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LEARNING MODELS IN A PANDEMIC PERIOD (AN ANALYSIS OF LEARNING MODELS)

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Abstract

Learning is a fundamental thing that every student does in order to add or expand the knowledge. In a learning process of interaction between learner and educator, it can also be said that learning is the direction and encouragement provided by the educator so that there is a process to acquire knowledge, improve skills, character education, and attitude. In other words, learning is a process to help students learn well. Face-to-face learning has been a long distance learning to break the spread of Covid-19. A variety of problems arose. The number of tasks students have to complete becomes one of the causes of boredom. This problem if not immediately sought a solution will certainly have a bad impact on the decrease in motivation which will impact on the low learning outcomes of students. This article aims to analyze several models of learning in pandemic times that have been carried out by educators, and can provide reference in the teaching learning process to improve students' learning outcomes. The results show that the learning process in pandemic period can be carried out through the following models, such as: 1) Online Learning Model; 2) Blended Learning model; 3) Project Based Learning Model. Here are some of the recommendations of learning models that can be applied so that learning in the current pandemic can still run smoothly and optimally.

Keywords: *Pandemic, Learning, Model.*

1. Introduction

The impact of the Covid-19 pandemic is so great in various sectors. All activities in all sectors: from economy, health, to education. Considering this, the government decided to instruct the implementation of an online-based learning system that is simultaneously conducted by all educational institutions in Indonesia.

This extension of the online education period has triggered the emergence of various creative options for several higher education institutions

so that learning activities can continue to run optimally even though they must be done online. However, there are still many universities in our country that are not yet ready to fully implement the online system. None other than that, the reason is that the existing infrastructure is not ready, either the institution itself or the location where the institution is located.

The purpose of this study is to try to solve each of the learning models that are appropriate for the learning process and to analyze and test the

accuracy of the learning models in learning practice.

Learning is a fundamental thing that every student does in order to add or expand the knowledge. In a learning process of interaction between learner and educator, it can also be said that learning is the direction and encouragement provided by the educator so that there is a process to acquire knowledge, improve skills, character education, and attitude. In other words, learning is a process to help students learn well.

According to Gagne et al, learning is a series of planned and oriented events to achieve learning outcomes. According to the Law of the Republic of Indonesia, learning is a process of interaction between students and teachers and learning resources in a learning environment. (Hamdan, 2002: 3). The word learning in language means the process, method, making people or living things learn. In terms of learning, it can be interpreted as an effort by educators to help students carry out learning activities. This is in line with the Word of God in verse An-Nisa '(4): 58 which means: "Verily Allah commands you to convey the mandate to those who are entitled to receive it, and instructs you when setting the law between people so that you judge fairly. Verily, Allah has taught you the best. Verily, Allah is All-Hearing, All-Seeing." (Ministry of Religion RI, 2011: 69)

It is undeniable that learning has several vital things, including educators, students, media, and the application of learning/learning strategies. Strategy itself is an outline of the course of action to achieve the goals that have been set. Strategy is very necessary in classroom learning; this is because the level of understanding and absorption possessed by each student is not the same.

There are several understandings of learning strategies according to the experts, among them according to Konza that the learning strategy is each chosen activity that can provide facilities or

assistance to the students towards achieving learning goals. According to Dick and Carey the learning strategy consists of all components of learning materials and procedures or stages of learning activities that/or are used by teachers in order to form students to achieve specific goals of learning. So, not only the procedures or the learning activities, but also the rules, materials or learning program packages that will be delivered to the students. (Halid Hanafi and Muzzakir, 2019: 27-28).

A good learning strategy is a strategy that can foster the spirit of learning for students. In this case educators should master the learning materials to be delivered and choose the right learning strategies for class conditions. The learning strategy itself has several types, such as direct learning strategies and indirect learning strategies. Both are used by educators in learning tailored to the situation and condition of the student and the learning support environment.

