Computer as media in improving teacher performance and student learning process

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Abstract. Technological developments in the globalization era is increasing, including in the education world, this development makes it easier for teachers and students in implementing teaching and learning process through computer media. Computer function is increasing sharply with the birth of internet technology, no longer limited to tools for storing, maintaining, and transferring knowledge, but able to become an interactive learning media through distance learning and teleconference, and others. The distance of the world of knowledge becomes increasingly narrow with the ease of accessing various information-news, science, knowledge, in the form of text and images through the internet network.

1. Introduction

Globalization has had an effect on all aspects of the world's order of life. One of aspect that is influenced by globalization is the aspect of education. Education is a process of transformation knowledge from the know to the uninitiated. This opinion is supported by Soekanto which states that education is the transfer of knowledge, norms and values in a formal or informal way [6]. Furthermore Hamalik mentioned that education is a process in order to influence learners to be able to adjust themselves as well as possible with their environment [2].

The development of the education world has a great influence in the world including the countries in it. The education world is like a river that continues as long as people still live in this world. This view means that education is all life situations that affect the growth of individuals as learning experiences that happen in all environments and throughout life.

The rapid flow of globalism has an impact on the development of technology and information faster and higher, so with this development has brought impact not only on community activities but also impact on the world of education, the availability of facilities and infrastructure in supporting education are important in order to facilitate teachers in implementing teaching and learning process. Thus, the teacher can perform his / her duties as a professional educator.

The use of technology in the education world in Indonesia is rampant so that the use of digital technology is commonly heard in use teaching and learning activities. However, the implementation of the use educational technology is still haphazardly caused by various technical constraints. This phenomenon shows the existence of perceptual gap with the ability of human resources educators and education personnel so that in this case the government must be able to finish the problems that arise in order to achieve equitable education and the creation of a harmonious education.
2. Result and Discussion

Learning and study are activity that always exist in human life or in other words can’t be separated from human life. Without study and learning, human can’t develop their potential to meet needs of his life. This is because all aspects of life including humans are always changing. Based on this explanation, we need to know the definition of learning from some experts according Warsita, learning is an activity to make learners learn or activities to educate the learners [1]. Meanwhile, according to Pribadi states that learning is a deliberately designed process to create the occurrence of learning activities in individuals [4]. As according to Aqib defines learning as a systematic effort by teachers to realize the learning process runs effectively and efficiently starting from planning, implementation and evaluation [1]. Based on some of the above opinions, learning is a systematic planned effort used by teachers to encourage students to be active, creative and create a pleasant atmosphere in it’s function as a contributor and facilitator in order to achieve effective and efficient learning process that starts from planning, implementation and evaluation.

Each school has the means as a learning resource. Indonesian Dictionary, the definition of the means is anything that can be used as a tool to achieve the purpose or goal. As for the meaning of the infrastructure is all things either in the form of material and nonmaterial which the main support implementation of a process are.

Facilities are anything that directly supports the learning process activities, for example learning media, school equipment, etc. While the infrastructure is anything that can indirectly support for success of the learning process, for example the way to school, school lighting, restrooms and so on. Completeness of facilities and infrastructure will assist teachers in conducting the learning process, thus facilities and infrastructure are important components that can affect the learning process [5].

School facilities are instrumental in supporting the success of learning programs. School facilities are also very instrumental in improving the competence of teachers. Adequate facilities can increase teacher knowledge and improve teacher skills. The experience of teachers increases by utilizing a number of facilities. So they always and can learn whenever they have time. Some of facilities directly related to the development of teacher competencies and also help the teaching and learning process in the classroom include computer and science laboratories, libraries, internet and horseshoes. The facility is a learning resource that is very important for the development of teacher competencies. Therefore, school leaders, systems, and school cultures encourage teachers to use the learning resources as well and as effectively as possible to support the learning process and teacher competence. Provision of adequate learning resources aims to enable teachers to learn, support learning in the classroom, and improve their competence.

The use of technology in education is very important where it relates to the tools used in the implementation of teaching and learning such as computers, language laboratories and other projected media. This program is only possible running well when the teachers were able to operate a computer, and of course computers are also available at the school, at least one class of the computer. But with the different financial capabilities of schools and the limited capacity of the government, not all schools are able to provide computer laboratories. At present, data shows that of all vocational schools in Indonesia around 70 percent have computer labs. Meanwhile for new high schools around 40 percent of junior high schools are 30 percent and elementary schools are still under 10 percent [3].

