The Function Of Information And Communication Technology In The Teaching And Learning Process During The COVID-19 Pandemic

by Chontina Siahaan

The Function Of Information And Communication Technology In The Teaching And Learning Process During The COVID-19 Pandemic

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Abstract.

This paper is intended to provide permanent information about learning in the era of the Covid-19 pandemic in utilizing information and communication technology. Based on the fact that most educators are not very familiar with managing information technology and communication and not all educational institutions feel the existence of technology that can support teaching and learning activities so that in the era of the Covid19 pandemic, there are still many schools that do the learning process manually, namely by providing modules or tasks to students to be done at home. This study was conducted using framing analysis of the phenomenon faced by teachers, especially teachers in Indonesia in an effort to improve competence in the era of the Covid-19 pandemic. The use of technology in the learning process can trigger increased interest and motivation for learning students until the quality of their learning increases. The use of gadgets that are commonly used by students in the present era in the teaching and learning process is expected to improve the quality of the teaching and learning process itself.

Keywords: *Information Technology, Communication, Covid-19 Pandemic, Education*

I.   INTRODUCTION

The Covid-19 pandemic is one of the causes of significant changes in aspects of life, including the system in education. Changes in the system in education occur so that students become difficult to receive material as usual (face-to-face). The Covid-19 outbreak that spread widely and greatly killed many people around the world and one of them Indonesia had to design strategi in order to decide the spread of the corona virus. Therefore, Indonesia took a policy of large-scale social restrictions (PSBB) in each region, so that the Government's decision caused changes in various sectors, including the education sector.Based on this policy, the Minister of Education and Culture strives to keep the learning process going in a way that is somewhat different than what is usually done. The Ministry of Education and Culture provides rules where education continues but through a different way, namely with the study from home (SFH) system. which is better known as online learning in the world of education today and encouraged by the Ministry of Education and Culture.The learning process carried out online requires hard work and even becomes a new problem and challenge for educators and education personnel and even parents. In today's learning era, teachers must play an active role in designing every learning process.

Starting from preparing materials, designing the learning process to be more attractive to students' learning interests, and also in the process of assessment and evaluation of the learning process that has been going on for one semester, using existing technology. This has an impact on the readiness of students in receiving and using existing technologies and parents in facilitating the learning process for students, by the sophistication of existing technologies, such as androids, laptops, etc. on the other hand, there are some areas where students live that do not have an internet network.In the implementation of online learning, technology takes over an important role because the presence of technology can facilitate the teaching and learning process. With the development and also advances in the field of information technology and communication can facilitate everything, including during the Covid-19 pandemic. Developments in the field of information technology and communication make the child's mindset different from previous generations. Therefore, teachers are also required to be able to keep up with technological developments.The advancement of information technology and communication, it turns out to have a great impact on the learning system, for example in the use of LCD projectors that make it easier for teachers to deliver learning materials creatively so that they can trigger the interest of students in the teaching and learning process.

The Covid-19 pandemic has changed the model of the learning process, then teachers need to upgrade themselves, knowledge and must be able to learn to apply information technology and communication, so that teachers can optimize the use of the internet as a source or teaching material by accessing appropriate subject matter for students, in other respect students can take advantage of internet facilities to learn independently and can improve and expand knowledge. Teachers can provide lesson materials by uploading via the internet then students can access and download the materials provided. therefore, educators who cannot keep up with the development of the era, especially the field of technology, will experience a lag because students during the Covid-19 pandemic have more time at home to operate their laptops or smarthphones, then by itself students will be easier to pick up or download materials, or whatever they want to learn and fulfill through the technology.The familiarity of learners with technology torow all kinds of information through laptops, computers and smartphones should be seen as a positive attitude because it follows existing developments. Therefore, it is a big capital for teachers to present learners to be more creative and make students' interest in learning higher and the learning process more effective.

However, the rapid development of technology has not been able to replace the role and function of teachers, but only slightly shift or add to its function. Because it does not apply to all places that are already affordable with information and communication technology so that not all learners have complete learning resources at home.The development of information and communication technology can support the creativity of educators in implementing and also adding to the creativity of science,

both related to the learning process and self-development, namely creativity marked by the activity of creating something that did not exist before. Advances in this field of technology cannot shift the role of the main task of a teacher. This is where the role of teachers is tested, because teachers must be able to use technology and information well and in such a way, especially in the learning process in the era of the Covid-19 pandemic. Technology optimization in the learning process must be created by teachers, so that when following learning learners become excited and do not become bored, with old models and methods that are often used, learning must be created to be able to inspire learners.The biggest challenge faced by educators is to become a teacher during the Covid-19 pandemic as it is today. It is inevitable that educators must be able to maximize the use of information technology and communication in their learning systems. Schools located in areas where electricity and internet networks are good, can use information and communication technology.

While it cannot be denied that there are still many schools that are still learning manually, namely by providing modules. But in general, during the Covid-19 pandemic, there are many teachers in the city who use technology in the learning process such as sending tasks and materials through google class room, presenting videos on youtube, using zoom for material collection, learners send tasks via email and also wa. Teachers can communicate with learners as well as parents to monitor the development of each learner. So that the learning process really involves cooperation between teachers, parents and students by relying on technology and information and communication that develops. However, it is also inevitable that there are still many teachers who are gaptek so that the learning process is still manual, namely by giving assignments manually. Here it can be seen that there are still many educators who have not prepared themselves and have not been able to make good use of technology for the advancement and effect of the learning process in the era of the Covid-19 pandemic. Based on the explanations discussed above, it will be researched on how the benefits of information technology and communication in the teaching and learning process in the era of the Covid-19 pandemic.

