



## APPLICATION OF LEARNING TECHNOLOGY IN THE NETWORK (SPEEDER) FOR OPTIMIZATION OF TEACHING AND LEARNING PROCESS AT SMK PALAPA

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### Abstract

The learning procedures carried out at this time during the pandemic have utilized learning media through whatsapp, google classroom and google form. The learning process starts from giving materials to students that are delivered or shared to whatsapp groups media and then students work on questions or materials given by each teacher. The online learning system at SMK Palapa as a support for learning is carried out using a website consisting of admin, teachers and students. The procedure for presenting materials is carried out in each online class made by the teacher in accordance with the designed syllabus, then students can see the materials and discussion forums conducted online. The online learning system at SMK Palapa as a learning support is carried out by accessing the online system, each student will get online class information to be able to enter the online classroom activities, students can see materials, see assignments and send answers and see the value of the results of the tasks done.

**Keywords:** Learning, Online Learning, Support For Learning.

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## INTRODUCING

The application of information systems during the pandemic affects every business process, both companies and government agencies, especially in the field of education (Setiawansyah et al., 2020). The large influence on learning activities during the pandemic has an impact on the teaching and learning process that must be carried out based on the distance of each student or carried out at home, so that information technology is needed to support the teaching and learning process between teachers and students through internet media. Based on the Regulation of the Minister of Education and Culture Number 33 of 2019 concerning Disaster Safe Education Units, namely Learning from Home through online and/or offline distance learning is carried out in accordance with the guidelines for the implementation of Learning from Home as stated.

The application of information technology in one of the educational institutions, namely SMK Palapa Bandar Lampung City, Lampung 35212 and has a total of 389 students and 39 teachers. The school has a vision that is to print outstanding students, creative, virtuous, virtuous, faithful and faithful, healthy physically and spiritually, so referring to the vision of outstanding students, of course, the school needs to have innovations in the application of information technology to support the teaching and learning process online (Darwis et al., 2020; Ulfa & Puspaningtyas, 2020). The learning procedures carried out at this time during the pandemic have utilized learning media through whatsapp, google classroom and google form. The learning process starts from giving materials to students that are delivered or shared to whatsapp groups media and then students work on questions

or materials given by each teacher. The results of the task carried out are then carried out recap assessment by each teacher, it is also done on supporting applications such as google classroom and google form. So based on some of the media used it will certainly complicate the process of expanding value and delivering materials because of the different processes in each media. As research conducted by (Sulistiani et al., 2021), that the Network Learning System that utilizes information technology for learning systems during the Covid-19 pandemic is not yet available and only uses Google Classroom so it is felt that there is no optimal knowledge in teachers and students in using information and communication technology in the learning system in the network.

Based on the results of interviews conducted to the teacher and students, problems or shortcomings in the learning system that are currently applied, among others, the delivery of materials using whatsapp media is still considered less than optimal because the material is only delivered and without any explanation, information about the assessment process for assignments, exams and questions is still carried out using different media so that there will be a repeated data collection process. The delivery of materials carried out is already in the network, but there are still problems between teachers and students, from students, the problem that occurs is that students do not have enough time to return to study the materials they receive in school because of the tight schedule of teaching and learning activities including practicum activities, while problems in teachers such as teachers have relatively short learning time and many administrative activities that are Non-academics must be solved, so as to have an impact on the achievement of student competencies, the problem is also raised by (Purmadi et al., 2018; Saputra & Febriyanto, 2019). Schools need to apply information technology as a support for the teaching and learning process with the motivation to still realize outstanding students.

Based on these problems, the solution provided is in the form of implementing an e-learning system that is carried out online using website media. The features given to the concept of e-learning are through the media of images, text and video. Features in the form of assignments, exams and questions can be done directly on the system built so that it is expected to facilitate the process of achieving student grades. Based on the circular letter of the Ministry of Education and Culture Number 15 of 2020 which requires learning to be carried out at home with a schedule and time that has been set by the local Education Office and schools, these regulations and policies indirectly force teachers and students to adapt to the habits and systems or models of E-learning learning or known as online (Hakim, 2018; Puspaningrum & Susanto, 2021). The implementation of the e-learning system can be adjusted to the curriculum implemented by the school and overall the system built can be accessed online.

