CHAPTER II

REVIEW OF RELATED LITERATURE

In this chapter the writer is going to explain about the previous study and theories that related with the topic for this study, Teaching Strategy, Online Learning or E-Learning, *COVID-19* pandemic and Previous Study. Then, the explanation as the following.

2.1. Teaching strategy

2.1.1. Definition of Teaching Strategy

The classroom is a dynamic environment, bringing together students from different backgrounds with various abilities and personalities. Being an effective teacher therefore requires the implementation of creative and innovative teaching strategies in order to meet students' individual needs. A dynamic classroom environment, bringing together students from various backgrounds with various abilities and personalities. Therefore, being an effective teacher implements creative and innovative strategies to meet individual student needs. No doubt new teachers or teachers who have taught for a long time may still find it difficult to work out which strategies work best with your students. As a teacher, there is no 'one size fits all' solution.

Teaching strategy is a generalized plan for a lesson which includes structure, instructional objectives and an outline of planned tactics, necessary to implement the strategies (Stone and Morris, in Issac, 2010).

Furthermore, Issac (2015) explains that teaching tactics are that behavior of the teacher which he manifests in the class i.e., the developments of the teaching strategies, giving proper stimulus for timely responses, drilling the learnt responses, increasing the responses by extra activities and so on.

Brown (2000:7) states that teaching means guiding and facilitating learning, enabling the learner to learn, setting the condition of learning. Teaching can be done without a teacher. They can use anything such as

nature, books, teaching machines, etc., which can act as teachers. Smith (1963), consider teaching as a tripolar process which involves:

- 1) An agent, a source, human or material that tries to produce learning.
- 2) The objectives to be achieved through the teaching process.
- 3) Intervening variables consisting of teaching and learning situations.

This may involve physical or human material conditions and teaching methods. From some of the definitions above it can be concluded that the teaching strategy is a method, technique, and tactic used by a teacher to teach students in the class. Teaching strategies have been designed before, and this is very necessary so that a learning goal can be achieved, and the material can be delivered easily.

2.1.2 Kinds of Teaching Strategies

1. Cooperative Learning: The Jigsaw Method

Cooperative learning gives students the opportunity to work with others and see different points of view. Students learn more effectively when working together rather than apart, and it is also known to improve self-confidence in students. *The Jigsaw Method* is especially effective because each student is responsible for one another's learning, and students find out quickly that each group member has something equally important to contribute to the group in order to make the task a successful one. Students are exposed to and use many skills throughout this strategy: communication, problem-solving skills, cognition, and critical thinking - all of which are essential for a successful academic career.

2. Inquiry-Based Instruction

Inquiry-Based Learning implies involving students in the learning process so they will have a deeper understanding of what they are learning. We are born with the instinct to inquire - as babies we use our senses to make connections to our surroundings. Inquiry-based learning strategies are used to engage students to learn by asking questions, investigating, exploring, and reporting what they see. This process leads students to a deeper understanding of the content that they are learning, which helps them be able to apply these

concepts in new situations. In order for our students to be able to be successful in the 21st century, they need to be able to answer complex questions and develop solutions for these problems. The inquiry-based learning strategy is a great tool to do just that.

3. Graphic Organizers

Graphic organizers are a simple and effective tool to help students brainstorm and organize their thoughts and ideas in a visual presentation. Simply put, they help students organize information so it is easier for them to comprehend. Graphic organizers can be used for any lesson, to structure writing, brainstorming, planning, problem solving, or decision making. The most popular organizers are the Venn diagram, concept map, KWL chart, and T Chart.

4. Differentiated Instruction: Learning Stations

Differentiated Instruction Strategies allow teachers to engage each student by accommodating to their specific learning style. According to Howard Gardner's Multiple Intelligences Theory, every person has a different mind, and therefore each person learns and understands information differently. Differentiating instruction offers a way to meet all students' needs. One helpful strategy to differentiate instruction is learning stations. Learning stations can easily be designed to enable students with diverse learning needs to learn at their pace and readiness level. Teachers can set up each station where students will be able to complete the same task, but at the level and style that is specifically designed for them.

5. Utilizing Technology in the Classroom

Integrating technology into the classroom is a great way to empower students to stay connected in this technological era. Technology-rich lessons have been found to keep students motivated and engaged longer. Some examples of utilizing technology in the classroom are to create web-based lessons or multimedia presentations such as a video, animation, or some type of graphic, utilizing a tablet or an IPad, taking your class on a virtual field trip, participating in an online research project, or even creating a class website.

Any of these technology integration strategies will have a positive impact on student learning.