II.   METHODS

This study uses qualitative method with case study approach. The main purpose in using qualitative descriptive is to describe the nature of a state that existed at the time of the study and explore the causes of certain symptoms, (Sevilla, 1993: 91). Qualitative research method according to Sugiyono (2013: 1) is a research method used to research on the condition of natural objects (as opposed to experiments) where researchers are as a key instrument, data collection techniques are carried out triangulated (combined), data analysis is inductive, and qualitative research results emphasize meaning rather than generalization. Informants are selected using purposive sampling. According to Miles and Huberman (1992) that data analysis consists of data reduction, data display and conclusion drawing.

III.   RESULT AND DISCUSSION

Oemar Hamalik, put forward several benefits of teaching and learning activities, including:

1.   The learners can feel directly the sensation of experience in learning.
2.   Try new things that will make students more and more bring out all the potential of what is in him.
3.   Cohesiveness of cooperation is built to trust each other.
4.   Students learn according to their own abilities, so as to know their abilities;
5.   Fun learning and disciplined attitude will make students more confident
6.   Establishing good relationships between each other, and others will support the education of these students.
7.   The kristis way of thinking is needed to hone the knowledge possessed by students.
8.   In the process of teaching and learning, there will be a new dynamic that will be faced by students and it will make students more prepared and exert all potential in him.

Benefits of Information and Communication Technology in Learning in the era of the Covid-19 pandemic.

The process in teaching and learning is well established if someone conveys information and someone receives information, and the information can be channeled through certain media or channels. With this media, the information received by students is expected to be able to be absorbed, survived and embedded in the memory of learners properly. With the existence of good technology in education, it is expected that the educational goals will be achieved and also the quality of learning outcomes from students has increased significantly. Technology in education has become very important and very needed in the current era because in everything it needs the name of technology and media. In fact, we are all required to be able to use the technology itself. The unidirectional relationship between teachers and students is able to be well established using existing media, learning will be able to take place, even in situations and conditions during this pandemic with us utilizing all social media in the technology. Educators will still be able to monitor the extent of students' understanding, even online. That is why in the current era we are all required to be able to use the existing media, to support everything that is our needs, including in terms of learning itself.

According to Hamalik explained that the effectiveness in communicating between educators and learners can be seen from the media used. Through the internet, teachers can carry out learning activities by practicing activities that spur students to more actively explore such as making presentation materials, educators can organize learners to be able to see certain sites related to learning materials online, teachers can

provide assignments through the internet, teachers can design intenet-based project learning. If the implementation of this project can be implemented properly, not only mastery of the concept can be learned but also other skills. So as much as possible educators use information technology and communication in the teaching and learning process carried out in the network in this Covid-19 pandemic era. These skills are not taught as part of the material that exists on the school curriculum. However, through project learning activities or known as project based learning which is otomotas learners can master it.The use of the internet for the learning process in the era of the Covid-19 pandemic is also inseparable from shortcomings. Learning to use this technology has an impact on equipment such as the availability of facilities and infrastructure, especially laptops, smartphones, electricity and internet signals with good quality.

Because if the internet signal is bad then the process of teaching and learning using the network (online) will also be hampered.The weaknesses behind the advantages of the use of information technology and also communication about the learning process in the era of the Covid-19 pandemic in the form of complaints from parents, the absence of direct interaction between educators and also students, underestimating aspects of social life, the role of teachers changed which was monotonous to be typical teachers who must master the field of technology, lack of will in learning by students and not availability of adequate facilities and infrastructure.The existence of the internet can basically have a positive influence on the success of the learning process and also hold important control in education. But this is what must be considered by all circles, including the Government to pay special attention to areas whose facilities and infrastructure are far from feasible. On the other hand, educators and learners are required to be civilized with existing technological advances, so as to support the learning activities that will be undertaken. Every teacher wants that every learning presented can be absorbed and done well by the learners. These experiences can be realized through an interesting and quality learning process.

But teachers need to pay attention to things such as the availability of facilities and infrastructure, the availability of quality materials and educators who must primarily be able to use and operate technology before the educators themselves teach it to students so that the learning process can run well, and in accordance with the purpose of learning itself.Teachers also need to convey which boundaries should be avoided by students, so that the use of gadgets themselves feels more appropriate to use in the teaching and learning process. For example, gadgets were created to facilitate communication, even for learning media even in the wrong use to play games. So that students become unfocused in following learning. The negative and positive sides of gadgets must be told from the beginning to students, so that they can know the true function of gadgets in learning itself.

IV. CONCLUSION

The use of information and communication technology in the learning process in the era of the Covid-19 pandemic is still valid in certain place because not all schools are reached with fast internet networks and electricity. The teaching and learning process during the Covid-19 pandemic is still a lot of schools that give assignments manually because not all students have gadgets, still a large gaptek. The learning process is still given manually, namely by giving assignments in the form of notes.there are still teachers who are not ready and technologically literate in carrying out learning in the era of the Covid-19 pandemic.

V. ACKNOWLEDGMENTS

We thank the informants who have participated in providing data related to online lectures during the covid-19 pandemic. Hopefully this research can provide the best benefits for the whole community, especially educational institutions that carry out the teaching and learning process during the COVID-19 pandemic.

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