## **IMPLEMENTATION METHODS**

### ***Place and Time***

Implementation of application of learning technology in the network (SPEEDER) training at SMK Palapa on May 20, 2022 at 09.00 WIB until completed

### ***Target Audience***

The existence of this training is carried out to provide skills to teachers in the use of technology to support the learning process in the network.

### ***Devotion Method***

This Community Service activity uses practical methods in the delivery of training materials. The target of this activity is the Palapa Vocational School Teacher. Sourced from the information that has been collected, that the teachers at the school have never done the learning process in the jaraingan. To increase the expertise of teachers in using learning technology in jaraingan by using mobile phones that develop so rapidly in learning activities in schools.

## **RESULTS AND DISCUSSIONS**

This service produces applications in the form of learning systems in the smk Palapa network based on websites. In detail, the appearance of the ipembelajaran system in the SMK Palapa network is as follows.

The login view is the view used as an access right to the menu page, here is the login view in The image below

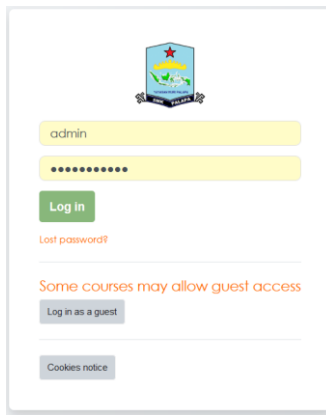


Figure 1. Login page

Implementation of the dashboard page when the user successfully logs in, here is the implementation view of the dashboard page in Figure below:

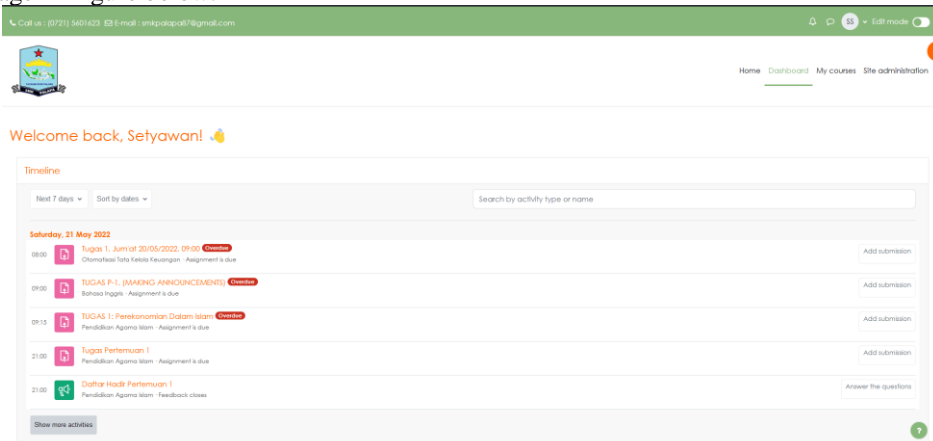


Figure 2. Dashboard Page

Implementation of discussion materials is a view used to add, change, delete and display data, here is the discussion material data in Figure below