Given the current situation, the world is experiencing a severe shock by facing difficult times in the form of a pandemic. This pandemic began to spread in December 2019 start from Wuhan city to all countries in the world. This gripping outbreak is called Corona Virus Diseases 2019 or often abbreviated as "COVID-19". Since March 2020, WHO has designated this gripping outbreak as a global pandemic. Transmission of this virus only by contacting fellow human beings either by shaking hands, touching, sweating and, so on. As the list of positive names of the virus grows, it also narrows the realm of human movement in all sectors including education.

To respond to such situations, the education world utilizes several appropriate learning models during pandemic times. Several methods of learning in the pandemic period have been carried out by educators, and can provide reference in the teaching learning process to improve the learning outcomes of students.

The application of the learning model is one of the main factors in the learning process. This is because when applying an appropriate learning model, the learning process and learning outcomes will be as expected.

The learning model is a set of plans or patterns that can be used to design learning materials and guide learning activities in the classroom or in other places that carry out learning activities (Martono, 2015:71).

According to Tutik Rachmawati, et al (2015:38-39) Learning is a process of interaction of students with educators and learning resources in a learning environment. Learning is assistance provided by educators so that the process of acquiring knowledge and knowledge, mastering skills and character, and forming attitudes and beliefs can occur in students. In other words, learning is a process to help students learn well. The learning process can also be interpreted as a series of interactions between students and teachers in order to achieve their goals, or learning is a process of teaching students.

A. Discussion

According to Trianto (2010: 51) Learning Model is a plan or a pattern that is used as a guide in carrying out classroom learning or learning in tutorials. The learning model is a conceptual framework that describes systematic procedures in organizing learning systems to achieve certain learning goals and serves as a guide for learning designers and teachers in planning and implementing learning activities (Saefuddin & Berdiati, 2014:48).

The learning model is a guideline in form of a program or instructional teaching strategy designed to achieve learning (Daryanto & Raharjo, 2012:241). a learning model is a form of learning that is drawn from start to finish that is presented specifically by the teacher. In other

words, the learning model is a wrap or frame of the application of an approach, method, and learning technique (Komalasari, 2010:57). A learning model is a pattern used as a guideline in planning classed learning or tutorials. The learning model is based on the approach to be used, including in learning objectives, stages in learning activities, and classrooms. Learning models can be defined as conceptual frameworks that illustrate systematic procedures in organizing learning experiences to achieve learning goals (Suprijono, 2010:54-55).

Regarding the learning model, Brunce Joyce and Marsha Weil in Asnawir and Basyirudin (2002:16) centered four groups of learning models, namely (1) social interaction models, (2) information rejection models, (3) personal humanistic models, and (4) behavior modification models. However, the use of the term model learning is often identified by a learning strategy.

According to Rusman (2014:136) the learning model has the following characteristics:

- 1) Based on educational theory and learning theory from certain experts. This model is designed to practice democratic group participation.
- 2) Having a specific educational mission or goal, for example the inductive thinking model is designed to develop inductive thinking processes.
- 3) Can be used as a guide for improving teaching and learning activities in the classroom, for example the synectic model is designed to improve creativity in writing lessons.
- 4) It has parts of a model called: (1) the order of learning steps, (2) the principles of reaction, (3) the social system, and (4) the support system. These four parts are practical instructions when teachers are going to apply a learning model.

- 5) Impact as a result of the application of the learning model. The impact includes: 1) the impact of learning, which is measurable, and 2) the impact of follow-up, which is the long-term impact of learning.
- 6) Prepare to teach (intrusional design) with the instruction model he chooses.

Rofa'ah (2016:71) explains that there are several characteristics of specific learning models including:

- (1) Logical theoretical rational design by the creators or developers.
- (2) The basis for thinking about what and how students teach.
- (3) The level of instruction required for the successful implementation of the model.
- (4) The learning environment needed to achieve the learning goal.

Hasan stated in Isjoni (2013: 50) that to choose the right model, it is necessary to pay attention to its relevance to the achievement of teaching objectives. In practice, all learning models can be said to be good if they meet the following principles:

- 1) The smaller the teacher's effort and the greater the student's activity, the better.
- 2) The less time teachers need to activate students, the better.
- 3) In accordance with the way students are taught.
- 4) Well done by the teacher.
- 5) There is no method most suitable for all purposes, types of matter, and the learning process.