2.1.3 Teaching Methods

A teaching method comprises the principles and methods used by teachers to enable student learning. These strategies are determined partly on subject matter to be taught and partly by the nature of the learner. For a particular teaching method to be appropriate and efficient it has to be in relation with the characteristic of the learner and the type of learning it is supposed to bring about. Suggestions are there to design and selection of teaching methods must take into account not only the nature of the subject matter but also how students learn. (Westwood, 2008)

Vikoo (2003) is discussing types of teaching methods explained that teaching methods could be presented under three main categories:

1. Cognitive Development Methods

Focus of the instructional objectives is to develop intellectual skills in learners, and then the cognitive development methods of teaching are recommended. This method helps learners to comprehend, analyze, synthesize and evaluate information. It helps learners develop good cognitive abilities. Though the cognitive development methods are essentially didactic. Some of the teaching methods in this category includes:

a) Discussion method

Discussion is usually at a higher cognitive level and it develops critical thinking. Student's participation is necessary for a successful classroom discussion. It is a student centered teaching technique but requires careful planning by the teacher to guide discussion. Successful discussions are guided by specific teaching goals. It involves a process of free guided discussion and expression of views and ideas on a given topic, question or problem by the teacher. In the students attempt to solve the problem or answer the question, students pair up in smaller groups for about 5 minutes or more, discuss the issue on ground and then they are brought back for a full group discussion. Various students are able to participate and are

exposed to other student's ideas. In small group students can discuss a complex issue and when they are brought back to the larger groups, these students can discuss their reactions, share ideas and build on each other's suggestions. This method encourages student's participation, develops critical thinking, develops student's ability to communicate, and problem solving skills. It allows all to participate.

Trouble Shooting: A times, in the process of critical discussion, it turns out into emotional charged unproductive debates, here the teacher should get other students involved to identify the issue of conflict and encourage them to analyze the discussion with less emotional charge. Discussion method can be tedious to co-ordinate and not practical with a lot of students at once.

Finally, discussions are characterized by multiple interactions, with the teacher as the facilitator. Discussions are basically small groups in nature and these groups vary in size and composition. Participant interactions are encouraged to be arranged face-to-face.

b) Questioning/Socratic Method

Questioning method of teaching aids learners in connecting concepts, increasing awareness, encouraging creative and imaginative thought, making inferences etc. Questioning generally helps learners to explore deeper level of thinking, knowing and understanding. Questioning, though it is more of a technique than a method of teaching, it is used during various methods of teaching. Questioning aids in sensitizing the inquisitive mind of the learner. This method is credited to Socrates, a Greek Philosopher. Questioning methods may be used for the following purposes:

- To arouse interest & curiosity: At the beginning of a lesson, questions
 can be used to secure interest, and focus the attention of the group on the
 subject.
- 2. To stimulate discussion: Question that is thought-provoking can get the group to start reactions.

- 3. To channel thinking: By skillful questioning, the teacher can steer the group to the objective he has established, keep them on the right track and guide their thinking. The teacher can also help the group to move from the known to the unknown by a series of well-prepared questions.
- 4. To determine how well the group, understand the material: By the response given to a question, the teacher can determine if the group has absorbed what is being presented, and provides opportunity to correct any misconceptions or to elaborate on points.
- 5. To get the attention of an individual: To help a timid person to express his or her thoughts (Achuonye & Ajoku, 2003).

c) Team Teaching Method

Team teaching is a method of coordinated classroom instruction involving a number of educators working together with a single group of students. This method has been around for years and is a strategy used at different levels in many schools. A strong team brings a variety of different teaching styles and expertise to the learning experience.

According to Oliva and Gordon (1988) Team teaching refers to cooperation of two or more than two teachers who help each other in scheduling, running, and evaluation of some group subject areas. They use various teaching techniques and methods with the aim of improving and expanding their own attitudes as well as improving student's skills.

Leavitt (2006; 16) says in the recent years, team teaching has become an inseparable part the schedule of important universities, such as Stanford University. In this university, in addition to human sciences, other fields of science are taught with team teaching method. Therefore, teachers with different specialties accept to teach a certain course.

Wachanga and Mwangi (2004;5(1):26–36) Awareness from effectiveness of team teaching method helps the teacher select an appropriate method for improving his or her teaching quality.

d) Field Trip/Escorting Method

Field trip is not just for recreation, but to learn by examining the evidence in real situation according to Roestiyah (2001). It is a way of teaching carried out by inviting students to a place or a particular object outside of school to learn or investigate something like reviewing a shoe factory, a car repair shop, a department store, and so forth. It may also called as travel activities or a journey by a group of people to do observation for educational to give the students experience to learn outside from their daily activities. Checep (2008) also support that field trip method is a way of presentation by taking the students to study outside the environment of class. Field trip using the environment as a learning resource, stimulates the creativity of the students, information can be more comprehensive and real-time, students can seek and process the information by themselves.