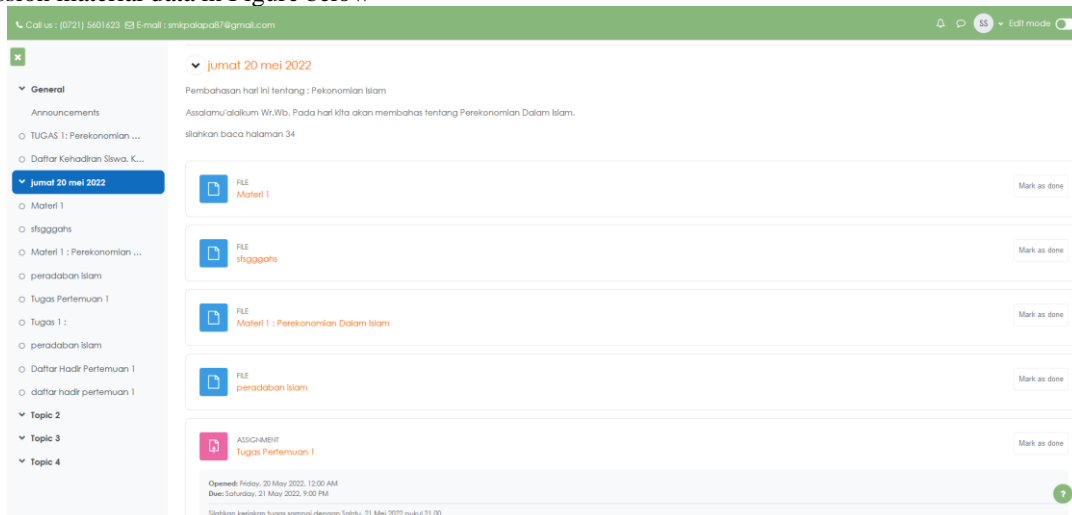


Figure 3. Discussion Material Page

Task page implementation is a view used to add, change, delete and display data, here is the discussion material data in Figure below

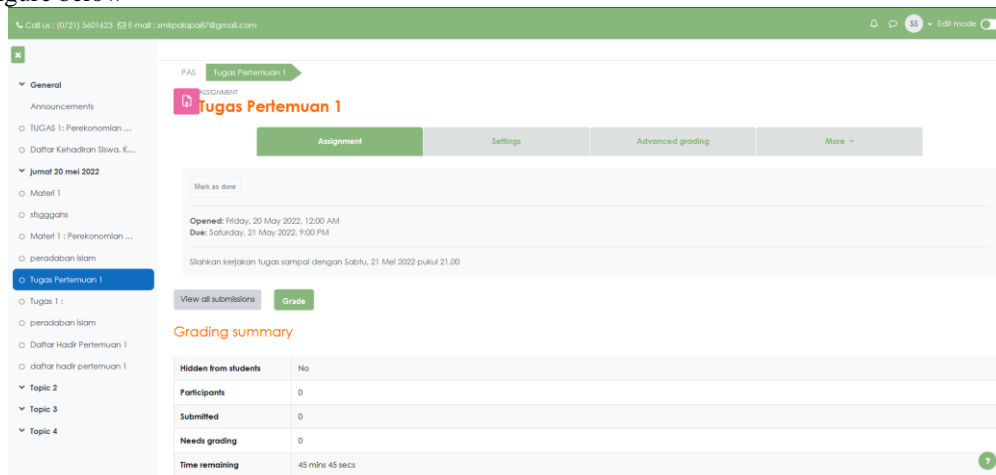


Figure 4. Assignment Page

The partner in this community service activity is SMK Palapa which is located at Jl.Cut Nyak Dien No.10A, Durian Payung, Tanjung Karang Pusat, Bandar Lampung on May 20, 2022. This Devotion activity has a goal of creating a learning information system in a website-based network for partners as a tool in the learning process. This devotional activity starts with planning starting with conducting a survey at SMK Palapa, then for the needs of creating a learning information system in a network of volunteer teams to collect data. Data collection is carried out by interviewing partners, namely principals and teachers. Then the team also made observations directly to SMK Palapa. Here are some pictures of the implementation of service at SMK Palapa:



Figure 5. Explanation of the use of the application



Figure 6. Assistance on app usage



Figure 7. Documentation of Service Activities

## CONCLUSION

The online learning system at SMK Palapa as a support for learning is carried out using a website consisting of admin, teachers and students. The procedure for presenting materials is carried out in each online class made by the teacher in accordance with the designed syllabus, then students can see the materials and discussion forums conducted online. The online learning system at SMK Palapa as a learning support is carried out by accessing the

online system, each student will get online class information to be able to enter the online classroom activities, students can see materials, see assignments and send answers and see the value of the results of the tasks done.

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