Teacher Training in the Development of Video-Based Learning Media by Using Bandicam Application

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Abstract	Article Info
Online learning is a challenge for the world of education with the situation of Indonesia which has thousands of islands. Distance learning has set the education process in the country towards digitalization. But on the other hand, it also creates obstacles. This challenge is also an opportunity for educators about how the use of technology can help bring students to be competent for the 21st century. This article aimed to give training in developing of teachers in using media learning that is bandicam application. The service community used Service Learning (SL) method. It was as a medium for integrating voluntary community services with active reflection which is expected to enrich and strengthen training materials in community development with the use of existing assets and potential. The sample was 30 teachers at Institut Agama Islam Ma'arif NU (IAIMNU) Metro Lampung. The result showed that Bandicam application is a layer recording utility that is very easy to use. This training can increase the knowledge of teachers in using application features in making learning videos and can improve the skills of teachers in making learning videos using the Bandicam application.	

INTRODUCTION

Educational patterns have changed during the Covid-19 pandemic. The learning process is no longer carried out face to face, but is carried out by utilizing the internet network so that the teaching and learning process is carried out remotely. The existence of this COVID-19 pandemic has provided an overview of how future education will be by utilizing technology (Toquero, 2020; Tadesse, & Muluye, 2020; Batubara, 2021). Technology can replace the continuity of the educational process, but it cannot replace the position of the teacher for students, in education it is not only getting knowledge but the advice from the teacher will make students besides having knowledge also have character (Manca, & Delfino, 2021). Distance learning by utilizing technology is a challenge for educators, how is the creativity of teachers in teaching to develop education.

Online learning is a challenge for the world of education with the situation of

Indonesia which has thousands of islands. In the world of education by utilizing technology will indirectly change the world of education in Indonesia towards digitalization (Chick, et al., 2020; Matsumo, et al., 2012; Aviles, M., & Eastman, J. K. 2012). However, there will be various obstacles or obstacles that will be faced while learning is carried out remotely. One of the obstacles or barriers is internet access and the low level of the community's economy, because not all residents in the land of water have a high economic level. In addition to obstacles from the internet network, the obstacles that will be faced by educators, namely how the program of a teacher or educator to deliver subject matter (Bahasoan, et al., 2020; Alchamdani, et al., 2020; Gunawan, et al., 2021). So that it can be understood by students and provide opportunities for educators to be able to take advantage of technology so as to bring students to be more competent. The change from face-to-face learning to distance learning requires educators to be able to innovate in the teaching and learning process. Online learning and mixed learning (a combination of two learning methods, namely face-to-face and online learning) can be used by teachers as a media reference for delivering knowledge (Richardson, et al., 2020; Pavel, A. P., Fruth, A., & Neacsu, M. N. 2015). Learning carried out remotely does not require students to be present in class, but learning can be accessed via the internet.

Education is a system that develops a fairly broad mission related to the physical development of mind, feeling, ability, social skills to the problem of trust or faith. Education must go well despite the many obstacles or obstacles faced. The obstacle in this case is the obstacle experienced by teachers in the midst of the Covid-19 condition, learning is carried out online and cannot be carried out face-to-face in class. Therefore, a teacher in dealing with educational conditions like this, must be able to make an innovation in the learning process, especially learning that is done online (in a network). The solution during the pandemic is to find a solution using network-based learning. Teachers are required to be innovative in using online learning models.

In this era of globalization and information, the use of Information Technology-based learning media has become a need and demand, but its implementation is not an easy thing. In using learning media, you must pay attention to several techniques so that the media used can be utilized to the maximum and do not deviate from the purpose of the media (Julia, et al., 2020; Anwar, 2021). Each learning material has a varying level of difficulty. On the one hand there are learning materials that do not require learning media, but on the other hand there are learning materials that require learning media. The existence of learning media as a tool in the learning process is a fact that cannot be denied. Teachers as messengers have a great interest in facilitating their duties in conveying messages or learning materials to students. Teachers also realize that without media, learning materials will be difficult to be digested and understood by students, especially if the learning materials that must be conveyed are complex and complex. For this reason, the use of media absolutely must be done so that the material can reach students effectively and efficiently.

The COVID-19 pandemic has forced teachers and students to carry out the online

learning process. All parties, from schools, teachers, students, to parents must adapt and make changes (Moorhouse, 2020; Adedoyin, O. B., & Soykan, E2020). The practice of implementing filtered learning is not as easy as imagined, there are many obstacles and obstacles faced by teachers and students. The habit of teachers who can explain the material directly (during offline learning) has an effect on the variety of teachers in using learning media. The role of parents is no less important in the online learning process. Because learning is done at home, parents must be able to become teachers' partners to assist the process. In this case, it is strongly influenced by educational background and low awareness will affect the activeness of students in participating in learning activities and also understanding of learning materials.