The ideal learning model is a model that explores effective learning experience, namely learning experience that allows students to experience or do it directly and actively in a learning environment (Sukardi, 2013:30). Darson in Hamdani (2011:23) revealed that, learning by

behavioral flow is a teacher's endeavour to shape the behavior desired by providing an environment or incentive. The cognitive stream defines learning as the way teachers give students the opportunity to think and understand something they're learning. The curriculum model can generally be described as a graphical display, a conceptual framework that describes systematic rules in organising learning to achieve certain learning goals. Thus, learning activities are indeed systematically recorded and carried out in accordance with planned activities (Prawiradilaga, 2007:33).

According to some of the experts above, it can be concluded that the learning model is a pattern or plan that is used to achieve certain learning goals. The learning process can be done anywhere and anytime, not only in the classroom but outside the classroom, even at home, learning activities can continue. The utilization of information technology can also assist in the learning process. Teachers can use information technology to carry out an online learning process or learning that is carried out without face-to-face. So far, teachers only dwell on conventional learning methods, learning methods that take place face-to-face in class.

Due to the impact of the emergence of this virus in the education sector, the Minister of Education and Culture (Mendikbud) issued circular letter Number 4 of 2020 concerning the Implementation of Education Policies in the Emergency Period for the Spread of Corona Virus Diseases-19. In order to break the chain of spread of this virus, the government recommends closing learning activities in schools and implementing online learning.

In this online learning process, it has many impacts, ranging from positive impacts to negative impacts. In this online learning, teachers are required to prepare for learning as well and as creatively as possible in providing a material.

One of the appropriate learning models during the pandemic is online/e-learning. E-learning is an abbreviation of "e" which means "electronic" and "learning" which means "learning". E-learning is learning based on electronic media. Meanwhile, according to Sukmadinata (2012: 206-207) e-learning is not only an abbreviation of electronics, but also stands for experience (experience, extended), and expended (expansion).

Effendi and Hartono (2005:6) explain that e-learning is all activities that use computer and/or internet media. Chandrawati (2010) states that, e-learning (electronic learning) is a distance learning process by combining principles in the learning process with technology. Brown and Feasey (Darmawan, 2012:26) also explain that e-learning is a learning activity that utilizes networks (internet, LAN, WAN) as a method of delivery, interaction, and facilities and is supported by various forms of learning services.

In line with Rusman, et al (2012:263) which states that web-based learning is a learning activity that utilizes media sites (websites) that can be accessed via the internet network. Web-based learning or also known as "web-based learning" is one type of application of electronic learning (e-learning).

According to Romli (2012:34) the definition of online media in general is any type or format of media that can only be accessed via the internet containing text, photos, video and sound, as a means of online communication, while the special understanding of online media is interpreted as a medium in the context of online media. mass communication. According to Munir (2009:171-172) the benefits of e-learning can be seen from two angles, namely from the point of view of students and teachers:

1) Participant angle increased

- a) Learning in small schools in poor areas to follow certain lessons that the school cannot provide.
- b) Follow home schoolers to study subjects that their parents cannot teach, such as foreign language and computer skills.
- c) Feels phobic with schools or educated attendants who are treated in hospital or at home, who have dropped out of school but intend to continue their education, or educated attendants who are in different areas or even abroad, and
- d) Not included in conventional schools for education.

2) Teacher

- a) Making it easier to update the materials that are responsible in accordance with the requirements for the development of knowledge.
- b) Develop or carry out research using enhanced visibility due to relatively more time spent.
- c) Controls the learning activities of educated participants. Even teachers can also know when students learn, what topics are learned, how long a topic is learned, and how many topics are re-taught.
- d) Verify whether the educated participants have been working on training issues after studying a particular topic, and
- e) Verify the replies of the educated participant and report the results to the educated participant.

