# The Online Learning Activities during the Covid 19 Pandemic

**M. Joharis Lubis[1], Liliana Puspa Sari[2]**
[1]Universitas Negeri Medan, Indonesia
[2]STOK Bina Guna,Indonesia
joharislubis@yahoo.ac.id

## Abstract

*The Covid 19 pandemic, which has spread throughout the world since December 2019 has changed the order of human life in all aspects, including education. The transition of offline to online learning is an absolute necessity. This paper aims to describe the ideas that related to the design of online learning management which is carried out when the long distance learning was implemented during the Covid 19 pandemic. The learning designs can be seen through the activities, which consist of: 1) filling in the learning material content, 2) tracking the students' attendance, 3) presenting the learning materials, 4) conducting the discussion forums, and 5) providing the evaluation through assignments and quizzes.*

## I. Introduction

The development of information and communication technology has brought huge changes to the advancement of education. Along with the developments, learning innovations have also experienced significant developments either personal learning models, learning media or learning processes which are surely integrated with the advances in digital technology. The development form of information technology applied in the education is known as an online learning system through a learning management system.

Learning Management System (LSM) is a software for administrative purposes, documentation, activity reports, teaching and learning activities and online activities (connected to the internet), E-learning and training materials, and they all conducted in online. (Ellis 2009). According to Rustaman et al, (2005) there are several functions of learning media, including increasing the learning motivation and students' attention, increasing the effectiveness and efficiency of delivering information, and the ease of comprehending the materials. From some of the functions above, we can conclude that the existence of learning media is important to help the students in the learning process.

The implementation of online learning has been carried out during the Covid 19 pandemic. It is known that the implementation of learning in the middle of the academic year of 2019/2020 was forced to switch from face-to-face learning method to online learning method due to the Covid 19 which has spread throughout the world, including Indonesia. The readiness of the college teachers and students to face this situation also varies. This is also due to several factors, such as the online learning facilities and infrastructures as well as the digital literacy competencies of the college teachers and students.

The online learning system is a learning system without doing face-to-face learning between the college teachers and students but is carried out online using the internet network. The college teachers must ensure that teaching and learning activities continue, even though the college students are at home. The solution is that the collecge teachers are required to be able to design learning media as an innovation by using the online media.

The Indonesian Ministry of Education and Culture actually prepared for this online learning situation a long time ago through the SPADA (Online Learning System in Indonesia) program. This effort was made to minimize the quality desparated of higher education institutions in Indonesia, which so far have only been centralized on the island of Java. Some indicators of the quality desparates of the higher education institutions are: 1) There are still many universities with very limited capacities. 2) The low affordability of higher education which is due to the uneven distribution as teh result of the increase in tuition fees and accommodation. 3) Most universities do not yet have adequate and quality educational resources. 4) The qualified institutions are more centralized on the island of Java that the students out of Java do not have access to the good and quality education. 5) Many higher education institutions are still in the guidance by the government in providing the satisfying services 6) The higher education is still low in ensuring the fulfillment of the qualified graduates (Ministry of Education and Culture of the Republic of Indonesia, 2014: 2). Furthermore, Mustofa, et al (2019) also describe the positive trend towards the online learning systems in Indonesia. The results show that the online teaching system has a positive contribution to encourage the quality desperates of higher education institutions in Indonesia.

Anderson & Mc. Cormick (2005) explain the principles that must be met when conducting the online learning, they are: (1) the suitability of the materials with the curriculum, (2) inclusiveness - that is, trying to use the other people's point of view or other groups in understanding the problems, (3) involving learning, (4) using an innovative approach, (5) using effective methods, (6) carrying out periodic evaluations, (7) teaching materials which are coherent, consistent, and transparent, (8) using easy to operate devices, (9) effective in paying the cost. In line with that, Dunwill (2016) adds that in the online learning, we must pay attention to: (1) The students-teacher contacts, (2) collaboration among the students, (3) an active learning atmosphere, (4) fast feedback, (5) formulating the goals learning that can be achieved, and (6) rewarding the differences. From these two opinions, there is a common point of view in the emphasis on the online learning, that is, teh online learning is very dependent on the students-teachers interactions. The quality of the online learning is determined by the extent to which the college teaachers and students can interact each other without being limited by space and time.