2. Affective Development Method:

This domain includes objectives which describe changes in interest, attitudes and values. It further deals with the development of appreciation and adequate adjustment. Education has a lot to give the learner in order to assist him/her develop in these areas, hence teachers are encouraged to include learning experiences that are worthwhile, teach in ways that arouse interest and develop proper attitude in learners. This mode of teaching is basically phyletic, here student's feelings or opinion are aroused. Some teaching methods under this category include:

a) Simulation Method

This method entails a real life activity in a simple manner that communicates the idea to the learners. Example, If the "use of money" is the topic in class; the teacher gets two students to act a trader and a customer scene, where the customer buys the items from the trader with the money, in this scene, the use of money is depicted in real life situation. This kind of simulation is better than mere verbal description.

Omieibi-David (2001) conceptualizes simulations as an imitation of real life situations that requires participants to play a role that involves them in interaction with other people or with elements of the environment concerned.

The use of stimulation methods in classroom situations is devised to help students learn how things operate in reality. Students are encouraged to act out the same roles and make decisions likened to real life situations. Therefore, simulation helps students to practice and understand adult roles and also develop the skills necessary for a successful adult life. Simulation and games are used at all levels of education and creates both intrinsic and extrinsic motivation in the learner. While simulation methods present the students realities of life in concrete and simple forms, they are innovative and a welcome change in the learning experiences as compared to the routine classroom learning. Simulation problems shooting areas lies in the fact that it is time consuming, very expensive, especially in an attempt to purchase a reasonable number for class use. It also requires great classroom management.

b) Simulation Games

Jacobs and Dempsey (1993) stated that the distinction between simulation and games is often blurred, and that many recent articles in this area refer to a single "simulation game" entity. "After all a game and a simulation generally may be assumed to have goals, activities, constraints and consequences. A distinction could be made between simulations and games in the following way. Where the task-irrelevant elements of a task are removed from reality to create a simulation, other elements are emphasized to create a game. These elements include competition and externally imposed rules, and may include other elements such as fantasy and surprise".

Both Gredler (1996) and Jacobs and Dempsey (1993) emphasized similar resemblances and differences between simulations and games. Games and simulations both have some kind of underlying model, allowable actions to be taken by the learner, and constraints under which these actions should take place. Games add to this some kind of "winning" or "losing" characteristics, participants need to reach a kind of goal state and quite often have to do so with a limited set

of resources. The latter means that in games participants have to think about the trade-off between costs and profits of actions.

c) Role-Playing Method

This method of teaching can be used for solving real life situational problems. The technique of role lay develops practical professional skills and functioning knowledge. It enables students in the classroom to act as stakeholders in an imagined scene. In a play role, the teacher selects an event that illuminates the topic of study and students are assigned roles, which will be played out, the role play will be concluded, with a reflection stage that reinforces the concepts introduced by the role play. This method gives students the opportunity to explore together their feelings, attitudes, values and problem solving strategies. Role play also creates a stimulating environment that brings reality to life and intensifies learners understanding of the event being played. This method intensifies and accelerates learning, it can be described as a handson approach to learning & students learn through active involvement in roleplay. The problem with role playing method amongst others is that directing a role playing is complex. Also, some students may be too self- conscious and may not be able to play the role for other students to observe.

3. Psychomotor Development Methods

These are activity based methods of teaching that aim at motor skills development in learners. This method requires that learners are able to illustrate, demonstrate, or perform certain skills using their manual dexterity. It is a heuristic method of teaching that involves inquiry and discovery methods of teaching. It is a more student activity based method. This method includes:

a) Inquiry Method

This is a teaching learning situation whereby students are given the opportunity to discover and find out things for themselves. Inquiry/discovery methods have been known to provide meaningful learning to students when compared to other methods. This method is rooted in the heuristic teaching activity and problem solving; these are basically the major ingredients of modern science. It is a learner centered method, whereby the learner

discovers & explores some problem solving experiences with a view to draw conclusions from data gathered through the process of observing, predicting, measuring and formulating relevant questions. Learning acquired through inquiry/discovery method is mostly accepted as more meaningful and authentic than learning imposed by external forces. This method can be used with students at any academic level though more effective with students at the secondary and tertiary levels. Two types of discovery methods can be used by the teacher namely the structured method and the open discovery method.

- 1. Structured Method: Here the teacher gives a clear set of instructions that learners are to follow to discover a fact, idea or skill for themselves.
- 2. Open Discovery Method: The teacher in this method presents a problem, gives some questions and directions that requires learners to find answers to. Here, the teacher gives the learner the freedom to explore different perspectives, views, possibilities, and solutions to the problem.

b) Discovery Method

Discovery learning is the method that when the teacher does not give the final material and student must organize their own material with stimulus given by the teacher. The teacher as guide in the process of learning and the teacher offer the students occasion to be active students. According to Balim (2008:2) "Discovery learning is a method that encourages students to arrive at a conclusion based upon their own activities and observations." It means that students become problem solver who collecting, comparing, analyzing the information, and make a conclusion of it Process Approach Method.

