

# Importance and role of computers in teaching and learning process essay sample

[Technology](#), [Computer](#)



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Thesis Statement:

Computer is a useful tool for instruction because it makes the teaching and learning process more enjoyable, interesting and interactive by using software programs such as educational games, power point presentation and other audio-visual presentations. SENTENCE OUTLINE

I. Computer is an electronic device which executes software programs.

A. It is a programmable machine.

B. It accepts and manipulates information.

C. It is capable of performing a series of arithmetic or logical operations.

II. Computer is a useful tool for instruction because it has many capabilities.

A. It can be used as information tool.

B. It can be used as situating tool.

C. It can be used as communication tool.

D. It can be used as constructive tool.

III. Computer makes the teaching and learning process more enjoyable, interesting and interactive by using of software programs such as educational games, power point presentation and other audio-visual presentations.

A. Computer games add fun to the learning process.

B. Computer makes the presentations of the teacher more attractive and

interesting.

C. Computer provides interactive learning.

## Introduction

Computers have changed the way we work, be it any profession. Therefore, it is only but natural the role of computers in education has been given a lot of prominence in recent years. Computers play a vital role in every field. They aid in industrial processes, they find application in medicine, they are the heart of the software and they play a vital role in education. To understand further the role of computer in education, let us define what are computers and its capabilities? Is it useful tool in teaching and learning process? What are its effects to students and teachers? How can it be used by teachers as a tool for their instruction? And the most intriguing question is that can computer improve the skills of students in terms of technology? This research paper aims to discuss the role and importance of computer in teaching and learning process. Computer is an electronic device which executes software programs. This is a programmable machine that can store, retrieve and process data. It automatically carries out a sequence of an arithmetic or logical operation. The particular sequence of operation can be changed readily, allowing the computer to solve more than one kind of problem (Britannica Concise Encyclopedia 2012.)

In addition, according to Columbia Encyclopedia (2012) computer is a device that accepts information (in the form of digitalized data) and manipulates it for some result based on a program or sequence of instruction n how the data is to be processed. Computers also include the means for storing data

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for some necessary duration. Moreover computer is device that is capable of performing a series of arithmetic or logical operations. A computer is distinguished from a calculating machine such as an electronic calculator by its ability to store computer programs and it can repeat its operations and make logical decisions by the number and complexity of the operations it can perform and by its ability to process store and retrieve data without human intervention ( McGraw -Hill Dictionary, 2002 )

### Computer for Instruction

According to Lucido (2001) Computer is a useful tool in instruction because it has many capabilities. It serves as information tool communication tool situating tool and constructive tool. Computer can provide a vast amount of information in various forms such as text, graphics, sound and video. Even multimedia encyclopedias are available today on the internet. The internet itself provides an enormous database from which users can access global information resources that include the latest news as well as educational information directly useful to learners (Lucido 2001) In addition, computer can be used as a situating tool. By means of Virtual Reality (VR) extension systems, the computers can create 3-D images on display to give the user the feeling that they are situated in a virtual environment. A flight simulation program is an example of situating tool which places the user, in a simulated flying environment ( Lucido, 2001). Moreover, computer can be used as communication tool.

Along the constructivist point of view, it is not enough for students to download relevant information using the computer as an information tool.

Students can use the gathered information for composition or presentation projects as may be assigned by the teacher. Given the fact that the internet can serve as a channel for global communication, the computer can very well be the key tool for video conferencing sessions (Lucido, 2001).

Furthermore, computer is also used as a constructive tool. Computer itself can be used for manipulating information; visualizing one's understanding and building new knowledge. The Microsoft word computer program itself is a desktop publishing software that allows the users to organize and presents their ideas in attractive formats ( Lucido, 2001). Computer for Enjoyment

Computer makes the teaching and learning process more enjoyable, interesting and interactive by using of software programs such as educational games, PowerPoint presentation, Photoshop and other audio-visual presentations. Computer games are great way for students to learn that learning can be fun. Educational games allow students to learn in fun and enter active way. Computer in the classroom are beneficial and helps students to learn and grow (Johason, 2011). A teacher who uses computer in this teaching can easily get attention of his students. Through PowerPoint presentation a teacher can deliver his lessons on a colorful and dynamic presentation that many students find it more interesting than traditional teacher lectures by providing the student with visual presentation of information help than to retain information from lessons covered in class (Thea, 2012). Moreover, computer also provides interactive learning. When learners use computer in the classroom, it provides active participation from

students, which could lead to a better understanding of the school subjects (Thea, 2012).

In addition, using computer projectors to present lessons adds the audio-visual element to instruction and reaches those whose learning style is not addressed through traditional teacher lecture. Since today's students are heavily oriented to the visual, this approach appeals to everyone. Students and teacher in learning situations both respond positively to the use of computer for the same reasons and both groups benefit when computer technology is utilized in instruction (Watts and Hammons, 2002). Students today instantly rises their level of interest and appreciable when they are allowed to work on the computer. A student learns best by doing instead of listening and using computer in instructions is hands on for them, requiring active involvement and participation. Many instructional programs are interactive, giving the students the opportunity to answer a questions or work a problems and receive immediate feedback (Walts & Hammons, 2002).

Furthermore, when students are using computer, they are in a active role of recipient of information transmitted by a teacher, textbook or broadcast. The students is actively making choices about how to generate, obtain, manipulate or display information technology use allows many more students to be actively thinking about information, making choices and executing skills than is typical teacher lessons. Moreover, when computer is used as a tool to support in performing automatic tasks, the students are in the position of defining their goals, making design decision, and evaluating

their programs (Brown et. al, 2001). On the other hand, using of computer in the classroom, the teacher's role changes as well. The teacher is no longer the center of attention and the dispenser of information, but rather plays the role of facilitator, setting project goals and providing guidelines and resources, moving from the student to student or group to group to group, providing suggestions and support for student activity. As the student work on technology-supported projects, the teacher rotates through the room, looking over shoulders, asking about the reasons for various design choices and suggesting resources that might be used (Brown et. al, , 2001)

## Conclusion

Using of computer in the classroom is very useful. It makes the teaching and learning process more fun, interesting and interactive. In addition, using computer in the classroom, the instruction tends to be less teacher-centered. Instructors felt more like facilitators than leaders and students tend to assume more responsibility for what goes on during class. Moreover, student to student and student to teacher interaction tend to increase the students' conversation more frequently focus on writing. And students tend to leave the computer classroom with greater confidence in their writing (Hussein, 2002)

On the other hand, the researcher recommended that when computer is used in the classroom, the teacher should be strict in facilitating the students while they are doing their activities in the computer because may be the

students will open and surf some pornographic sites or may be some students will play games which are not educational.

## BIBLIOGRAPHY

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