DIGITALIZATION OF THE TSANAWIYAH MADRASAH EDUCATION PROCESS IN CIMACAN DISTRICT, CIANJUR REGENCY IN SUPPORTING SMART VILLAGES

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Abstract

The strong current of globalization has driven advances in technology, information and communication which then brought and forced changes in governance for various sectors, ranging from education, business to government. Communication technology is seen as capable of acting as an effective and efficient solution to a problem. One of the main phenomena of this technological advancement is the emergence of the Industrial Revolution 4.0. The Industrial Revolution 4.0 is marked by the widespread use of the internet, with sensors that are getting smaller, stronger and cheaper. School Digitization is an implementation of new learning, which is prepared to face the industrial revolution 4.0. The characteristics of the new learning are student-centered, use multimedia, prioritize collaborative work, exchange information, and encourage critical thinking and problem solving. Students do not only learn in conventional ways by listening to lectures from teachers and reading textbooks. However, they are challenged to collect relevant information, collaborate with friends, and solve problems from the problems they face and present them.

Keywords : School Digitization, Industrial Revolution 4.0, School Web, Learning

INTRODUCTION

Cimacan Village is one of the developed villages in the Cianjur Regency, where there is a lot of village potential that can be developed between tourism and its derivatives. With a variety of potentials that are presented in Cimacan Village, one of the efforts that can be made as a form of community service activities in this village, the Abdimas Team makes efforts to develop innovation in the education sector by creating a website application at Madrasah Tsanawiyah to implement digitalization in the education sector in order to support Smart Village.

School Digitization is the implementation of new learning, which is prepared to face the industrial revolution 4.0. The characteristics of the new learning are student-centered, use multimedia, prioritize collaborative work, exchange information, and encourage critical thinking and problem solving. Students do not only learn in conventional ways by listening to lectures from teachers and reading textbooks. However, they are challenged to collect relevant

information, collaborate with friends, and solve problems from the problems they face and present them.

The existence of this phenomenon triggers the idea of using digital technology as an alternative to overcome the obstruction of education due to restrictions on gathering or gathering activities. Salsabila et al (2020:3) mention that with the development of technology and information, it is used as a medium that can be a human solution in terms of work, especially during the Covid-19 pandemic which is still present. Digital technology is considered capable of being a solution for the continuity of education during a pandemic. Because education is basically a meaningful process in the continuity of the formation of humans into whole beings through the learning process. Education is an important aspect of life. Education has a fundamental position for human self-development. Education is a human way to develop and survive. Through education, humans are able to adapt to change by responding to every challenge that arises in every era of development (Andalas, 2020: 28).

METHODOLOGY
Preparation phase

Before carrying out Community Service activities, data and information related to the data needed are extracted, carried out by observation, direct interviews and literature studies. From the data collected, it will be included in the school website that has been developed. The steps in collecting data that we do are by:

Observation

Observation is one of the fundamental foundations of all data collection methods in qualitative research. Observations carried out in this community service are by looking for information related to the conditions and conditions of the school, where the data is needed. including those relating to the profile, structural and institutional existing in the school which will later be included in the school website.

Interview

Interview (interview) in general is a conversation between two or more people conducted by the interviewer and resource person. Interviews were conducted as a form of data mining and have been carried out to several parties who play an important role in school development.

Literature Study

Literature study is a way to solve problems by tracing the sources of writings that have been made before. In addition to conducting observations and interviews, in the process of compiling articles that take several references from previous scientific journals as supporting material in strengthening the expected achievements

School website development

School website development can be done with the hope that this website can provide convenience in the service system and in terms of potential development so that it is more widely known by the public

Implementation stage

The implementation of this community service activity consists of several activities with an allocation of 3 (five) months in the implementation of community service at Bhayangkara University, Greater Jakarta. The method of implementation includes lectures with the provision of materials, discussions and socialization with the school

Lecture

The lecture method is a method of providing descriptions or explanations to participants and this only relies on the sense of hearing as the most dominant learning tool even though in delivering this lecture it is equipped with adequate presentation tools. In other words, this method is a teaching method by conveying information and knowledge orally to participants who generally follow passively.