According to Westwood (2008:29) discovery learning has advantages and disadvantages. The advantages of guide discovery learning are:

- a. Students are actively involved in the process of learning and the topics are usually intrinsically motivating.
- b. The activities used in discovery contexts are often more meaningful than the typical classroom exercises and textbook study.

- c. Students acquire investigative and reflective skills that can be generalized and applied in other contexts.
- d. New skills and strategies are learned in context.
- e. The approach builds on students' prior knowledge and experience.
- f. Independence in learning is encouraged.
- g. It claimed (but not proved conclusively) that students are more likely to remember concepts and information if they discover them on their own.
- h. Group working skills are enhanced.

Disadvantages of discovery learning methods are:

- a. Discovery can be a very time-consuming method.
- b. Discovery method often requires a resource-rich learning environment
- c. The effectiveness depends on learner's skills.
- d. Although students become actively involved, they may still not understand or recognize the underlying concept.
- e. Students often have difficulty forming opinions, making predictions, or drawing conclusion.
- f. Teachers are not necessarily good at creating and managing discovery learning.
- g. Teacher may not monitor activities effectively.

c) Process Approach Method

The Process Approach is an approach with several steps in it; the core of this approach is not the product of the writing, but the process itself. This section will discuss the Process Approach in detail.

d) Demonstration Method

A demonstration involves showing, doing or telling the students the point of emphasis. It is mostly used as a technique within a method of teaching and a times as a method of teaching itself. Here the role of the teacher is to illustrate how to do something or illustrate a principle first by

explaining the nature of the act verbally, followed by demonstrating the act in a systematic manner and later the students repeats the act. Here students are involved in doing things that will influence their behavior patterns, through demonstrations, students are exposed to physical materials that will illustrate some meaning to their cognitive framework. Direct experiences like this go a long way to enrich learning. Demonstration is useful mostly in imparting psychomotor skills and lessons that require practical knowledge. The gains of using demonstration method in teaching lies in the fact that it bridges the gap between theory and practice, enables learners to become good observers and generate their interest; students see immediate progress as a result of a correct effort and it enables the teacher to teach manipulative and operational skills. The problems encountered in this method amongst others include the fact that students loose interest and confidence when they fail to repeat accurately; creativity and originality by students are hindered as students try to do it exactly the same way as their teacher did it and students have a limited opportunity to be familiar with learning materials.

e) Programmed Learning Method

Programmed learning is a individualized and systematic instructional strategy for classroom learning and self-learning. Simce the 1960s, it has emerged as one of the most important innovations in the field of education. Programmed learning received it's major from B. F. Skinner and is based on his theory of operant conditioning, according to which learning is best accomplished in small, incremental step with immediate reinforcement, of reward, for the learner. Therefore, the learning material is broken down into small chunks of information and is followed by a comprehension question to be answered by the learner, who receives immediate feedback with regard to the correctness of the answer. If the answer is correct, the learner may proceed to the next chunk; otherwise he or she must go back to the previous chunk and try it again. Thus, programmed learning is based on the principles of small step, self-packing, and immediate feedback.

Margulies and Eigen (1961) A research-based system which helps learners work successfully. The method is guided by research done by a variety of applied psychologists and educators. The learning material is in a kind of textbook or teaching machine or computer. The medium presents the material in a logical and tested sequence. The text is in small steps or larger chunks. After each step, learners are given a question to test their comprehension. Then immediately the correct answer is shown. This means the learner at all stages makes responses, and is given immediate knowledge of results.

f) Dalton Plan/Assignment Method

Parkhurst is pragmatic to the core. She developed her Dalton education as a teacher in practice. The Dalton Plan was more or less completed in 1911, 1912; that is to say: practically completed. The theory was to come later. In the early twenties Parkhurst presented the theory of the Dalton Plan. The function of key features of Dalton Education, such as assignments, laboratories and graphs is to make freedom and sociality possible. The theory summarized in five steps:

a. For the sake of efficiency:

The Dalton Plan is relatively modest. It wants to be an "efficiency measure": "a simple and economic reorganization of the school". The world does not need to be changed, the child does not have to be saved, existing curricula do not have to be turned upside down, and traditional subjects do not have to be abandoned. The Dalton plan strives to make prevailing school learning more efficient. It is all about more efficient education; no more and no less.

b. Learning to live and learning to work:

Efficiency presupposes clear goals. What is the aim of education, according to Parkhurst? Education should aim at culturally and morally forming children and youth, in order that they become independent and socially responsible: experienced in, accustomed to and prepared for life and work. This asks for the acquisition of knowledge and skills considered

valuable and useful, and for the development of various habits and virtues, especially industry and thoroughness, open-mindedness and independence and concern for the common good.

c. There is nothing more educative than experience:

How do children learn to live and to work? There is nothing more educative than experience:

"Experience is the best and indeed the only real teacher".

d. Traditional education offers insufficient experience:

How do we provide for the necessary experience at school? Not by keeping pupil's passive, not by keeping them apart from their peers, not by holding them in one place, not by keeping them quiet, not by requiring them to learn their lessons off by heart, not by making them recite their lessons.

