

Training in Making and Utilizing Mobile Learning-Based Learning Media Using “Rumah Belajar” Application

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ABSTRACT

Technological developments have a major impact on education so that educators must prepare themselves to develop the process and use of learning media as the main means of supporting learning. The purpose of this study is to train teachers to be able to use Rumah Belajars as a technology-based platform that can be used as a learning medium. This service method uses the Assed Based Communities Development (ABCD) approach with community service steps, namely discovery, dream, design, define, destiny. Assisted subjects are IPPNU members. The assisted result is that the assisted subjects of IPPNU members are able to use, design and utilize the Rumah Belajar platform so that it can be used as an alternative free learning media.

INTRODUCTION

Education is one way to grow the will, ability, and self-potential. With education, humans can become more understanding and responsive to the direction and changes and development of science and technology. Just like other fields, information technology is also very closely related to the world of education. In the field of teaching, information technology allows for distance learning, or face-to-face learning. However, the problems that arise are not as easy as imagined. Teachers in this case, teachers who master the subject matter, are mostly unable to present forms of learning in computers.

The current education system has progressed rapidly. This is indicated by the many ways used in the teaching and learning process. With the hope that the learning delivered is more effective and meaningful for students. Currently in the teaching and learning process has been widely used information technology (IT) and multimedia learning. This is expected to advance the quality of education, especially along with the development of technology.

The development of learning methods through curriculum development towards "student center learning" or student-centered learning and the use of information and communication technology (ICT) in the learning process according to the 2013 curriculum, encourages educators to develop creativity in preparing interesting teaching materials or materials. and up-to-date so that students can understand the concepts being taught. With the role of technology in learning, the use of media plays an important role in the learning process. In this case, teachers are required to be able to integrate ICT in learning by using more attractive media so that learning can take place more interactively, inspiringly, fun, challenging, efficient and motivating students to participate actively and provide sufficient space for students to be creative and independent. according to the interests, talents and psychological development of students such as teaching aids training for elementary schools (Rumidjan et al, 2017); learning media training using the filmora application (Sunardi, Syahputra & Hidayah, 2021); learning media training software sothink swf easy (Hartono et al, 2018); learning media training using Spring Suit 8 (Syah et al, 2018).

All sectors are currently feeling the impact of the Covid-19 pandemic. The world of education is one of them. Judging from the surrounding events that are happening, both students and parents who do not have cellphones to support online learning activities feel confused, so the school is looking for solutions to anticipate this. Some students who do not have mobile phones do learning in groups, so they do learning activities together. Start learning through video calls that are connected to the teacher in question, being asked questions one by one, to taking attendance through Voice Notes available on WhatsApp. The materials are also provided in the form of videos that are less than 2 minutes long.

Student achievement in school is often indicated by the student's learning problems in understanding the material. This indication is possible because student learning factors are less effective, even students themselves do not feel motivated in participating in class learning. Currently, there are still

many madrasah Ibtidaiyah teachers who have not used and have not even been able to design communication technology-based learning media. So that it causes students to lack or even not understand the difficult material given by the teacher. This unattractive learning tendency is experienced by teachers who do not understand the needs and learning characteristics of each student at Madrasah Ibtidaiyah. In the teaching and learning process, a very important element is the learning media.

The learning media used are expected to generate motivation and stimulation of learning activities and bring psychological influence on students. In its development, following learning media allows interaction between a person and subject developers (learning programs) with students. Based on initial observations, the service program that will be carried out is in accordance with the online learning situation obtained by the members of IPPNU Metro, most of whom are students. The activities are carried out based on needs and opportunities with the hope that this program can help especially IPPNU members in assisting with online learning in this pandemic era.

Based on the problems that have been described, researchers provide alternative solutions for using applications that can help SIPNU IPPNU members learn during this pandemic. The application used is "RUMAH BELAJAR".



Figure 1. Logo of Rumah Belajar

This application is equipped with material, sample questions and how to answer, problem solving questions, interactive videos, etc. and most importantly, this application is free, not paid like other applications.

The Rumah Belajar as an interactive learning system is expected to accelerate the mastery of students' material so as to increase the quality of Indonesian students. Rumah Belajar as a Learning Management System (SMP) or Learning Management System (LMS) is useful for improving the standard of the learning process in order to maximize the effectiveness of achieving learning objectives. Increasing the use of this system opens up more opportunities because of the demands of education that must be integrated with ICT.

