Multimedia Based Learning In New Normal Era

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A. Introduction

Education will always run into dynamics stage along with environmental changes including the influence of political, economic, safety, or even the health issues and social cultural. Also, when this pandemic hit the world nowadays, education should be improving the system and technical of learning at the education unit or school and higher education institutions. All of the stakeholder who involved in the educational process have to adapt to this hard and unpredictable changes. Like a runner, this pandemic doesn't reach the finish line yet, the worst case is that the vaccine has not yet been found. It has changed the way of life of people on all line, as shown by the economic sector, decrease of activity on tourism, no more hotel occupancy as same as before pandemic, an also change the system of social activity and education sector. Conventional models in learning are "forced" to transform in a more adaptive form without ignoring the substantial aspects.

Looking at the increasing graph of the covid-19 which has been spread out in almost all of country, raises concerns not only in the health sector, but no less important is the hampered economy. The government had made efforts to limit community activities in the form of Large Scale Social Restrictions and Restrictions of Community Activities, and even implementing policies for the

government agencies by work from home, and for educational institutions such as higher education and schools to conduct teaching and learning activities from home by online learning. This policy faced various complex problems, but at that time no other choice could be made.

Based on the assumption that economic movements will stall if the implementation of work from home continues, the government then sets the latest policies for the implementation of new normal in order to maintain economic conditions in the midst of an increasingly pandemic effect. Likewise in other fields must adjust to the new normal conditions. The community is expected to carry out activities as in the pre-pandemic, but in new and different ways. This certainly requires public awareness and creativity in carrying out routine. No exception in the field of education, practitioners, academics, educators must think creatively critical to carry out the learning process in ways that are adaptive to this pandemic situation.

The government has declare a learning system in this pandemic period by learn form home, it means online learning. This regulation face a lot of hindrance, both in terms of educators, students, internet networks, quotas, and even children whose parents don't have smart phones so that they are unable to access tasks through online media provided by the teacher. Various hindrance that arise should be a challenge, not only for the government but also the educators and students also parents to stimulate and encourage student's enthusiasm in learning. This problem afflicts almost every country affected by this pandemi, and generally, the government uses an online learning system but accompanied by an additional policies that differ in each country.

For schools that have implemented online learning in addition to offline, this pandemic is not gonna be a significant problem because it only needs to emphasize a well-integrated online learning system. Unlike the case with schools that have just shifted their learning to online systems, this is certainly a challenge because cultural and technological adaptation is needed. This is in line with statement conveyed by Sandars (2020) that online learning is not a single entity but rather a collection of developing modalities and technologies. Adaptation to an unprecedented situation requires ability, communication, learning and acting through the use of technology.

Based on this phenomenon, multimedia-oriented learning present as an alternative as well as an opportunity in this pandemic. Multimedia emphasizes the channels used such as text, symbols, spoken words, pictures, graphics, paintings, illustrations or in electronic form such as audio cassettes, or radio presentations (audio), video cassettes and television presentations (video), power points slides, YouTube, graphic animation and the like (Simarmata and Mujiarto, 2018: 3). To face this new normal era, the use of multimedia in learning should be optimized, certainly based on credible management and oriented to the progress and development of students.

B. Discussion

The Covid-19 pandemic truly changes all systems without exception. Conventional and face-to-face learning processes transformed and adapt to government regulations for implementing online learning. It is undeniable that this hard condition demands the seriousness, creativity and enthusiasm of educators and students to continue implementing the learning process. It's not an easy thing to start adapting to these conditions,

but the government has confidently confirmed that at this time Indonesia is entering a new era, living in a new order, in ways that are different from before. Despite the many hindrance encountered, online learning is starting to get its place in the world of education. Learning systems that were once only considered as alternatives, are now a primary need in the context of media and learning methods.

Learning will always dynamize in the development of knowledge, and the current learning process should be oriented to the application and utilization of knowledge in real life of society, not just to pursue academic achievement labeled as a charter or academic certificate. But the reality of education nowadays is not as beautiful as desired. This is in line with the statement of Trianto (2009: 5) that the main problem in learning on formal education at present is the low absorption of students, and this is seen in the quality of student learning outcomes that are very alarming. Learning can be said as a system that is interconnected and synergized with each other. As stated by Heinich (Pribadi, 2009: 30) that the learning system can be categorized into several types namely:

1. Learning in class (face to face);
2. Learning using radio and television systems;
3. Independent learning by using a package of teaching materials in the distance learning system;
4. Web-based learning;
5. Learning activities in laboratories and workshops;
6. Seminars, symposiums and field studies;
7. Learning by using computers (multimedia) and teleconferencing.