The online learning is a form of long distance learning or education, which has been part of the American education system, and has become the largest distance learning sector in the recent years (Bartley & Golek, 2004; Evans & Haase, 2001). The online learning concept according to (Belawati, 2019) is a learning that is usually carried out online, so that the principles of learning that are carried out normally and conventionally still apply. According to (J. Anderson & Mc.Cormick, 2005) the online learning needs to pay attention to: (a) the compliance of the curriculum, (b) The inclusiveness, (c) involving teh college styudents, (d) Innovative, (e) Effective learning, (f) Evaluation which is formative, summative, (g) Coherent, consistent, and transparent, (h) The device whcih is easy to operate and use, and (i) cost-effective.

In e-learning system, flexibility is the keyword. The students become very flexible in choosing the time and place to study because they don't have to come in one place at a certain time. On the other hand, the college teachers can update their learning materials anytime and from anywhere. In terms of the content, learning materials can be made very flexible, starting from text-based learning materials to those that are full of multimedia content. However, the quality of e-learning learning is also very flexible or varied, which can be worse or better than face-to-face (conventional) learning system. To obtain a good e-learning system, it is required a good design too. The distributed learning refers to

learning in which the teachers, students, and the learning materials are located in different locations, so the students can study anytime and from anywhere.

As Mulyani, et al (2017: 156) stated that abstract and difficult to imagine material can be illustrated by using the media as an intermediary in conveying messages to the students. Moreover, Khoe Yao Tung adds that the characteristics of online learning include: 1) Teaching material is presented in the form of text, graphics and various multimedia elements, 2) the communication is carried out simultaneously and continuously such as video conferencing, chat rooms, or discussion forums, 3) It is used to learn in virtual time and place, 4) It can be used in various elements of CD-ROM based learning, to improve learning communication, 5) Teaching materials are relatively easy to update, 6) Increasing the interaction between students and facilitators, 7) Enabling the formal and informal learning communication forms, 7) It can be used a wide variety of learning resources on the internet (Tung, 2000: 15)

The success of the online learning system depends on several components, including the students, the teachers, the learning resources, and the information technology. These are integrated so that they can produce quality student graduates. It is on this basis that this article was written. The various problems in online learning during the Covid 19 pandemic are the background to the problems of this article. Broadly speaking, this article aims to answer the problem formulation of: How is the ideal online learning design implemented during the Covid 19 pandemic in universities?

## II. Review of Literature

2020 became the year that made human life in the world totally changed, the emergence of the corona virus that shook the world quickly became a global upheaval. The system of interaction between humans becomes changed with the existence of social distancing, the need to keep a distance in order to suppress the rate of spread of the virus. All fields have been affected, including education. Schools, which are the gathering place of people, inevitably become a region that is heavily affected must adapt to this pandemic. The pattern of teaching in the classroom also follows the government's recommendations that must be removed. While the material has not or cannot be completed if schools are closed. Distance learning or online can be a solution so that the discussion of the material continues even with online (Silalahi and Hutauruk, 2020).

Learning is the process of changing behavior due to interactions among individuals and the environment. Changes in behavior include changes in knowledge, understanding, attitudes, skills, motivation, interests, thinking abilities and so on (Sitorus et al, 2019). According to Imelda and Anzelina (2019) learning activities are activities or actions both physical and mental carried out by individuals to build knowledge and skills in themselves in learning activities. Learning activities will make learning more effective.

## III. Discussion

### The Learning Management by Using a Learning Management System
The LMS application plays as a media in creating learning interactions in ehich the learning activities are managed through a virtual class. The use of virtual classes with LMS has advantages in the availability of menus and features that can be used by the students to study the teaching materials, activities, and to measure their understanding of learning materials like conventional learning. At the beginiing is managing the learning in which the lecturer first activates an account at the LMS. The activation of teh teacher's account is

usually conducted by the e-learning administrator. The faculty administrator prepares the account of each teachers and the subjects they are teaching. After the teachers are registered and have an account, they can access the LMS to carry out the online learning process. After that, they will find the elearning front page before logging in as a teacher.

The provided features in LMS for educational institutions are as follows: (1) The management of user access rights, (2) The management of courses, (3) The management of teaching materials (resources), (4) The management of activities, (5) The management of value, (6) The value of display, (7) The management of e-learning visualization, so that it can be accessed with a web browser. Most of the LMS is web-based which is built by using various development platforms, such as Java/J2EE, Microsoft.NET or PHP. They typically employ the use of databases such as MySQL, Microsoft SQL Server or Oracle as a "back-end". Although most systems are commercially developed and licensed for commercial software, there are a few systems that are "open source" licenses.

There are several types of LMS that can be utilized in the learning process including Edmodo, Schoology, Learnboos, Moodle and others. Amiroh (2013).