Many current learnings are found that use the *WhatSapp application,* the teacher sends material to the *WhatSapp* which then students are required to understand the material sent, which in the end many students do not understand the material given by the teacher. Many parents complain when accompanying their children to study at home. The educational background of parents, the busyness of parents at work also affects the success rate of online learning. Therefore, there must be good steps in dealing with online learning problems, even though learning is carried out at home, students still have the spirit of learning. An interactive and interesting learning media is needed for a teacher to help the teaching and learning process. Utilization of technology can help solve solutions to existing problems. Limited understanding and knowledge of technology is an obstacle to being able to solve the problems experienced by teachers.

This situation needs to be considered by educators, especially teachers to always try to create innovations in learning as a solution to increase student attractiveness in online teaching and learning activities, so that student learning outcomes also increase. Technological advances that give rise to various innovative applications must be utilized to develop appropriate learning media.

The problems above must be corrected immediately, the way teachers teach must be changed, teachers must be creative in developing online learning media that can help students and parents understand the material. The solution offered is the creation of presentation-based learning media using the bandicam application, which is then carried out by socializing the use of the bandicam application which can help the teaching and learning process. With the advancement of existing technology, learning media are not just books and manual teaching aids, but then turn to digital multimedia. Teachers must make learning implementation plans that are tailored to the Basic Competencies, then how teachers carry out learning according to the plans that have been prepared, use learning video media that are in accordance with learning objectives that can make students interested, and help students better understand the learning material. With the hope that through the use of video bandicam media, students' learning enthusiasm will increase again so that their learning outcomes will improve.

Learning media will make it easier for students to remember the material presented by the teacher because it is presented in a pleasant display. Where the

learning media can increase students' creativity and effectiveness in learning. Media is one component in the teaching and learning process that is indispensable in the learning process. According to Gagne in Sadiman defines that the media are various types of components in the student's environment that can stimulate them to learn. Meanwhile, according to Briggs in Asyhar defines media as a physical means used to send messages to students so as to stimulate them to learn.

Video is a series of motion pictures accompanied by sound that forms a unity that is assembled into a plot, with messages in it for the achievement of learning objectives, video is an audio-visual media that displays motion. Audio-visual is a modern instructional media that is in accordance with the times (advancements of science and technology), including media that can be seen and heard. The use of audio-visual media in learning according to Anitah is that within certain limits it can replace the role and duties of the teacher, the teacher does not always act as a presenter of material (teacher), but the presentation of material can be replaced by audio-visual media, so the role of the teacher can switch to being a learning facilitator. , which makes it easy for students to learn.

Bandicam application is a layer recording utility that is very easy to use (Vioskha, Y. (2021). This Bandicam application has several main features, such as: additional web camera overlay, this feature facilitates the use of a web camera while recording, so that the video results show a teacher figure explaining, mixing sounds while being co-opted, can add mouse click effects and animations when recording (Azurah, Sahib, & Fansury, 2022; Azurah, Sahib, & Fansury, 2022). With these problems and solutions, the community service team of the Ma'arif Islamic Institute (IAIMNU) Metro Lampung this time will socialize the use of bandicam-based video learning media in the hope of developing creativity and assisting the teaching and learning process in an interactive and interesting way so that it can increase student interest in learning.

a. **The problem of Community**

   The teachers as an educator expects an interactive learning method that utilizes technology that can help the teaching and learning process so that it can provide its own attraction to be able to receive the material presented. There are many teachers who have not implemented technology-based interactive learning methods due to a lack of understanding and knowledge of technology.

b. **Solutions offered**

   Based on the problems faced by partners, the solutions offered include mentoring and training for teachers in making bandicam-based learning media for video presentations.

c. **Expected Target After Service**

   The target of community service regarding bandicam-based learning media for video presentations is school/madrasah teachers throughout the province of Lampung. With an increase in the ability to make bandicam-based learning media, video presentations can increase teacher creativity in making learning media during the covid 19 pandemic.