Learning is supported by several components, and the components of the learning system according to Pribadi (2009: 31) include:

1. Students

   As the most important component in a learning system, learning activities should be base on student centered learning , no longer teacher centered learning.

2. Learning Objectives

   Learning objectives are formulated when designing learning programs to facilitate the determination of evaluation instruments that will be used in measuring the achievement of objectives and learning outcomes simultaneously.

3. Learning Methods

   The learning method is a technique or method used by teachers to convey subject matter in order to achieve learning objectives. The methods should be adjusted to the assignments, the material delivered and the competencies expected from students. Some methods that teachers can use include: presentations, discussions, games, simulations, role playing, tutorials, demonstrations, discoveries, exercises, and collaboration.

4. Media

   Media is also a component of the learning system which has an important role in learning. Learning media is a means used in learning activities or in other words as a means of connecting between teacher and students. some of the media that can be used are: text, audio, video, exhibition media, computers, and networks (internet). Each media

certainly has advantages and disadvantages that are important for teachers to consider.

5. Learning Strategies

   The strategy is almost the same as the method but it is more specific that is requires creative efforts from the teacher to stimulate students in achieving learning objectives.

6. Evaluation

   Evaluation is a systematic process to determine the knowledge that is known by students. evaluations in the context of learning can be classified into learning outcomes evaluation and learning programs evaluation

7. Feedback

   This component is needed to increase the effectiveness of the process in a learning system

To achieve the learning objectives, all of these components should be able to be synergized properly. The choice of media or methods, for example, must be adapted to the material delivered and considering the student's condition. Entering this new normal era, these components have to properly organized to minimize the hindrance faced by students in achieving learning goals. The teacher should think of appropriate strategies in conveying learning material to keep students' enthusiasm in learning. Using conventional methods is not the right choice, because it is less attractive. Now, multimedia-oriented learning has taking over position of conventional methods.

Technology has facilitied human activities in all aspect, including in the field of education. One of them is by utilizing computer media in learning (multimedia). This is

in line with Dwijandono's statement (2002: 254) that there are at least three reasons why computers become an important medium that could be used by schools for effective teaching purposes. The first reason is because computers have become an important element in modern society, computers is able to do a lot of things quickly and precisely. The second reason is because of the price and size of computers (nowadays people are more familiar with laptops) dramatically become cheaper year after year. The last reason is because computers have been used widely for various purposes. The role of computers in learning could be as a tool or media and also as a guide. Multimedia easly streamline the learning process. The use of multimedia in learning, especially in facing this new normal era is important to think out so that learning can still running actively, innovatively, creatively and certainly fun.

1. Multimedia and Learning

Information technology now it seems to have become a primary need. People are addicted to technology because of the many advantages offered by modern technology devices. Likewise in learning activities, technology has been transformed into a "virtual teacher" who is able to carry out activities like a teacher who delivers material to students. As well as Darmawan's opinion (2016: 3), information technology is referred to as a bridge to the reality of learning, meaning that the concept of virtual learning is able to package the settings and reality of the previous learning becomes more interesting. Its also provides psychologically conditioning adaptive to students wherever they are. E-learning is able to realize effective and efficient learning conditions even though it is limited in space and time.

Utilization of technology by using and presenting various forms of information content and information processing such as audio, graphic, picture, video as a medium for educating or conveying learning information is often termed multimedia. Multimedia-oriented learning is certainly more interesting than book-based with conventional methods such as lectures and notes. Citing the opinion of Arsyad (2017: 162), multimedia is currently understood as a combination of media in the form of graphics, text, audio, video which together display information, messages or in this context is learning content. The concept of this merger automatically requires several types of hardware equipment, each of which continues to perform its main function, and the controller of all equipment is the computer. Besides of computers, there are also other equipment such as video cameras, video cassette recorders (VCR), Overhead Projector (OHP), CDs and DVD players. All of these equipment work together in conveying information or lesson content to users, in this case menas students.