Discussion

The discussion method is a way of teaching by solving the problems encountered. This method is for exchanging ideas, thoughts, information/experiences among participants, so that an agreement is reached on the main ideas (ideas, conclusions). To reach the agreement, the participants can argue with each other to convince the other participants. This agreement of thoughts is then written as a result of the discussion. The discussion started with questions from participants regarding the problems found in the field

Socialization

Socialization is a practice that is demonstrated to participants who will see the application program that will be used later. The goal is for participants to be able to understand the procedure so that it can be applied

Evaluation Stage

Evaluation of the implementation of this Community Service activity is carried out by the implementing team with details of the activities as follows:

The implementation team will monitor the attendance and activity of each participant through checking attendance. The criteria for measuring success are: 90% of participants attend the training. 80% of participants who attend Actively participate in activities

Based on the schedule for implementing the activities, the implementing team will review the suitability of the activity schedule, time allocation, activity materials and methods that have been designed.

Fig 1 Activity Evaluation Image

The implementation evaluation stage is carried out based on 3 aspects, namely: (A) Aspects of knowledge (knowledge) that is based on knowledge related to the training material (B) The skill aspect is related to the ability to understand existing applications. (C) The attitude aspect is related to the ability to solve problems and the ability to communicate

RESULT

School Information Systems require the following minimum hardware and software:

Hardware

Intel Pentium 4 processor or higher

Memory 1GB or higher

Monitor with a minimum resolution of 1024x768. Minimum recommended 1280x800 or higher

Input device (Keyboard, Mouse/Touchpad, Deskjet or laser printer)

Server Software

Operating System Windows XP, Windows 7, Windows 8, or higher or Linux

Apache Web Server 2

MySQL Database Server 4. PHP Module 5

Client

Operating System Windows XP or higher or Linux

Web Browser or web browser program. Mozilla Firefox 15 or higher is recommended

PDF Reader. It is recommended to integrate with a web browser in the form of an add on

Display of the resulting application

Start the application by opening the login menu

Fig 2. login menu

Academic Year Data

The academic year master stores data from the semester school year. A record represents one semester. Example of Code 20211 academic year means 2021 semester 1, Code 20212 academic year means 2016 semester 2 and so on

Creating New Academic Year Data

To create a new academic year record, select the "Add Data" button at the top right of the list of existing academic years. If there is no academic year data in the system at all, the program will display an empty table. Furthermore, after clicking add data, the program will direct the user to a page containing the academic year data form. Complete the form then select the "Save" button to save it.

Room Data

The room master must be filled in before the user creates a lesson schedule and so on. Each room is assigned a unique code (different from each other). The code is needed so that the room data can be used by other modules without experiencing any problems. The capacity is adjusted to school policy, number of students, and room availability.

Type of PTK

The CAR master type is useful for determining the type of teacher CAR when adding a new teacher, so the data on the CAR master type must be completed first to be selected when registering or inputting new teachers. Users can use the "Add", "Change" or "Delete" operations to match the CAR type with the original data in the school
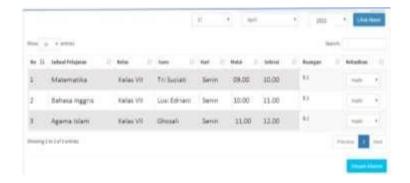

Subject Data

To create a new course record, select the "Add Data" button at the top right of the existing list of subjects. Then the program will direct the user to a page that contains the subject data form. Complete the form then select the "Save" button to save it.

Teacher Attendance Data

To increase teacher attendance, select the teacher attendance menu and filter by academic year, and the next class select show attendance and the names of students in the selected class will appear in the selected lesson schedule, then fill in attendance and when finished click save attendance on the bottom right button of the page absenteeism.

The teacher who teaches is the teacher who actually teaches on the schedule. The teacher may be different from the teacher listed in the lesson schedule. After selecting teacher attendance, proceed by selecting the "Save Attendance" button to save it

Student Attendance Data

To increase student attendance, select the student attendance menu and filter by academic year, then select the teacher's presence in the subject he forgives. After the attendance is taken, the students who are not present either sick, permits, or neglect, the system will automatically send an SMS notification to the parents of the students that their child is not present to confirm the truth.

Upload Teaching Materials and Assignments

Upload materials and assignments containing lesson materials and assignments given by the teacher to students in lessons, classes, and academic years through the system and if in the form of assignments, students can also send answers from assignments through the system, and if they are materials, students can only take materials just a lesson

CONCLUSION

Community service activities in the form of digitizing the Madrasah Tsanawiyah Education Process in Cimacan District, Cianjur Regency in order to support Smart Village to run smoothly. All participants were very enthusiastic and enthusiastic in participating in the training. From the results of the training, it can be concluded that the existence of a school website makes it easier for services, communication between teachers, students and parents of

students, introduces the potential of the school to the outside community and improves the ability of teachers and students in the learning-based process. technology.

Participants of the community service program feel motivated to improve the technology-based learning process so that it can be used for various purposes in order to improve the quality of school learning.

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