Through the Rumah Belajar, it is possible to manage learning materials, organize learning, and evaluate web-based learning. The advantages of this system are that it opens up learning opportunities for students with a longer and more flexible time, increasing student interaction with educators, not only limited to school hours.

In full, the Rumah Belajar consists of eight main features, namely Learning Resources, Electronic School Books (BSE), Question Banks, Virtual Laboratories, Cultural Maps, Space Exploration Vehicles, Continuous Professional Development (PKB)/Online Education and Training, and Virtual Classes. There are also additional features, namely Community Work, Educator Works, and Literary Language Works. To be able to take full advantage of the features on the Rumah Belajar portal, users must have an internet network and several other technological devices such as computers and supporting software, including Adobe Acrobat Reader, Win Rar, and Adobe Flash 9. Player.

IMPLEMENTATION AND METHODS

Community service in the form of ICT-Based Learning Media Training at IPPNU uses the Assesed Based Communities Development (ABCD) approach (Green & Haines, 2000; Barret, 2013). ABCD is one of the approaches used in community service that prioritizes the utilization of assets and potentials in the surrounding environment. Teachers are a valuable asset for schools. By looking at the skills or potentials that exist in every teacher during the Covid-19 Pandemic, training is needed to make ICT-based learning media that can be used for the online learning process. The method used in this assistance is the Appeciative inquiry. The steps for community service are discovery, dream, design, define, destiny (Dureau, 2013):

a) Discovery

The discovery is done through interview techniques. Conversations with several members of IPPNU. Interviews were conducted to explore potentials and discuss to develop these potentials. Based on the interview, knowledge was obtained about the assets and facilities owned by the organization that can be used to support the potential of IPPNU members.

b) Dream

Dream is the stage of motivating IPPNU members as the subject of devotion to creative and innovative thinking to develop and utilize ICT-based learning media.

c) Design

Design of PKM activities that will be carried out starting from determining participants, resource persons, places of service, required infrastructure, consumption, and other things needed for the smooth running of PKM activities.

d) Define

At this stage a PKM team meeting is held. At this stage the PKM team determines that the training participants are members of the Metro City IPPNU. With the consideration that other than members are assets, this learning media training is important because it can help members learn online using media during this pandemic.

The selected resource persons are Agus Setiawan, M.Pd. with the consideration that apart from being a lecturer, he has a lot of experience in writing works in the field of learning media and is a doctoral major in learning technology.

e) Destiny

This PKM activity uses the Asset Based Community Development (ABCD) approach, which prioritizes assets and potentials that exist within NU, especially the IPPNU organization that can be empowered for the advancement of IPPNU Metro members.

Evaluation

The evaluation is carried out after the presenter delivers the training material, from this evaluation it can be seen how the level of understanding of the training participants regarding the material that has been given using a questionnaire. The evaluation procedure is to change data in the form of letters into qualitative values with the following steps.

- 1) The type of questionnaire data taken is in the form of qualitative data and then converted into quantitative with the conditions that can be seen in Table 1 as follows:

Table 1. Scale Giving Rules

Information	Score
SB (very good)	5
B (good)	4
C (enough)	3
K (less)	2
SK (very less)	1

- 2) After the data is collected, then calculate the average score with the formula:

$$\bar{X} = \frac{\sum X}{N}$$

Information : \bar{X} = Average

$\sum X$ = Total Score

N = Number of Appraisers

- 3) Ideal assessment with the following conditions in Table 2 (Budiyono, 2009).

Table 2. Assessment Criteria

No	Score Range (i) Quantitative	Qualitative Category
1	$\bar{X} > (M_i + 1,5 SB_i)$	Very Good
2	$(M_i + 0,5 SB_i) < \bar{X} \leq (M_i + 1,5 SB_i)$	Well
3	$(M_i - 0,5 SB_i) < \bar{X} \leq (M_i + 0,5 SB_i)$	Enough
4	$(M_i - 1,5 SB_i) < \bar{X} \leq (M_i - 0,5 SB_i)$	Less
5	$\bar{X} \leq (M_i - 1,5 SB_i)$	Very Less

Information:

M_i : ideal average that can be searched using formula.