In traditional education (at the beginning of the twentieth century) there is not much to undertake, not much to sense, little opportunity to move around, not much to discover, not much to do, hence: not much to experience and consequently not much to learn.

e. Freedom and sociality: providing for experience:

Improving education means: providing for experience. How? The answer is: through the "liberation of the pupil" and "socialization of the school". In other words: through freedom and sociality.

"Freedom": the opportunity to do one's own schoolwork, to organize it oneself (how, where and when) and to do it at one's own space, and particularly to not be disturbed, to work with commitment and concentration.

Sociality, "interaction of group life" or "co-operation": to interact, work and communicate without hindrance and inhibition, in varying groups, in varying places, with varying means and materials, no stilted relations, not too many rules and not too much hierarchy.

g) Project Method

Scientific research concerning project-teaching technology is renewed, completed, and developed from time to time. According to the meanings of the word "project", "making project" in the dictionaries, project teaching is a plan, an idea, an activity directed to change the form of something, to develop it, to complete. It is very important long live problem with not investigated widely spread ideas (Abdieva, 2009, p.84).

In project teaching method students can develop their self- study activities: they will get used to educate beyond the program, to use the knowledge, to solve communicative, informative problems, to have an opportunity to study cultural- informative competencies. That is why it is considered very effective.

In order to organize the project teaching technology well it is very important to know the types of it. The types of project are grouped: 1) on the activity type: researching, role-play, and applied, mono project, inter subject; 2) on the subject-content character: mono project, inter subject; 3) on the relation ways: direct relation; communication technology; 4) on the compatibility character: direct, indirect; 5) on the linking character: regional, at the educational establishment, and international; 6) on the number of participants: individual, pair, group; 7) on the time of fulfillment: short time, mid time, long time (Satbekova, 2009, p. 441).

h) Microteaching Method

Microteaching is a technique aiming to prepare teacher candidates to the real classroom setting (Brent & Thomson, 1996). Microteaching can also define as a teaching technique especially used in teachers' pre-service education to train them systematically by allowing them to experiment main teacher behaviors. By the help of this technique, teacher candidates can experiment and learn each of the teaching skills by breaking them into smaller parts and without encountering chaotic environment of the crowded classes. While instilling teaching skills in students during microteaching, reciprocal negotiation of the students actively presenting and watching about the

performances can make great contribution to the acquisition of the skills (Taşdemir, 2006). Wilkinson (1996), emphasizes that teacher candidates can experience real teaching and teaching rules with the help of this method. This method offers teachers opportunities for discovering and reflecting on both their own and others' teaching styles and enables them to learn about new teaching techniques (Wahba, 1999). Pre-service teacher can benefit to a great extent from microteaching applications. Firstly, they reveal teaching facts; and roles of the teacher (Amobi, 2005; Hawkey, 1995; Kpanja, 2001; Wilkinson, 1996); help pre-service teachers to see the importance of planning and taking decisions (Gess-Newsome & Lederman, 1990); enable them to develop and improve their teaching skills (Benton-Kupper, 2001).

Since its inception in 1963, micro-teaching has become an established teacher-training procedure in many universities and school districts. This training procedure is geared towards simplification of the complexities of the regular teaching-learning process. Class size, time, task, and content are scaled down to provide optimal training environments. The supervisor demonstrates the skill to be practiced. This may be live demonstration, or a video presentation of the skill. Then, the group members select a topic and prepare a lesson of five to ten minutes. The teacher trainee then has the opportunity to practice and evaluate his use of the skills. Practice takes the form of a ten-minute micro-teaching session in which five to ten pupils are involved.

i) Mastery Learning

Mastery learning though strongly influenced by the development of instructional technology is not, however, a new concept (Bloom, 1976; Wentling, 1973). Some principles of mastery learning originated with Aristotle and other ancient Greek philosophers. Furthermore, the concept that most students can learn everything that is being taught, if given sufficient time, goes back into the previous century (Block, 1973; Bloom, 1976).

In the early 1960s the idea of mastery learning was revived in the form of programmed instruction. Programmed instruction derived initially

from work conducted by B. F. Skinner was further developed by other behaviorists. This program was similar to mastery learning in the sense that the focus was on the role of feedback in learning and on individualized learning. Also, like the original mastery learning model, this method of instruction allowed students to move at their own pace and receive instant feedback on their current level of mastery.

2.2. Online Learning / E-Learning

2.2.1. Definition of Online Learning / E-Learning

Online Learning / E-Learning is learning system based on formalized teaching but with the help of electronic resources is known as E-Learning. While teaching can be based in or out of the classrooms, the use of computers and the Internet forms the major component of E-Learning. E-Learning can also be termed as a network enabled transfer of skills and knowledge, and the delivery of education is made to a large number of recipients at the same or different times. Earlier, it was not accepted wholeheartedly as it was assumed that this system lacked the human element required in learning. However, with the rapid progress in technology and the advancement in learning systems, it is no embraced by the masses. The introduction of computers was the basis of this revolution and with the passage of time, as we get hooked to smartphones, tablets, etc. These devices now have an importance place in the classrooms for learning. Knowledge can also be shared via the Internet, which is accessible 24/7, anywhere, anytime.