Multimedia could be used as a medium in long distance learning, online also in face-to-face learning. Multimedia is an interesting media, has a broad scope including the display of images, text, sound, animation and video that is controlled through a computer. Multimedia presents a dynamic, moving, viewable, and better view of the display when it is projected onto the big screen via an LCD projector, the sound can be heard, coupled with animation as well as text display. Multimedia basically aims to convey information in a more interesting way that is fun and easy to understand. This multimedia allows students to use all of their senses in the learning process, and is very contributing to the learning process.

Correspondingly, Simarmata and Mujiarto (2018: 11) outline there are several reasons for the use of this multimedia in learning, namely:

a. The teacher can explain certain concepts to students to deepen and clarify student understanding such as by inserting relevant images, videos related to the concepts to be conveyed;

b. Facilitating the explanation of sample-based subject matter, being able to present real-life and practical examples in everyday life and being able to inspire and motivate students to explore;

c. Some information such as words, images, flash and sound can be given simultaneously so that learning activities become more real, active and tend to provide a rich perception of ideas. This has implications for the ability of students to build abstract thinking even though it is only limited to perception;

d. Multimedia teaching supports traditional learning, the point is complementary, it does not mean having to leave traditional methods.

In this regard, Arsyad (2017: 55) details some benefits of the practice in using computer-based multimedia on learning process including:

a. Computers are able to facilitate students who experience obstacles in learning. This computer is able to give a more constructive influence because the computer is never tired, never bored, always patient in carrying out learning programs that have been designed before;

b. Computers are able to provide stimulus to students to work on exercises, to conduct laboratory or simulation practices because of the elements of

animation, images, video, graphics and audio simultaneously are able to bring real situations to the students;

c. Computers make it easy for students to actively interact with the media and adjust their abilities and learning speed to the level of their mastery. Students are able to control the learning process because of the concept of interactive media;

d. Student activities and abilities could be recorded and monitored through the use of computer-based multimedia, thus helping teachers evaluate learning and learning outcomes;

e. Providing several alternative media in the delivery of material, either through compact discs, USB ports using flasdisk, Bluetooth, or through the web with the support of internet networks (LAN or Wifi).

But in the midst of these advantages, computer-based multimedia also has several limitations including:

a. The price of computer / laptop devices that is increasingly affordable is inversely proportional to the price of software development;

b. Need special knowledge and skills to operate a computer;

c. Not all software is compatible with computer equipment;

d. The limitations of the available programs so that they have not been able to optimize student creativity;

e. The use of computers for large groups is not effective because it requires additional other computer equipment or use other devices to project images and material on the monitor to a wider screen, for example using an LCD Projector device.

Apart from the limitations of multimedia, the learning process requires the ability and creativity of teachers to combine media such as text, audio, video, images and graphics so that influence the student's focus and attention on subject matter while increasing student motivation in learning. This is also in line with the opinion of Huda (2016: 129) that by using computer-based multimedia will be able to improve the quality of learning and motivation and student achievement. The implications for learning include the learning process becoming more effective and efficient, able to attract student's attention and facilitate the delivery of material. Students is also easier to understand certain concepts conveyed by the teacher.

2. Multimedia Elements

Multimedia is the incorporation of various media for the purpose of presenting information that is interesting and easily understood and controlled by a computer. To display interesting learning content, it requires the support of several elements. In line with this, Simarmata and Mujiarto (2018: 4) describe some of the elements that compose multimedia applications as follows:

a. Text

   Elements in the form of text or symbols are the simplest elements and easly to use. Online learning by using text has several advantages namely:

   1) The text file size is very small so that it could well working at low bandwidth;
   2) Users can easily specify the words and phrases to be used;
   3) Text and symbols can be updated both in size, shape and color.

b. Images and Graphics

Images have a vital role in multimedia as a support to make the appearance of the material more attractive. Images are usually expressed in the form of still images, paintings, and photos taken using a digital camera. Several types of image formats include the captured image format and the format when the image is saved. While the most popular graphic formats used in online learning and web pages are the GIF and JPEG formats, which are relatively small bitmap files.

c. Audio

The audio element is able to strengthen the delivery of the concept of subject matter presented through text or pictures and graphics on the screen. In learning, there are three types of audio that are commonly used, namely music, narration, and sound effects. Music requires a higher sound quality and a wider range of sound frequencies than the narration, while the relative narration has a smaller sound frequency range so that it can be compressed more than music but still maintain good sound quality. Sound effects are usually relatively short and don't have a significant effect on the size of online learning files.