In addition, the benefits of e-learning using the Internet, especially in distance learning among

others:

- 1) Teachers and students can communicate easily and quickly through Internet facilities without limiting place, distance and time. Regularly or whenever communication activities can be carried out.
- 2) Teachers and students can use learning materials whose scope and sequence are systematically scheduled over the Internet.
- 3) By e-learning, it can explain the difficult and complicated subjects of learning to be simple and simple. In addition, learning materials can be stored in computers, so that students can re-study or repeat learning materials that they have learned at all times and wherever they need.
- 4) Make it easier and faster to access or obtain a lot of information related to the learning materials they learn from various sources of information by accessing the internet.
- 5) The internet can be used as a medium for conducting discussions between teachers and students, either for a learner, or in a limited number of students, even mass.
- 6) The role of students becomes more active in studying learning materials, obtaining knowledge or information independently, not relying on gifts from teachers, also adjusted to their desires and interests in learning materials.
- 7) Relatively more efficient than time, place and cost.
- 8) For learners who have worked and are busy with their activities so that they do not have time to come to an educational institution, they can access the Internet at any time in their spare time.
- 9) In terms of cost, Internet services are less expensive than building rooms or classrooms at educational institutions while maintaining them, and hiring their employees.
- 10) Provide interesting and meaningful experiences for students because they can interact directly, so that understanding of matter will be more meaningful, easily understood, remembered and easily disclosed.
- 11) Working together in an online community that facilitates information transfer and does a communication so that there will be no shortage of learning resources or materials.
- 12) Administration and management are concentrated so as to facilitate access or in its operations.
- 13) Focus on learning.

According to Siahaan (2003) there are at least 3 (three) functions of electronic learning for learning activities in the classroom (classroom instruction), namely:

1. Supplement (additional)

It is said to function as a supplement, if students have the freedom to choose whether to use the subject matter electronic or not. In this case, there is no obligation/requirement for students to access electronic learning materials. Even though it is operational, students who use it will of course have additional knowledge or insight.

2. Complements

It's said to work as a complement, when e-learning materials are programmed to complete the learning materials that students receive in the classroom. As a complement means e-learning material is

programmed to be enrichment or remedial material for educated participants in conventional learning activities.

As an enrichment, when educated participants are able to quickly master/understand the teaching materials that teachers face to face are given the opportunity to access e-learning materials that are actually specifically developed for them. The goal is to increase the level of control of educated participants over the teaching materials that teachers teach in the classroom. As a remedy, when educated participants experience difficulty in understanding the subject of the teacher's teaching in the classroom. The goal is to make it easier for students to understand the teaching materials that teachers teach in the classroom.

3. Substitution

The goal of e-learning as a conventional replacement class is to allow educated participants to manage their education activities flexibly in accordance with time and other daily activities. There are 3 (three) alternative learning activities models that can be followed by participants:

- 1) Fully face-to-face (conventional).
- 2) Some face-to-face and some through the Internet, or even,
- 3) Fully online.

According to Munir (2009:173-174), the factor to consider in using e-learning for distance learning is to choose the Internet for learning activities. choosing this Internet there are some steps to be taken:

1. Need analysis

The use of e-learning is highly dependent on the user in viewing or assessing the e-

learning. The use of this technology if e-learning is already a necessity. To determine whether a person or educational institution requires or not e-learning, a needs analysis is needed. This needs analysis is to answer the questions that arise, namely whether the supporting facilities are adequate, whether they are supported by adequate funds, and whether there is support from policy makers. If based on the needs analysis it is decided that e-learning is needed, it is necessary to make a feasibility study. There are several assessment components in a feasibility study that need to be considered, including:

- a. Technically, can the Internet be installed along with its support infrastructure, like a computer network, electrical installations, telephone channels, etc.
- b. Human resources that have knowledge and skills or knowledge that can technically operate.
- c. Economically, whether the activity is carried out with this e-learning is beneficial or not, will it require a large or small cost.
- d. Socially, can the attitude of society accept it or refuse to use e-learning as part of technology and communication. This requires a positive attitude towards e-learning, especially. An information and communication technology in general, so that bias understands the potential and impact for students and society.