Benefits of the computer are to store knowledge, keep it, and move it [3]. The presence of computers has a tremendous impact on the development of science. The way individuals and companies work increases sharply several times, both in terms of quality and quantity. The presence of portable computers allows each individual to learn wherever and whenever, in the car, while waiting, at the mall, and so on. Because through the computer can search and get the information he needs in a matter of seconds, the computer allows teachers guide students to use critical technology, which became lifelong learning. Computers can also make teachers work carefully with students and other educators to achieve educational goals and standards.
In the past, write a letter or a book with a note on the paper, and then switch to manual electric machines, before moving on to computers. In the next development of computers also experienced the development and innovation very quickly, from PC, notebook / laptop, to netbook. Nowadays, in general, almost certainly in every house there is a computer device. Professional workers, lawyers, doctors, businessmen, professors, teachers, and even students and students, have and attached to a notebook or netbook, and take it with them wherever they go.

The presence of laptops and netbooks is not only mushrooming in the campus environment or academic environment, but has penetrated into large, medium and small business areas, such as malls, cafes, and shopping places that are commonly visited by students and the public. This is possible because of the availability of free internet connection facilities for visitors by the owner or manager of the building or shop. Only carry a laptop, turn on, free internet facilities can be enjoyed (usually with certain conditions). Conditions in elementary, middle and high school, in certain big cities in Indonesia have experienced conditions similar to those mentioned above.

Computer function is increasing sharply with the birth of internet technology, no longer limited to tools to store, maintain, and transfer knowledge, but able to become interactive learning media through distance learning and teleconference, and others. Distance of the world of knowledge becomes increasingly narrow with the ease of accessing various information-news, science, knowledge, in the form of text or images through the internet network. The Google search engine is worth mentioning here as one good example of providing the necessary data, whether on education, politics, economics, sports, health, culture and entertainment. Teachers in the 21st century actually should know and be able to operate computers. Although it may be the fact that many teachers still stutter technology. When viewed from the field of work, teachers will always be related to the computer, such as preparing a lesson plan, preparing curriculum level education, and writing scientific papers.

Teachers should have a computer or laptop to support teaching and learning activities and productivity as educators. But it is clear that not all teachers can afford to buy a computer. That there is a gap in ownership and access to information-communication technology between developed and developing countries between big cities and small cities [3].

In the midst of the demands competence and professionalism of teachers today. It seems that the teacher really needs computer or laptop media, and better if you can connect to the internet. Computers will be very beneficial for teacher performance. Among others:

a. Adding scientific insight. In addition through the book, teachers can get information from computers and the internet. Only by carrying a lightweight laptop. Teachers can carry and read hundreds of book titles and thousands of pages in digital form.

b. Enabling teachers to interact with professional people outside their school environment. This moment can be used to share experiences and knowledge and useful information to improve the teacher quality.

c. Facilitate teacher work. Teachers write and draw with computers more easily than ordinary writing and drawing tools. Probably from the time also could be faster. So it's easy to correct writing or drawing through the computer in case of errors.

d. Make it easier for teachers to deliver instruction (message or information) in students. Teachers convey student information by speaking or writing on the board but information can also be submitted through Powerpoints in form of text, drawings, or tables. Even Powerpoint are made properly and carefully will attract more students to learn and easier to absorb the meaning and message.

e. Motivate teachers to be productive or more productive in their work. The presence of a computer allows the teacher to write his ideas anytime and anywhere. Likewise when you have to send the manuscript - in the form of an article or book - to the publisher, the teacher only needs a few seconds or minutes through the email facility.

If most teachers still difficult to have a laptop. So computer labs in schools can be utilized by teachers as much as possible, which is when they are in school. Teachers can’t always deal with computers and the internet every day. Unless both of us only need it when needed for something that
is really important, useful, and improve the quality of teachers beyond this, now books are very abundant in school and private libraries, and these books require teachers who are diligent in reading books for touch it.

3. Conclusion
Education and learning is an activity that always exist in human life or in other words can’t be separated from human life. Without education and learning, human can’t develop their potential to meet the needs of their life. This is because all aspects of life including humans are always changing. School facilities are instrumental in supporting the success of learning programs. And school facilities are also very instrumental in improving teacher competence. Adequate facilities can increase teacher knowledge and improve teacher skills. The experience of teachers increases by utilizing a number of facilities. So that they are always and can learn whenever they have time. The use of technology in the learning activities are compulsory in education in the era of globalization. Because it can facilitate the learning process and also this as an age demand so that students are not left behind in the use of technology and can increase the existing human resources so that students are able to compete well when plunging into the field of work.

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