d. Video

It is undeniable that video has a significant impact on the learning process, being able to convey information thoroughly and show realistic tools and processes compared to other elements. The teacher will also more easily convey certain concepts to students by using video media. For example when delivering material about the concept of mutual cooperation, the teacher can insert a video about a

group of residents working together to build a place of worship or clean a ditch or river. This will strengthen students' understanding of the importance of mutual cooperation through messages delivered in the video without having to come to the location where residents are cooperating. Although it requires a large bandwidth, this video element is interesting and important as an effort to transmit concepts to students as well as reinforcement in the learning process.

e. Animation

Animation is an element that describes a concept with movement, shows the process or draws attention to an area or screen element. Animation is also no less important and interesting than video, because well-made animation will attract the attention of students to listen and understand the content of the lesson delivered.

3. Multimedia Learning Format

Multimedia is now beginning to be looked at as a promising media for various activities, including learning activities because of the features and elements that support to maximize learning activities. Coupled with the development of digital technology such as Android and other learning applications that are easily downloaded, both free and paid. This certainly helps educators to maximize the learning process by utilizing the presence of multimedia, not only in online learning, but even in offline learning, this media is recommended to be used properly. Multimedia is not only able to transcend time and space in learning, but is able to accommodate student abilities and motivate students in the learning process.

Given the tendency of low student learning outcomes and learning that is relatively survive with traditional systems, multimedia can be used as an option as well as a solution to minimize or even overcome the real conditions. Education today requires innovation, adaptation to the development of information technology, not just theories and materials that make students trapped in academic circles but can't develop themselves and don't know what to do when in the midst of society. Knowledge gained is limited to the transmission of knowledge without being able to be understood and actualized by students. If this happen continuesly, then the existing human resources will be difficult to compete with other nations. For this reason, multimedia is at least present as a complement and even becomes an important thing that must be considered by educators. Multimedia basically has a number of choices that can be tailored to the infrastructure and abilities of teachers and students. In line with that, (Indrawan, et al, 2020: 53) states that multimedia in the context of general learning consists of several types including:

a. Interactive Multimedia

   As the name implies, this interactive type of multimedia shows the interaction between the user and the media facilitated by the computer and other supporting devices. Control is on the user to determine the operating time of the media. Examples include: educational games, interactive learning CDs, and the like.

b. Hyperactive Multimedia

   This multimedia has a structure and related elements and can be used or directed by users through existing links. Examples of hyperactive multimedia include:

the World Wide Web, online games, youtube and others.

c. Linear Multimedia or Sequential Linear Multimedia

This type of multimedia is technically straight and can usually be seen in all types of films, video tutorials and so on which operate without the need for navigation controls from the user. Examples such as films, learning videos, and the like.

d. Multimedia Presentation

This multimedia can serve as a tool for teachers in the learning process in the classroom, but the aim is not to replace the teacher's overall role in the learning process. The most commonly used examples today are Microsoft Power Point.

e. Multimedia Independent Learning

This type of multimedia is in the form of learning software that can be used by students without teacher assistance. Examples are Macromedia Authorware or Adobe Flash.

f. Multimedia Kits

This multimedia is a collection of learning materials that involve more than one type of media and is organized around a single topic including: CD-rooms, slides, audio cassettes, still images.

In this regard, multimedia can be presented in several formats, as described in Indrawan (2020: 70) as follows:

a. Tutorial

The format of this tutorial multimedia is one part of the Computer Assisted Instruction (CAI) implementation consisting of programmed tutorials and intelligence tutorials. The format of the tutorial

clasified to the interactive multimedia which conveys information and is presented in the form of text, images, both moving and still, and graphically in a tutorial. This format is complemented by questions and assignments, as well as learning provided or carried out by the teacher or instructor.

At the operation stage, the user or students are asked to respond to questions that have been provided by the system, if students answer correctly, it will be continued with the next material, but if the student answers are wrong then students are given the opportunity to repeat the understanding of the material as a whole or only part just certain. At the end of this tutorial format is completed with a series of questions which are a form of test to measure the level of student understanding of the material that has been given.