METHOD

The service community used Service Learning (SL) method. It was as a medium for integrating voluntary community services with active reflection which is expected to enrich and strengthen training materials in community development with the use of existing assets and potential. The sample was 30 participants. in making learning videos. The participants of this activity are teachers from schools/madrasahsin the city of Metro. This activity is carried out in three stages, namely:

a. Preparation. Service activities are training activities that can be reached by school/madrasah teachers in the city of Metro. Information on this activity is disseminated using an invitation letter intended for schools/madrasahs in the city of Metro.

b. Training on making learning videos using the Bandicam Application. This activity is carried out face to face. The training is given in the form of interactive lectures from the presenters. The presenter provides an explanation of the use of the Bandicam Application. The media used is powerpoint and provides a simulation of the use of the Bandicam application. After listening to the material from the service team, participants were given the opportunity to ask questions and discuss related to the use of applications and the process of making creative, innovative and interesting learning videos. The follow-up to this activity is assistance for teachers in designing or developing learning videos.

c. Assistance in making learning videos using the Bandicam application. Assistance in making this learning video was carried out for one day. Teachers are given the opportunity to make learning videos. The videos that have been made are consulted and revised based on notes from the service team.

This PKM program is implemented for Madrasah/School teachers in Metro Lampung City. As we know, during this pandemic, education is being dominated by online learning activities. So, with the mentoring activities for madrasah/school teachers in making video-based learning media presentations Bandicam application , it is hoped that teachers can carry out distance learning that is effective, creative and fun.

The location PKM is carried out on the campus at Institut Agama Islam Ma'arif NU (IAIMNU) Metro Lampung. The reason the proposer chose the location was because the teacher still had difficulties in managing distance learning and had not been able to make multimedia-based learning media optimally. Meanwhile, the pandemic period suddenly required educational elements to maintain online learning. The current condition is urgent to innovate and adapt related to the use of available technology to support the learning process. The time of service community is September 2021.

The Procedure activities

The procedures of community service activities regarding the making of video presentation-based learning media using the *Bandicam application,*which are as follows:

1. Design

    The design or preparation stage, coordination of program*Bandicam.*

2. Implementation of Training

    are in the form of:

    a. Conducting training /*workshops* on making video presentations based on video presentations using the*Badicam application*with screen recording techniques as a medium in distance learning.training*Bandicam application.*

    b. Assignment to each teacher*Bandicam application*and make learning videos.

    c. Continuous assistance to teachers, in the context of: understanding*Bandicam application* used in learning, then designing learning media with active, creative and fun video presentations by using the Bandicam*application.*

3. Monitoring and Evaluation

    Monitoring and evaluation or often called monev in this case during the implementation of the program monitoring will be carried out, namely monitoring the implementation of PKM and its impact on partners. Furthermore, an evaluation was carried out, namely by collecting data through interviews with partners to see the development of partners' skills in making video presentation-based learning media using the *Bandicam application.*

Figure 1 Overview of Assistance in Making Video-Based Learning Media Presentations using the Bandicam application.

Figure 2 Bandicam Application Display.
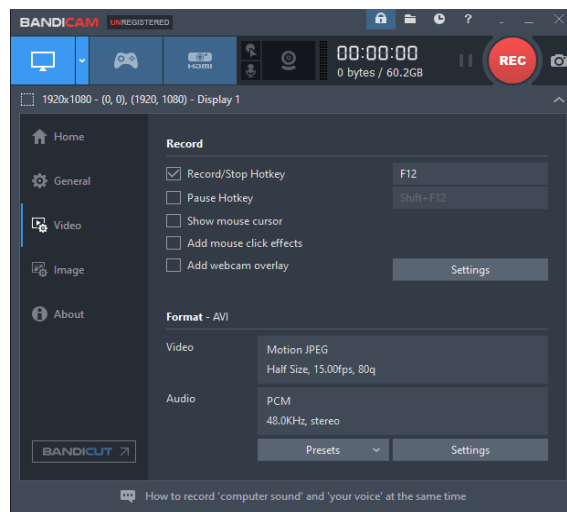
1. First of all, of course, you have to install the Bandicam application on your computer or laptop. If so, just open as usual.
2. Click the General tab. Please set it in the Output Folder section. You can choose which directory if you still have a lot of storage space. Later the recorded video will be stored there.
3. Next, please click the Video tab. Here, the default record button is F12. You can use the button, or if you want to change it, you can. The function of this button itself is so that we can record by pressing the button.
4. There are three screen recording options in Bandicam. Well, here we are setting for the main screen. Open the dropdown menu at the top left.
5. Next, select Fullscreen and set the setting to Display 1.
6. If so, please return to the main Bandicam screen. Press the Rec button to start the screen recording process, or press the record button that you set earlier (default button F12).
7. After the recording process is complete, please click the Stop Recording button, or press the record button again.