According to Abernathy (2019) E-Learning also referred to as online learning or electronic learning, is the acquisition of knowledge which takes place through electronic technologies and media. In simple language, E-Learning is defined as "learning that I enable electronically". Typically, E-Learning is conducted on the Internet, where students can access their learning materials online at any place and time. E-Learning most often takes place in the form of online courses, online degrees, or online programs.

Lawless (2018) E-Learning or electronic learning, is the delivery of learning and training through digital resources. Although eLearning is based on formalized learning, it is provided through electronic devices such as computers, tablets and even cellular phones that are connected to the internet. This makes it easy for users to learn anytime, anywhere, with few, if any, restrictions. Basically, eLearning is training, learning, or education delivered online through a computer or any other digital device.

From some definitions above, it can be concluded that E- Learning can be done anywhere and anytime using available technology so that learners can access anything they want to know.

2.2.2. Models of Online Learning / E-Learning

E-Learning implementation varies greatly, but all it is based on a principle the E-Learning is hosted as an effort to disseminate information in the form of learning material through electronic or internet media so that students can access it anytime and anywhere. The characteristic of e- learning is the creation of a flexible and distributed learning environment. Based on the definition, E-Learning can be divided into four models, namely:

1. Web-Based Learning

Web-based learning is a remote learning system based on information technology and communication with the web interface (Munir, 2009:231). In the web-based learning, learners do online learning through a website. They can communicate with each other with colleagues or learners through the facilities provided by the website

2. Computer-Based Learning

Computer-based learning can be defined as a self-learning activity that can be done by learners using a computer system. Rusman (2012) suggests that computer-based learning is a learning program used in the learning process using computer software containing titles, goals, learning materials, and learning evaluations.

3. Virtual Education

Based on the definition of Kurbei (2001:10), the term virtual education refers to learning activity that occurs in a learning environment where teachers and learners are separated by distance and time. The teacher provides learning materials through the use of several methods such as LMS applications, multimedia materials, internet utilization, or video conferencing. Learners receive the material and communication by utilizing the same technology.

2.2.3. Advantages or Benefits of E-Learning

The adoption of E-Learning in education, especially for higher educational institutions has several benefits, and given its several advantages and benefits, E-Learning is considered among the best methods of education. Several studies and authors have provided benefits and advantages derived from the adoption of E-Learning technologies into schools (Klein and Ware, 2003; Algahtani, 2011; Hameed et al, 2008; Marc, 2002; Wentling et al. 2000; Nichols, 2003).

Some studies give advantage of E-Learning as its ability to focus on the needs of individual learners. For example, Marc (2002) in his book review on E-Learning strategies for delivering knowledge in digital age noted that one of the advantages of E-Learning in education is its focus on the needs of individual learners as an important factor in the process of education (rather than on the instructors' or educational institutions' needs). These are some advantages of adoption of E-Learning in education obtained from review of literature:

- 1. It is flexible when issues of time and place are taken into consideration. Every student has the luxury of choosing the place and time that suits him/her. According to Smedley (2010), the adoption of E-Learning provides the institutions as well as their students or learners the much flexibility of time and place of delivery or receipt of according to learning information.
- 2. E-Learning enhances the efficacy of knowledge and qualifications via ease of access to a huge amount of information.

- 3. It is able to provide opportunities for relations between learners by the use of discussion forums. Through this, E-Learning helps eliminate barriers that have the potential of hindering participation including the fear of talking to other learners. E-Learning motivates students to interact with other, as well as exchange and respect different point of views. E-Learning eases communication and also improves the relationships that sustain learning. Wagner et al (2008) note that E-Learning makes available extra prospects for interactivity between students and teachers during content delivery.
- 4. E-Learning is cost effective in the sense that there is no need for the students or learners to travel. It is also cost effective in the sense that it offers opportunities for learning for maximum number of learners with no need for many buildings.
- 5. E-Learning always takes into consideration the individual learners differences. Some learners, for instance prefer to concentrate on certain parts of the course, while others are prepared to review the entire course.
- 6. E-Learning helps compensate for scarcities of academic staff, including instructors or teachers as well as facilitators, lab technicians etc.
- 7. The use of E-Learning allows self-pacing. For instance, the asynchronous way permits each student to study at his or her own pace and speed whether slow or quick. It therefore increases satisfaction and decreases stress (Codone, 2001; Amer, 2007; Urdan and Weggen, 2000; Algahtani, 2011; Marc, 2002; Klein and Ware, 2003)