Things to consider in the use and development of this tutorial format are several principles as outlined by Susilana and Cepi Riyana (2009: 147) as follows:

1) This format is oriented towards complete learning, because in practice students who haven't mastered the material can't proceed to the next material;
2) This format provides an opportunity for teachers to find out the speed of students in learning;
3) The format of the tutorial should be able to provide full service to users. This includes material that is presented in a clear, straightforward, interesting manner and combines text with sound, video and images. Navigation must also provide ease of control for its users

4) Giving a response at the evaluation stage should be given directly when students answer the questions given, not delivered at the end of the evaluation. In addition, the responses given for right and wrong answers should be able to motivate students with words that are constructive for the progress of student learning.

b. Drill dan Practice

This format is one of the computer-based learning models that is designed to train student's ability to answer questions through exercises that have been prepared by a computer program. The questions applied by the computer are made varied and are equipped with correct answers and their explanations, so that students can understand the material and concepts provided while measuring their ability to understand the material.

Similar to the tutorial format, the use of drill and practice format requires mastering the following principles (Susilana and Cepi Riyana, 2009: 140):

1) The drill and practice format presents computer program based questions for students at a certain level in the form of multiple choice questions, matching, pairing short descriptions and case studies;

2) In its application, there are no student activities to heed material or video, because students are directly confronted with exercise questions that must be completed;

3) Students' answers will be recorded by a computer program, then followed by giving responses to correct or incorrect answers, either directly after students have finished answering

questions or at the end after all questions have been answered;

4) Each question is given a specific quality value which is then used to determine the student's final grade, so the teacher is able to draw conclusions related to student's achievement in answering the exercise questions;

5) The program should facilitate repetition that will be done by students and wherever possible that answers and comments can be accessed by students.

Further stated related components in the drill and practice model, namely:

1) Start / introduction

   This component is the entrance to the core program, includes data entry for login, contain the title of the program as well as information about the material to be presented.

2) Presentation of Objective

   Contains the objectives of learning, both general goals and special goals.

3) Direction

   Consists of instructions for using the program, and made using the principle of user friendly to be easily understood by users or students.

4) Presentation of Question

   Is a main component or this of the program that presents practice questions. Questions could be a multiple choice, matching or the like equipped with relevant pictures and contains a timer that serves to measure the speed of students in

answering questions and understanding the material.

5) Response / Feedback

This response is usually placed at the end when students have answered the whole problem and show the final grade obtained by students. It also contains the next steps that must be done after knowing the final grade, whether to continue the material or to repeat.

c. Simulation

The multimedia format in the form of simulations uses imitations that approach the real form as a real learning experience for students. This computer-based simulation model presents an imitation that is made as closely as possible to the original object, the more similar or closer to the real form of the imitation, the better simulation is. This program is presented interactively, which means there is interaction between the program and users or students, but still paying attention to the reality of the object. The accuracy of the imitation with the original form becomes important in this program besides presenting a comparison scale.

This simulation model is usually used for learning high-risk or high-cost materials such as aircraft simulations, or how to detect damage to a car through a computer. Citing the opinion of Pratama (2017) there are several benefits of using simulation models in learning, namely:

1) Time efficiency

Able to reduce the time that is usually long to only in minutes or even seconds.

2) Study the process

Processes that usually occur so quickly can be observed using simulation models, such as the process of lightning and thunder.

3) Experimental learning becomes safer

The use of simulation models can minimize or anticipate dangerous risks that can occur if done with real objects.

4) Impossible-possible

Simulation models make things impossible to be realized.

5) Save money and other resources

This simulation model can be used in the learning process that requires large costs because of the efficiency and effectiveness that is in this model.

6) Repetition with various variations

This model can accommodate a variety of repetition for students.

7) Complex processes can be observed

The use of this model is very useful for observing a complex event and is difficult to understand.

d. Experiment

This model has similarity to the simulation model, the difference is only in the experimental model. The activities are focused on experiments such as practical activities in chemistry or physics laboratories. Students learn through a computer program that presents practical tools and materials as well as how to use them. Of course this requires the qualification of a programmer who understands

or gets direction from people who understand the material, the task of the programmer is only to make tailor made programs. The benefits of using the multimedia experimental model are more similar to the simulation model, one of which can save costs and time but the learning objectives can be achieved.

e. Game

Game models are no longer unfamiliar to educators or students, but games that are packaged with the support of technological equipment such as computers will provide an attraction for students. This is due to many things that can be trained in the game, both the affective, cognitive and psychomotor aspects. Students are trained to play honestly, admit defeat or lack. The use of multimedia game models in learning will stimulate students' ability to think, associate their knowledge with the challenges presented in the game. The game must be relevant to the material presented by the teacher. Besides that, skills in using technology and strategy can be trained in this game's multimedia model.