RESULTS AND DISCUSSION

This type of community service activity uses the lecture method and practical training method (*drill praktice*) making video-based learning media presentations using the *Bandicam application.* The *drill practice* is an activity of doing the same thing, and is done repeatedly and seriously with the aim of perfecting a skill to make it permanent (Sudjana, 2011). The *drill practice* carried out by means of the training and service proposer team coming to the Ma'arif Nahdlatul Ulama Islamic Institute (IAIM NU) Metro Lampung campus to carry out socialization of training on making learning media based on video presentations using the *Bandicam application.*

The *drill practice* used considering that there are still many teachers who have difficulty in delivering subject matter in the classroom during the learning process. Therefore, the *drill practice* can help the difficulties experienced by teachers in delivering and using learning media. Because the practice of making learning media with the *Bandicam* will be done repeatedly in earnest so that educators are able to use the learning media permanently.

The training is carried out to realize that online learning can run in a conducive manner, and the objectives of learning can be conveyed properly. In this training the materials presented are about how to make learning videos using the *bandicam application.* The results of the training that have been carried out are as follows:

a. *Training on making learning videos using the Bandicam Application*

This training will be held in September 2021. This activity aims to equip participants with basic knowledge about making learning videos, designing attractive presentation media, basic knowledge about the Bandicam application. as well as simulations of making learning videos using the Bandicam application. The knowledge provided is used as a basis or guideline when developing learning videos in accordance with their respective fields of science

Figure 3. Training on Making Videos Bandicam Application

In this activity, the speaker gave a lecture on the steps of making learning videos, namely determining the concept of video, making presentation material in the form of creative powerpoints, preparing the tools needed, making videos, evaluating videos, and editing. This material is provided to provide learning videos later. Participants are introduced first to the features available in the Bandicam application and the settings that need to be made in order to produce quality learning videos. The speaker also explained about the weaknesses and strengths of the Bandicam application.

After the presentation of the material, the activity continued with discussion and question and answer. In this activity, participants enthusiastically listened to the material, discussed and gave positive comments related to the material provided.

b. *Assistance in Making Learning Videos Using the Bandicam Application*

The stages of this mentoring activity are:

1) Determining the concept/theme of the learning video.
2) Designing powerpoint presentation media. Participants are asked to design animation media or powerpoint media. The resulting animation or presentation media will be used as a tool/media to help teachers create learning videos that serve as audio-visual teaching materials or interactive learning media. In this activity, all participants are familiar with and can use powerpoint media well, although there are still participants who do not pay attention to the artistic/display art of the presentation media such as the compatibility of color selection, font size, animation time and the use of images that are not in accordance with the presentation theme/ learning Media.
3) Create learning videos using the Bandicam app. In this activity, participants were asked to make learning videos with the help of powerpoint presentation media that had been prepared previously. Participants seemed very enthusiastic in this stage of the activity. This can be seen from the active participation of participants in this service activity. Participants thought that making this learning video was a new thing for them, the application used to make videos was very easy to use. It does not require a lot of recording equipment but only uses a laptop and the resulting video can be directly given to students for use. Although there are still obstacles encountered when making videos.

c. *Evaluation of the Implementation of Activities*
   a. Weaknesses
      Weaknesses found from the learning video training activities using the Bandicam application include: Service
      1) activities that rely on the internet network.
      2) Evaluation of learning videos is not carried out in depth.
      3) There was no evaluation related to the use of videos produced by participants in their respective classes.
   b. Advantages The
      advantages that are benefits that are received directly by participants and the service team include:
      1) In addition to participants getting interesting knowledge and experiences in making learning videos using the Bandicam application, participants also learn to make presentation materials using powerpoint.
      2) The service team got general descriptions of the ability of teachers in the metro city related to the ability to carry out online learning in each school and the ability of teachers to use technology in classroom learning. This becomes input for the service team to carry out further service and research activities based on these inputs.

CONCLUSION

Based on the results of the activities and discussion above, it can be concluded that: The results of the training activities for making learning videos using Bandicam are able to increase the knowledge of teachers about the use of the application, regarding application features in making learning videos, weaknesses and strengths from the application and knowledge of the stages of making learning videos. The result of the mentoring activity for making learning videos using the Bandicam application is that it can improve the skills of teachers in making learning videos using the Bandicam application. This is indicated by the existence of learning videos made by the teacher using the application. Another result of this activity is the increase in the skills of teachers in using powerpoint to make presentation materials and learning media, especially in terms of packaging attractive presentations. Participants also gain additional knowledge related to compiling content, determining the order of material and establishing important points in a presentation. Based on the weaknesses and strengths that have been described, trainings are needed to improve the knowledge and skills of teachers in developing lessons in an E-Learning-based network.

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