2. Learning design

In determining the learning design, several things need to be considered,

including:

- a. Course content and learning unit analysis, such as the scope and sequence of learning materials, or relevant topics.
- b. Learner analysis (student analysis), such as: educational background, age, employment status, and so on.
- c. Learning context analysis (analysis related to learning), such as: learning competencies that will and want to be discussed in depth in this design.
- d. Instructional analysis (learning analysis), such as: learning materials to be grouped according to their importance, arranging tasks from easy to difficult, and so on.
- e. State instructional objectives (learning objectives) are compiled based on the results of the learning analysis.
- f. Construct criterion test items (test compilers) based on predetermined learning objectives.
- g. Select instructional strategy (learning selection strategy) that can be determined based on existing facilities.

3. Development level

The development of e-learning follows the development of the available information and communication technology facilities. In addition, the development of prototypes of learning materials and curricula that will be used also needs to be continuously considered and evaluated.

4. Implementation

A complete prototype can be moved to a computer network (LAN). To that end, testing against the prototype should continue. This test will identify various obstacles faced, such as the management course tool, whether the learning material meets the standard self learning materials.

5. Evaluation

Before the evaluation, the program was first tested trying to take some samples of people. From this test an evaluation has just been carried out. The prototype needs to be evaluated over a relatively long period of time and continuously for its advantage and lack. The process from those five stages takes a relatively long time and is repeated, because it happens continuously. Entries from a learner or other party are very needed to fix the program.

According to some of the above experts' explanations about daring/e-learning it can be concluded that daring/e-learning is a learning based on electronic media such as smartphones, computers/laptops that use the Internet as a method of presentation, interaction, and facilities that contain text, photos, Video and sound as a means of remote learning services.

Next is the blended learning model. Blended learning is the best lesson used during the transition to normal state, and this lesson combines face-to-face learning with external learning. Blended learning according to Husamah combines the best features of classroom learning (face-to-face) and the best features of online learning to actively enhance self-learning by educated participants and reduce the number of face time in class. The message of today's technological development demands that we remain responsive to everything related to advanced technology as a means of communication.

At first, blended learning emerged as an answer to the weaknesses of face-to-face learning and online learning (Milya Sari and Asmendri, 2019). This model is very suitable to be applied during a pandemic like today. This learning process is considered effective in overcoming problems that occur during the pandemic. Educators and students can more easily communicate and carry out the learning process compared to using conventional methods. This is proven by the running of the learning process during the pandemic even though they are in different places, and under different conditions, they can take advantage of online learning, as well as if learning will be added directly in order to emphasize understanding of learning for students. However, This is with a note seeing the existing situation and conditions, if the location is in the green zone, learning can apply the blended learning method. Therefore, distance or online learning has been established by the government to reduce the spread of the COVID-19 virus (Abid Rohmanu, et al, 2020: 222).

Face-to-face and online learning models have their own ways that are adapted to the current pandemic period. For example, when learning online, each educator has their own way of utilizing increasingly modern technology.

The educator has various application options that can help him in learning, can use whatsapp applications, google classroom, google form, e-learning, even youtube. The various forms of technology are applied in order to facilitate the learning that takes place in this pandemic. A blended learning model combining facial and external activities. In its application, this learning reduces learning directly in the classroom.

The purpose of using this learning model is so that students are more independent and active in learning. The advantages of this learning model are that it can deliver learning materials anywhere and anytime, offline and online learning that complements each other, learning

becomes effective and efficient, increases accessibility, and learning becomes flexible, not rigid (Muhammad Taufik Hidayat, et al, 2020: 402) .

Furthermore, the project-based learning model or Project Based Learning mentioned by the Minister of Education and Culture is one of the learning models that makes students active and independent in learning. Project-based learning model is a learning model that can be used to apply existing knowledge, train various thinking skills, attitudes, and concrete skills. Meanwhile, in complex problems, learning is needed through investigation, collaboration and experimentation in making a project, as well as integrating various subjects (materials) in learning. By applying the project-based learning model, it is expected to train independence, collaboration and experimentation in students or students.