The multimedia format in the form of a game offers several advantages (Sadiman, et al, 2014: 78) including:

1) The game is entertaining, has space to compete, chances to win the game or accept defeat;
2) Active participation of students can be trained in games;
3) Feedback from the game can be used as an indicator of success in the learning process;
4) Game models can help students understand the material or concept and master certain skills that can be used in daily life;

5) The flexibility of this game can be used and adjusted for educational purposes, ranging from learning to read, write, count, use logic and so on;
6) The process of making multimedia-based games can be made easily, don't have to download certain applications, just use the default computer application, at least there is creativity from the teacher, and most importantly the mastery of educational technology by the teacher.

4. Multimedia Challenges in the New Normal Era

Multimedia-based learning can be thought of as a new education regulation in the new normal era. Despite many hindrance, the online learning program is better combined with the offline methods, even though the pandemic is over. Since the implementation of the home learning system, the teacher uses a variety of learning media, but the most common is the google classroom media, by delivering material and assignments and quizzes, all facilitated by google classroom. In addition there are also those who use zoom to meet by online. There are also those who make learning videos and then send them via online media or upload them on the YouTube channel. Teacher creativity is really demanded in the home learning period. The role of technology is much important in supporting the implementation of online learning or home learning.

Considering the position of devices such as computers and laptops and smart phones today is very important, then entering this new normal era, learning should be directed to continue to use these devices and develop according to the needs and abilities. Several steps can be taken to utilize multimedia in the learning process in this new normal era, i.e.:

a. Improve the teacher's understanding of educational technology

   Entering the new normal era, regardless of whether schools remain closed or gradually open, it is important for teachers to prepare adaptive innovative learning methods and media. Multimedia can be used as an option in the learning process to maximize student learning outcomes while maintaining distance and interaction. To support these efforts, the teacher should have the skills and abilities to use technology in learning, at least has an ability to operate a computer or laptop. School management can design webinars or online workshops on the use of multimedia in learning, or techniques for creating online learning media for teachers. This will help the realization of multimedia-based learning in the face of the new normal era.

b. Increase the number of facilities or devices that support

   Its not only resources that should be support this multimedia-oriented learning effort, but there is the most important thing is to increase the number of infrastructure such as computer labs or at least one set of computers and LCD projectors in each class room and supported by free Wifi facilities. In addition to increasing the number of infrastructure means, things that should not be forgotten are the technical use and maintenance. Don't let these devices only last a short time, whereas that provided a lot of benefit to support multimedia in learning process.

c. Using applications that attached on computer operating systems

   Developing multimedia could be done by the teacher even unassisted by a programmer, but indeed not all

multimedia formats can be prepared by the teacher, such as a simulation or experimental format, because it must be done or prepared by the programmer. Teachers can take advantage of the built-in program on computer operating system (which is common with Microsoft Windows) such as Microsoft Power Point to create learning materials, mind maps, and even quizzes that can be made interestingly by using this program. Adding animated images and the teacher's voice as a narrator to explain learning material to students. The initial purpose of this program was only to make it easier for people to make presentations and not as a medium of learning, but along with the dynamics of education, Microsoft Power Point is often used as a medium in conveying materials or concepts to students, and incorporated into the learning media categories. In addition, there is also a Windows Movie Maker program that can be used to make videos and do video editing. The teacher can combine presentations in power points with videos that have been made.

d. Downloading the relevant learning videos

At present its not difficult to find videos of a variety content, including learning videos about certain material, but in selecting them it must be selective. In addition there are also applications that offer learning processes like a teacher who is teach in the classroom, but they are on paid and couldn't be adjusted to the demands and needs of students. Unlike the case with learning videos that were uploaded by the creator in the public interest. In line with this, according to Goh and Sandars (Sandars, 2020) the optimization of the use of online video directs students to relevant video segments, encourages individual reflection and group

discussion of video content, and demonstrates important procedural and communication skills with peer feedback and educator. The concept of blended learning can now be expanded, combining self-study with small group meetings online (Shank in Sandars, 2020)

