125
10	Butir 10	2	2	1	2	2	2	1	2	1,75

Post Test

No	Pertanyaan	A	B	C	D	E	F	G	H	Rata2
1	Butir 1	4	3	4	4	3	4	4	3	3,625
2	Butir 2	3	3	4	3	3	3	3	4	3,25
3	Butir 3	3	3	3	3	3	3	3	3	3
4	Butir 4	3	4	4	3	3	4	4	3	3,5
5	Butir 5	3	3	3	3	3	3	4	3	3,125
6	Butir 6	3	3	3	3	3	3	4	3	3,125
7	Butir 7	3	3	3	3	3	3	3	4	3,125
8	Butir 8	3	3	4	3	3	4	4	3	3,375
9	Butir 9	3	3	4	3	4	3	3	3	3,25
10	Butir 10	4	4	3	4	4	4	3	4	3,75

Based on the results of the Post test which are compared with the results of the pre-test, a table of improvement in the ability of the teacher (based on a scale of 5) can be arranged, and the percentage of increase (the amount of increase in the final score after training)

Tabel 3. Increased ability to make Learning Videos based on the results of the pre test and post test

List of Questions for Pre test and post test

No	Indikator Kemampuan	Sebelum	Sesudah	Peningkatan	% Peningkatan
1	Kemampuan Menggunakan Aplikasi Ms PowerPoint dalam membuat materi pembelajaran	2,75	3,625	0,875	24,14
2	Kemampuan Menggunakan Aplikasi Canva dalam membuat materi pembelajaran	1,25	3,25	2	61,54
3	Kemampuan Menggunakan Aplikasi Zoom dalam membuat	1	3	2	66,67
4	Kemampuan Menggunakan Aplikasi Movie Maker untuk membuat Video (Finishing)	1,5	3,5	2	57,14
5	Kemampuan Menggunakan Aplikasi VLC dalam membuat	1,125	3,125	2	64,00
6	Kemampuan Mengedit dan Penyelesaian Penggabungan Video dengan Movie Maker	1,125	3,125	2	64,00
7	Kemampuan mengedit suara dalam penyelesaian Video	1,125	3,125	2	64,00
8	Pemahaman Mengunggah Video ke media sosial Youtube atau InstaGram	2,625	3,375	0,75	22,22
9	Pemahaman proses pembuatan video pembelajaran	1,125	3,25	2,125	65,38
10	Kemampuan Membuat Video Pembelajaran dan distribusi untuk digunakan secara umum	1,75	3,75	2	53,33

Menggunakan Skala 5

1 Belum Mengerti
2 Sedikit Mengerti
3 Pemahaman Rata-rata
4 Pemahaman Baik
5 Pemahaman Baik Sekali

From the results of the post-test, it is known that there are 8 indicators with an increase of more than 50% (compared to the ability before participating in the training). These indicators are:
a. Ability to use the Canva application to create learning materials
b. Ability to Use the Zoom Application in making Videos
c. Ability to Use Movie Maker Applications to Make Videos (Finishing)
d. Ability to use the VLC application to create videos
e. Video Merge Editing and Finalizing Ability with Movie Maker
f. Sound editing capabilities in Video completion
g. Understanding of the process of making learning videos
h. Ability to Create Learning Videos and distribution for general use

Where the teacher as a respondent gives a value of 1 if they do not understand or have very minimal abilities, and a value of 5 if they really understand or have maximum knowledge. The pre-test is carried out before the activity begins, by giving prior directions about what they should score and how to give weight to the assessment. This is done so that each answer is valid and reliable and not due to assumptions or giving answers in circumstances that are unclear or do not understand well the questions are asked. The questionnaire is accompanied by the name of the filler identity so that it is possible to see changes in individual knowledge - as well as changes as a whole.

Based on the results of the Pre test and Post Test, the highest increase was in the ability to make learning videos and distributing them to the public. This is because the main purpose of this learning is to provide the ability to make videos and distribute them to students. The final score of a lesson is 3.75. Meanwhile, the lowest increase was in the ability to upload videos to Youtube or InstaGram, because basically the teacher already understands these processes..

There are 2 indicators with an average increase below 1, namely understanding using Ms Power Point in making learning materials (0.875) and understanding uploading videos to social media such as Youtube and InstaGram (0.25). One indicator with an increase of more than 2 points is Understanding the process of making learning videos (2,125). Other indicators have increased by 2 points.

4. CONCLUSION

Based on the training that has been carried out, it can be concluded that teachers do need the training to be able to make their own Learning Videos. There are 2 indicators with an increase of below 25%, while other indicators have an increase of more than 50%. The teacher already understands the use of the Ms Power Point application, the teacher also understands how to produce or upload videos to social media, but they still don't understand how to use other applications to beautify the videos they make. The weakness of teachers is that they don't understand how to use other apps like Canva, for example. They also don't understand how to combine videos from various media (images and other videos) into a single video, for example using VLC, Zoom, or Movie Maker. So it is necessary to carry out integrated training activities to unify a series of activities and fill their gaps in making their own learning videos.

5. SUGGESTION

It would be better if teacher trainings could be carried out regularly and continuously. The ability to make learning videos will be very useful for teachers, especially in online learning. For software applications, it will also be reproduced so that the quality can be improved as well. In addition, it might be better if a forum for teachers to make learning videos that have allied knowledge is also made. So that they can share and learn from each other.

THANK YOU NOTE

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