The above-mentioned advantages of E-Learning were summed up by Holmes and Gardner (2006) by noting that the ability of E- Learning to assess the students and their learning as they learn, and at the same time enhance their educational experiences interactivity through collaborative learning, cultural diversity, globalization, and eradicating boundaries of place and time. The most vital characteristic, as well as the advantage of E-Learning in education, is that it centers on students or learners (Holmes and Gardner, 2006)

2.2.4. Disadvantages of E-Learning

E-Learning, in spite of advantages it has when adopted in education, also has some disadvantages. For example, despite claim that E-Learning can improve the quality of education, Dowling et al. (2003) argue that making learning materials available online improves learning only for specific forms of collective assessment. Also Mayes (2002) questioned whether E-Learning is simply a support device for existing methods of learning. The most frequent condemnation of E- Learning is the complete absence of vital personal interactions, not only between learners and instructors, but also among colleague learners (Young, 1997; Burdman, 1998). According to Almosa (2002), regardless of all the disadvantages of E-Learning, there are a lot of benefits that inspire its use and encourage search for ways to reduce its disadvantages. Disadvantages of E-Learning listed in various studies include:

- 1 E-Learning as a method of education makes the learners undergo contemplation, remoteness, as well as lack of interaction or relation. It therefore requires a very strong motivation and time management skills in order to reduce such effects.
- With respect to clarifications, explanations, and interpretations, the E-Learning method may be less effective that traditional methods of learning. The learning process is much easier face-to-face with instructors or teachers.
- When it comes to improvement of learner's communication skills, E-Learning may have a negative effect. Though learners might have an excellent academic knowledge, they may not possess the needed skills to deliver their acquired knowledge to others.
- 4 Since tests and assessments in E-Learning are frequently supervised by proxy, it may be difficult, if not impossible, to control or regulate activities such as cheating.
- 5 E-Learning may also be subject to piracy, plagiarism, cheating, inadequate selection skills, and inappropriate use of copy and paste.
- 6 E-Learning may negatively impact socialization skills and limit the role of instructors as directors of the educational process.

- Not all disciplines can effectively use E-Learning in education. For instance, scientific fields that require hands-on practical experiences may be more difficult to study through E-Learning. Researchers have argued that E-Learning is more appropriate in social science and humanities than the fields such as medical science and engineering where there is the need to develop practical skills.
- 8 E-Learning may also lead to congestion or heavy use of some websites. This may bring about unanticipated costs both in time and money (Collins et al. 1997; Klein and Ware, 2003; Hameed et al, 2008; Almosa, 2002; Akkoyuklu & Soylu, 2006; Lewis, 2000; Scott et al. 1999; Marc, 2002)

2.3 COVID-19 Pandemic

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), better known as the Corona virus, is a new type of coronavirus that is transmitted to humans. This virus can attack anyone, such as the elderly (elderly), adults, children, and babies, including pregnant women an nursing mothers. Corona virus infection is called *COVID-19* (Corona Virus Disease 2019) and was first discovered in Wuhan city, China at the end of December 2019. The virus is spreading very quickly and has spread to almost all countries, including Indonesia, in just a few months. (Alodokter, 2020)

2.3.1 COVID-19 Transmission

Person-to-person transmission is thought to occur via droplets when an infected person coughs or sneezes, similar to how influenza and other respiratory pathogens can be inhaled into the lungs. *COVID-19* transmission can also occur by touching a surface or object that has the virus on it and then the person touching their own mouth, nose, or possibly their own eyes. (Viva Health, 2020) Most corona viruses spread like other viruses in general, such as:

- 1. Splash the person's saliva (cough and sneeze).
- 2. Touching the hands or face of an infected person.
- 3. Touching the eyes, nose, or mouth after handling an item that has been splashed with coronavirus saliva.
- 4. Stool (rare)

Especially for *COVID-19*, the incubation period is not certain. However, the average symptoms appear after 2-14 days after the first virus enters the body. In addition, the method of transmission of *COVID-19* is also not known with certainty. Initially, the corona virus type *COVID-19* was thought to have originated from animals. The *COVID-19* corona virus is a virus that circulates in several animals, including camels, cats and bats. (Halodoc, 2020).

The corona virus can cause various symptoms in people with it. The symptoms that appear depend on the type of corona virus that attacks, and how serious the infection is. Here are some mild symptoms of the corona virus:

- 1. Runny nose.
- 2. Headache.
- 3. Cough.
- 4. Sore throat.
- 5. Fever.
- 6. Not feeling well.

What needs to be emphasized is that some coronaviruses can cause severe symptoms. The infection can turn into bronchitis and pneumonia (caused by *COVID-19*), resulting in symptoms such as:

- 1. Fever which may be quite high if the patient has pneumonia.
- 2. Cough with mucus.
- 3. Hard to breathe.
- 4. Chest pain or tightness when breathing and coughing.