e. Using multimedia game models in the learning process

The multimedia format of the game model has several advantages including being able to train the affective, cognitive and psychomotor aspects, in addition to its entertaining nature it can increase student motivation in learning while strengthening students' understanding of the material presented in the form of games. The teacher can also measure the level of student learning success through the results of the game provided. Game models don't have to be sourced from online media or downloaded for free or paid, although the game models are also very interesting, but sometimes they are unable to accommodate certain subjects. Teachers can make their own game models using Microsoft Power Point for example, even Microsoft Excel can also be used as a medium to insert games in the learning process, only need skills in using the program. Especially now that tutorials on various things can easily be accessed through online media. The teacher can browse and learn the techniques of making games based on computer built-in programs, but if the teacher has difficulty it can download game applications that are relevant to the subject matter.

f. Using online media varies

Welcoming this new normal era, teachers should not use only one media, but can combine the use of

several media including social media and video-based media. This is in line with Shah's opinion (Sandars, 2020) that social media is a widely available technology and offers the possibility to reach every participant who can offer a variety of perspectives. But the role of supervision in the use of social media needs to be considered by educators and parents, so that the existence of social media really give a benefits for student's learning. The teacher can ask students to upload assignments given in the form of videos to online video-based media, and teachers who have received links from these assignments can provide feedback in the form of responses and grades to students.

Utilization of multimedia in the new normal era provides an opportunity for the implementation of the learning system, by not ignoring the health's protocols. The interaction between teachers and students is done with the assist of multimedia. Interaction between one student and other students in the learning process can be clearly limited, but with the use of multimedia, interaction between students and teachers and other students can be intertwined, such as in the form of games involving several groups of students. Teachers can practice their skills in using multimedia in learning by attending online learning seminars or workshops as well as by learning their tutorials through online media. Multimedia provides opportunities for teachers and students to continue to train skills in an effort to achieve learning goals and realize human resources that are creative, innovative, and able to compete with other nations.

The application of the learning system from home and the use of multimedia by the teacher did encounter many hindrance. Not a few parents who complain because of difficulties using technology devices, both due to lack of

tools and limited funds to connect devices to the internet. Seeing this phenomenon, then by citingthe opinions of Simarmata and Mujiarto (2019: 73), several multimedia weaknesses in learning practices can be described as follows:

a. Multimedia requires devices such as laptops, computers, LCD projectors whose costs are relatively expensive and not owned by all education units, and not even all parents have these devices or can't use them.

b. Multimedia is less effective for students who have limitations in learning skills;

c. Some multimedia elements such as video and audio are not suitable for all students because of their physiological factors;

d. Multimedia is less effective for students who still need guidance and direction from the teacher.

In addition, another hindrance that arises is when the teacher gives a lot of assignments to students, and the task must be completed on the same day. The assignment also need to be uploaded to the media determined by the teacher and then given an assessment. Parents who can accompany their children at home, even some complaining about the difficulty of teaching their children at home, and the other side, parents should finish thei own task. This will increase the stress level of parents and children. Teachers in this case also have to think about the impact of using multimedia in online learning, it does not mean continuously giving assignments, but thinking about strategies so students can understand the material as well, because there is a possiblility that parents assist their children's task, or even parents that finishing their children's task as a whole. This will certainly have a

negative effect, which is laziness from children, and dishonesty shown by parents of students.

The teacher can use a variety of multimedia options to deliver learning material using either video, presentations or a combination of both. The teacher can also ask students to make a short resume related to the material given by the teacher or make a video that can be uploaded with a flexible time limit, so that parents are not burdened. Models of tutorials, drill and practice and games can be selected by the teachers to maximize the learning process by multimedia in the new normal era

C. Conclusion

Covid-19 pandemic has indeed changed various systems, including learning systems. Conventional systems are demanded to be transformed towards technology-based learning. For this reason multimedia present and meets these demands. Various advantages are offered by the use of multimedia in the learning process, but in practice there are not a few weaknesses or hindrance encountered. Multimedia is a combination of several media such as text, audio, video, animation and graphics as an attractive learning media, saving time and money, and able to facilitate the achievement of learning objectives. Teachers and students should be work together to determine an interesting multimedia format to use, and no longer the teacher's authority determines that they should use certain media by ignoring the difficulties and limitations of students. Multimedia is the right choice in learning to enter the new normal era by keeping attention and considering aspects of its strengths and weaknesses.

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