Project Based Learning is one of the constructive learning models that potentially undermine high-level cognitive abilities. In his article, Irham Ramadhani and Motlan quoted a statement from Mansoor and Moss (1997) that Project Based Learning was a collaborative approach to learning and teaching to place educated participants in situations where they used authentic language to achieve certain goals. As part of the process, students plan projects, work in complex tasks, and evaluate their performance and progress. A project designed around issues, questions or needs identified by the educated participants. As a learning model, project-based learning has the following steps:

1. Setting up a question or assignment of a project. This stage is a first step to deepen students' observation on the issues that arise from the phenomenon.
2. Design the project plan. As a concrete step to answer the existing questions, a project plan can be prepared through experiments.

3. Develop a schedule as a concrete step of a project. Scheduling is very important so that the project is carried out in accordance with the available time and according to the target.
 4. Monitor project activities and progress. The teacher monitors the implementation and progress of the project. Students evaluate the project they are working on.
 5. Test results. Facts and experimental or research data are linked to various other data from various sources.
 6. Evaluating activities/experiences. This level is done to evaluate activities as an improvement tool for project tasks at the same or other learning points.
- c. Prioritizing positive interaction and/or communication patterns between educators and students and parents.
 - d. Materials on learning from home other than those in the curriculum can be in the form of life skills education about Covid-19, character education according to the level of education.
 - e. Activities and assignments during learning from home do not become a new burden so that they can vary between schools, between regions by considering access gaps in implementation.

Learning in the era of Covid-19, of course, requires adjustments in the implementation of project-based learning, because of the enactment of the Circular Letter of the Minister of Education and Culture No. 4 of 2020 which makes teachers and students unable to meet directly to carry out the learning process. Implementation of project based learning is usually carried out in groups or in collaboration between students, but during a pandemic, collaboration can be carried out between students and parents so that there is involvement between teachers, students and parents. The COVID-19 pandemic has forced teachers and students to conduct distance learning, which applies to all levels of education. Distance learning is carried out by taking into account several main principles;

- a. Prioritizing the safety and health of all school members in the implementation of learning from home.
- b. Learning from home provides a meaningful learning experience for students, without being burdened with achieving curriculum completeness.

Project-based learning steps are carried out with teachers, students and parents as a team. Project based learning is a learning model that is suitable for use in learning activities from home because through project based learning students are invited to collaborate, be independent and explore, the assessment used is also in accordance with the circular letter of the Minister of Education and Culture No. 4 of 2020, namely portfolio-based assessment by adjusting conditions. Students (access gap). The learning process is carried out by prioritizing positive interaction and/or communication patterns between educators and students and parents because it is necessary to choose the right media in learning and assessment. Project based learning makes students develop because when students learn in their own way, they develop the ability to focus and reflect. Working in their own way also gives students the opportunity to take personal responsibility for what they learn.

B. Closing

There are several learning models that are most recommended and considered the most suitable to be carried out during the Covid-19 pandemic like this.

1. Online Learning Model

As the name implies the online method or

can be called in the network, this one learning method is run using the help of network technology in full online. The online method is the method that was first suggested by the Ministry of Education and Culture to anticipate learning activities during this Covid-19 pandemic. Online learning is carried out by utilizing existing facilities in each student's home, without direct face-to-face meetings.

This online method is highly recommended for universities that are in the red zone. With this method, it is expected that learning activities will continue optimally even though there are no face-to-face meetings as usual learning activities. Students and lecturers are still able to interact from their respective homes.

2. Blended learning model

Blended learning is a learning method that is carried out by combining, mixing, combining conventional education systems with digital-based education systems.

Learning using blended learning is considered more effective in increasing student interest in learning. So, students do not only learn from various kinds of e-books and books without face to face at all. However, the face-to-face system can still be done via video conference to stimulate student enthusiasm and as direct supervision of students.

3. Project Based Learning Model

Project based learning (PBL) is a project-based learning method or activity carried out independently by students. Students explore, assess, interpret, synthesize, and provide information as a means to obtain learning outcomes. Project Based Learning is centered on students and lecturers only as facilitators, students investigate a material or task independently.

This learning method is recommended for students who are in the green and yellow zones. This learning method has a goal so that students can interact, collaborate, and build a team work spirit. In the Project Based Learning method, students are usually divided into groups to complete projects by implementing health protocols.

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