$$M_i = \frac{1}{2} \times (\text{skor maksimal ideal} + \text{skor minimal ideal})$$

SB_i : ideal standard deviation that can be found by formula.

$$SB_i = \left(\frac{1}{2} \times \frac{1}{3}\right) \times (\text{skor maksimal ideal} - \text{skor minimal ideal})$$

Ideal maximum score = Σ criteria item x highest score

Ideal minimum score = Σ criteria item x lowest score

RESULTS AND DISCUSSION

In order for users to optimally use the features on the Rumah Belajar portal, such as downloading BSE files in BSE format, users need to register or login first on the Register or Login. The following is the procedure login to the Rumah Belajar account (Register for new users)

1. Setting up a computer/laptop/tablet/smartphone that is already connected to the internet. Then, open the Rumah Belajar portal using the browser available on the user's device with the URL address <http://learning.kemdikbud.go.id>. The Rumah Belajar Portal can be opened through a variety of browsers such as Google Chrome, Mozilla Firefox, Opera, Safari, Internet Explorer, Edge, or other types of browsers (Pusdatin Kemdikbud, 2011).



Figure 2. Home Learning Portal Display

2. Login to Rumah Belajar by input username and password. (For users who already have a Rumah Belajar account.)

Log in.

Gunakan username dan password Rumah Belajar.

Kategori

User Name

Password

Tuliskan teks pada gambar

Ingat saya?

[Lupa Password?](#)

[Daftar baru](#)

Figure 3. Login by Input Username and Password

3. For new users who do not have a Rumah Belajar account, click the Register located at the top right of the Rumah Belajar main page. Then, select the type of registrar according to the user in question. There are three types of Rumah Belajar users, namely educators, students, and the general public as shown in the following figure 4.



Figure 4. New User Login Portal HOME Learn

For educator-type users, the data that must be filled in is the user's personal data and the data of the school where the user works. If the user's school has not been registered, the user can add the user's school name manually by clicking the "+" so that the school addition form appears. Then, the user fills out and saves the form so that the user's school is registered in database Rumah Belajar Next, the user fills in the username and password, includes the user's email address, and writes the captcha according to the text that appears in the image. The steps and fields that must be filled out on the registration form for students and general users are more or less the same. The following is a display of the educator type user registration form page.

Daftar Baru

Data Sekolah

Provinsi -- Pilih Salah Satu --

Kabupaten

Jenjang -- Pilih Salah Satu --

* Pilih atau tulis kata kunci untuk mencari sekolah (Autocomplete), jika tidak menemukan gunakan tombol tambah(+) untuk menambah sekolah

Sekolah* +

Data Akun

NUPTK / No KTP

Nama Depan

Nama Belakang

Data Diri

User Name

Figure 5. Display of the Educator Type User Registration

The following is a display of the registration form page for users of the student type.

Daftar Baru Siswa

Data Sekolah

Provinsi -- Pilih Salah Satu --

Kabupaten

Jenjang -- Pilih Salah Satu --

* Pilih atau tulis kata kunci untuk mencari sekolah (Autocomplete)

Sekolah

Data Diri & Akun

NISN / No KTP

Nama Depan

Nama Belakang

User Name

Password

Figure 6. Student Users

The following is a screenshot of the registration form page for general type users.

Figure 7. General Type Registration Form Page Display

4. If users experience difficulties in utilizing the features in the Rumah Belajar portal, users can view the Frequently Asked Questions (FAQ) page which contains general questions about Rumah Belajar and their solutions by clicking on the FAQ menu. This is how the FAQ page looks like.



Figure 8. FAQ Page



Figure 9. Documentation



Figure 10. Documentation 2

Evaluation Result

Based on the evaluation that was given at the end of the training using a questionnaire, data on the level of understanding of the training material that was given was obtained. Based on the results of the questionnaire data analysis, an average score of 85 was obtained, an ideal average score of 80 and an ideal percentage of 84.2%, so that it was included in the very good category (SB).

Some of the suggestions and input for this training, the participants asked for learning media training like this to be carried out continuously so that they can provide scientific insight regarding learning media.

CONCLUSIONS AND RECOMMENDATIONS

This series of community service activities increases knowledge and skills in using Rumah Belajars as an alternative to mobile learning-based learning that can be done anytime and anywhere. As taught by the resource person of the service team.

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