The learning activities in the learning management system design are described as follows:

**Table 1.** Learning activities in the learning management system design

| Learning Activities | Explanation |
| --- | --- |
| Assignments | With this activity, the teachers can give any assignments that require teh students to send (upload) any digital content, for examples are essays, project assigments, reports, and others. The file types that can be sent include word-processed documents, spreadsheets, images, audio and video clips. Then the teacher can see and assess the assignments that have been sent by student. |
| Chats | With this activity, each participant can discuss real-time via the web. The etachers can monitor the sstudents' activities during teachihg learning  via this chat. |
| Choices | This activity is very simple - the teacher asks several questions and provides several options iof the answer. This activity can be used as a poll to stimulate the students' mind about a topic, for example allowing a class to determine (vote) the direction of the course. |
| Database Activity | With this activity, the teachers and/or the students can create, view and search for databases on any topic. The format and structure of the data entered are almost unlimited, including the images, files, URLs, numbers, and text. |
| Forums | This is similar to chat, in forums, students and teachers can interact with each other in real-time. However, unlike chat, the interaction is carried out asynchronously in forums. Each member who joins the forum will receive a copy of the post in their email. |
| Glossary | In this activity, the participants can make a collection/list of word meanings, such as a dictionary. The data entered can come in a variety of formats and links to other material that can be automatically generated. |
| Lesson | Lessons are intended to make the teachers can create any activities that contain interesting and flexible content. The lesson is divided into several pages and at the end of each page there is usually a question that has several answers. The answer chosen by the student will determine which page he will access. |
| Quizzes | In this module, the teachers can design a collection of questions, |

| | which contains multiple choice, true-false, and short answer questions. The questions will be stored in a question bank that can be categorized and reused. |
|---|---|
| **SCORM/AICC Packages** | With this module, the teachers can create any packages that contain web pages, graphics, Javascript programs, flash presentation slides, videos, sounds and any content that can be opened in a web browser. This package is also integrated with a collection of questions which, if necessary, can be assessed and then included in the students' reports. |
| **Surveys** | The survey is a feedback, or questionnaire that can be used as a learning material or criticism for the teachers or courses so that the teachers' performance and the content of the course can be improved in the future. |
| **Wikis** | In this activity, the students and the teachers can collaboratively write web documents without knowing the html language directly from a web browser. The results can be in the form of a class, group or individual creativity. The following are the resources provided by Moodle. |
| **Web page** | With this type of resource, the teachers can create any posts that only contain text. Several types of formatting are provided to make the text a web page that is comfortable to see. |
| **Link to Files or web pages** | With this resource, the teachers can link to other web pages or files on the internet. The links can also be directed to web pages or other files that have been uploaded to the local computer. |
| **Directory** | With this resource, the students can see all directories (and subdirectories) of the directories under the course directory. |
| **IMS Content Packages** | IMS content packages can be created with various content authoring software, as in a zip file. Moodle will automatically extract the package so that the content can be viewed. The content of the IMS package usually contains a presentation slide consisting of several pages and page navigation. |
| **Labels** | Unlike other resourses, the labels are only in the text and graphics forms. These are useful as short instructions that tell the student what to do next. |
| **Workshop** | Workshop is a new feature in Moodle 2. Its function is similar to the extended assignment module in many ways. However, it is recommended that the facilitator and the course participants have at least some experiences with the pre-Workshop assignment modules used in the course. Like assignments, the course participants submit their work during the Workshop activities. Each course participant submits their own work. The Submissions can consist of text and attachments. Therefore, Workshop submission combines both online text and upload file types from the assignment module. |

Today, the online learning is very necessary to perform, in order to open up more space and access than conventional classrooms. The learning with the help of technology and good learning resources, such as learning using LMS can be a media that can be used and has the potential to increase the learning outcomes and innovations in the classroom. Surely to support a better learning, any supports from various parties is needed, primarily the teachers who act as the motor of the education. The dynamics of education that continue to change will increasingly become a necessity for all teachers to continue in innovation to advance the education. The ultimate goal of education in higher education is surely to lead the students to develop their potential and to achieve a life success.

## IV. Conclusion

Based on the explanation above, it can be concluded that the online learning innovation is determined by the online learning activities synchronously through a learning management system. The teachers should be able to design any innovative online learning. Some of these activities include: 1) filling in the learning material content, 2) tracking the students' attendance, 3) presenting the learning materials, 4) conducting the discussion forums, and 5) providing the evaluation through assignments and quizzes.

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