 The infection can get worse if it affects certain groups of individuals. For example, people with heart or lung disease, people with weakened immune systems, infants, and the elderly. (Halodoc, 2020)

2.3.2 Prevention of *COVID-19* Transmission

The WHO has stated that education, isolation, prevention, controlling the transmission, and treatment of infected persons are the critical steps in controlling contagious diseases like *COVID-19* (WHO, 2020). It is possible to minimize the spread of infection by making the following recommendations:

- Wash hands for 20 seconds with soap and running water according to WHO standards.
- 2. Avoid crowds / crowds
- 3. Keep a distance from other people
- 4. Avoid direct contact with people who are sick
- Regular consumption of vitamins that can increase immunity when healthy and accelerate healing when sick
- 6. Use a mask when leaving the house
- 7. Clean and disinfect frequently touched items

There is no vaccine or specific treatment for the *COVID-19* virus to date. However, the symptoms caused by this virus can be treated. Treatment therefore must be based on the patient's clinical condition and supportive care can be very effective. (Viva Health, 2020). Efforts that can be made to relieve symptoms of corona virus infection. Example:

- Take over-the-counter medications to reduce pain, fever, and cough.
 However, do not give aspirin to children. Also, do not give cough
 medicines to children under four years of age.
- 2. Use a humidifier or take a hot shower to help relieve sore throats and coughs.
- 3. Much rest.
- 4. Increase your body fluid intake.
- 5. If you are concerned about the symptoms you are experiencing, immediately contact the nearest health care provider.

If the patient has a novel coronavirus infection, the doctor will refer to a Referral Hospital that has been designated by the local Health Office (Dinas Kesehatan). If you cannot be referred for several reasons, the doctor will:

- 1. Isolation
- 2. Chest X-ray as indicated.
- 3. Symptomatic therapy.
- 4. Fluid therapy.
- 5. Mechanical ventilator.
- 6. If there is accompanied by a bacterial infection, antibiotics can be given.

With this pandemic, the Minister of Education and Culture Nadiem Makarim issued a circular handling of the *COVID-19* outbreak. The handling instruction was aimed at the Department of Education at the provincial, district, and city levels, higher education institutions, higher education leaders, and principals through SE Number 3 of 2020 concerning prevention of *COVID-19* on the education unit. In circulars listen 18 instructions that must be obeyed by the education unit (cited in CNN Indonesia, 2020).

2.4 Previous Studies

Researchers take several previous studies to ensure the authenticity of the research. So that the researcher can make a comparison of the results of each strategy used by the teacher in the English E-Learning classroom method, and also the researcher can conclude what strategies can help the teacher in the E-Learning classroom.

The first is "The Teachers' Implementations of Distance Learning During the *COVID-19* Pandemic at SMAN 1 Bringin" by Nabilah. The researcher used the descriptive qualitative method in this research. Descriptive research describes and interprets events, conditions, or situations of the present. On the other hand, qualitative research is a research method based on post-positivism and naturalist paradigm. It has some characteristics: (1) the objects observed are process and value; (2) most of the data are words; (3) when collecting data, the researcher actively interacts with the data sources; (4) the data are analyzed inductively; (5) the result of the research cannot be generalized; (6) the research is subjective and related value.

The result of Nabilah's research is this study found that distance learning is learning activities carried out indirectly and requires appropriate media so that learning can take place. The implementation Distance learning has several advantages and disadvantages. However, more disadvantages than advantages. This is because it's the first time of implementation distance learning is carried out during the *COVID-19* pandemic. In addition, other factors that cause the weaknesses of distance learning in terms of geography, human resources, and the

economy are still weak. However, learning can still take place even though the results obtained are not optimal.

The second research is "An Analysis Of Teachers' Strategies on English E-Learning Classes During *COVID-19* Pandemic" by Utami. In Utami's research, she used descriptive qualitative research that focuses on the teacher's strategies on English E-Learning classes. It describes the technique used by the teacher in SMA Sudirman Getasan. Qualitative research is used to describe and analyze the abilities, forms, uniqueness, variations of words produced by teachers in E-Learning classes.

The result of Utami's show that (1) The teachers use different strategies because the expected skill output is different, for writing skills the teacher uses 3 strategies namely planning, drafting, and editing. As for listening skills, the teacher applies several strategies such as listening to songs, writing song lyrics, matching lyrics, and finally sings a song. But both of them use the video-based learning model and also virtual education through WhatsApp. (2) Strategies in teaching through e- learning classes during the *COVID-19* pandemic greatly assisted teachers in the teaching and learning process to achieve learning goals.

The differentiate between previous study are, the Utami's study focus on English teacher methods with E-Learning during the *COVID-19* pandemic, while in this study focus on learning strategies during *COVID-19* pandemic, the second previous study focus on how teachers can apply distance learning during the *COVID-19* pandemic but in this study focus on E-Learning strategies during *COVID-19* pandemic