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COMPUTERS IN EDUCATION

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Short Profile

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ABSTRACT:
In recent times, critical opinion has appeared regarding the utilization of computers by kids and adolescents, particularly in education at the first and highschool levels. during this essay, we start by citing and summarizing a number of the arguments given in favor of the utilization of computers by kids and in education. Then we have a tendency to argue against them using some opinions that we have a tendency to consider to be non-standard.

Another approach and a few a lot of details on several of the problems covered here may be found in. we conjointly introduce here some new arguments.

KEYWORDS
Computers in Education , citing and summarizing ,learning environments .

INTRODUCTION:

The computer is the most powerful new learning device since the invention of the printing press and the textbook. The computer is important as a learning device because it allows us, for the first time in hundreds, perhaps even thousands of years, to move toward situations in which most learning is interactive. As we have educated larger and larger numbers of people, we have adopted undesirable passive modes of learning. With the computer, we can create active learning environments for all students.

We should not seek the "best" way of using the computer in learning. The computer can be used in many different ways to aid many different aspects of the learning process. None of these should be eliminated at the present time, when our experience with first rate use of the computer is still extremely limited. Decisions should be made on empirical grounds, rather than on the basis of philosophical positions. We need to use the principles of science in deciding where computers can best be used in the learning process.

Computers will continue rapidly to decline in cost and improve in capability. Because hardware will become cheaper, and because we are becoming more skillful in developing computer-based curriculum material, the computer will eventually become, in almost every area of education, the cheapest learning delivery system.

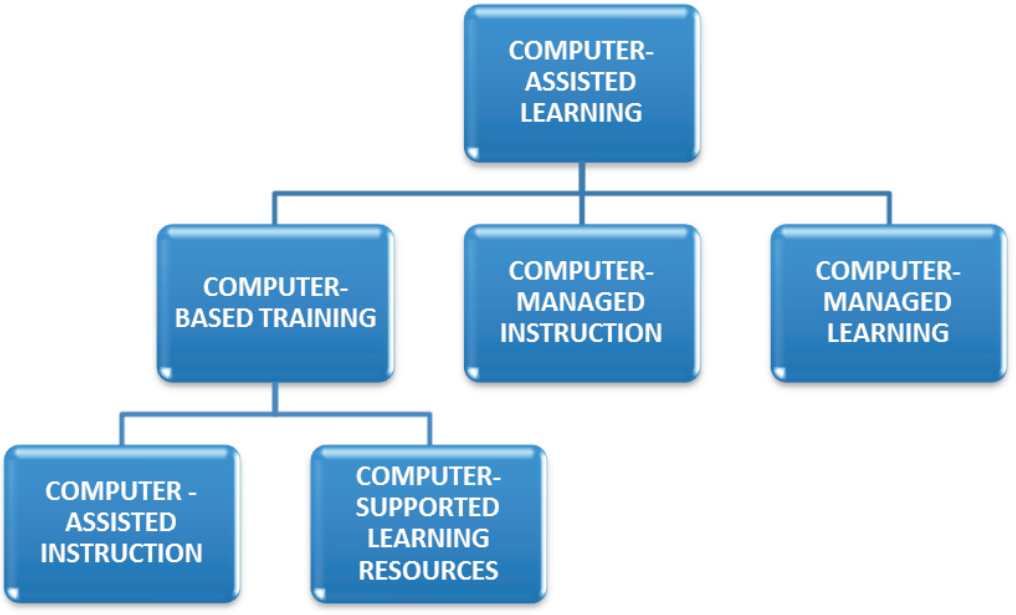
The history of computers in education has been variously characterised as an "accidental revolution" or "unthinking man and his thinking machines." Others have aforesaid that laptop|the pc} revolution has modified the expression that "necessity is that the mother of invention" to "in a computer world, invention is that the mother of necessity." but characterised, it's clear that innovators during this field have created a number of the foremost provocative and stimulating concepts within the history of education.

It seems that computers and technology are being used more and more frequently in an educational setting. This trend of wiring schools, using long distance learning, and reliance on the internet for information is seemingly being pushed forward without any real test or study on the usefulness of such technology on education. The uncontrolled use of technology without examining its long-term benefits and potential problems is not something that should be allowed to happen in education. This use of computers in education has rapidly changed the way that people learn in a short period of time.

2.6.1. Present System of Computers in Education

Computers are the best way of teaching subjects to students. These days, all schools and colleges have computer labs where they receive practical training from their teachers. Computers assist teachers in teaching their students easily and quickly. Students can search for the concepts or things which they wish to know, by referring to relevant websites. The Internet is an ocean of information and surfing daily will increase the knowledge of these students greatly. Another advantage of computers is that the students will be able to gain knowledge of various subjects and things which are other than their school syllabus. Such a form of receiving education is considered to be more effective than only learning from textbooks prescribed by authorities.

There are four different types of computer applications for education. The first type is Computer-Assisted Instruction (CAI). This uses the computer as a single device to teach a student a specific lesson or piece of material. There are several different CAI modes including: drill and practice, tutorial, simulations and games, and problem solving. The second type is Computer-Managed Instruction (CMI). This type of application uses various components of the computer, such as, branching, storage, and retrieval capabilities to keep instruction in order and to maintain track of student's progress and records. CAI and CMI are often combined to deliver information, but it is not necessary. The third type of computer application used in education is known as Computer-Mediated Communication (CMC). This simply describes the computer applications that allow for communication. There are many different types of CMCs, but the most common are electronic mail (E-mail), computer conferencing, and electronic bulletin boards. The fourth and final type of computer application is Computer-Based Multimedia. The purpose of this is to combine voice, video, and other computer technologies into one delivery system. HyperCard, hypermedia, and other still-developing computing tools are useful components in this type of computer application. The different forms of instructions through computers are given in the following figure F.2.1.



F.2.1 Different Forms of Instructions through Computers.

There are many advantages of using computers and technology to educate. By using computers, a student can learn at their own pace. They are at their own level of learning, and can take as much time needed on components they do not understand, but can also spend less time on material that they do understand. In a normal classroom, time may be wasted on material that a student understands, because the rest of the class can not comprehend it as quickly. Likely, in a classroom, an entire class might grasp information quickly, and one student may not fully understand, but still the class will move

onto new material. While using Computer-Assisted Mode, computers specify learning to the student, and give instamatic feedback and reinforcement. Computers are very useful because they are multimedia devices. They contain graphic, print, audio, and video abilities, and link these technologies together. This way, a student can interact with the computer, and not solely listen to a recording or voice. Videos and CD-ROM allow for interactive units, lessons, and learning environments. Computer technology is constantly advancing and changing to the latest needs. As technology continues to advance, related costs continue to drop. If an educator knows their present and future needs, they can effectively search through the computer market for efficient and cost effective hardware and software. By using computers for education, it opens many opportunities to far more individuals. It eliminates the problem of location, transportation, and handicaps. By the use of national networks, students and resources are linked. Many institutions are now giving graduate and undergraduate degrees by the sole use of computer-based resources. This allows many more individuals from all over, and with handicaps, to complete a college education that would have not been possible without the use of computers.

Arguments in favor of early use

Let us introduce here some arguments for using computers in education, reception and in class, victimization quotations.

Oppenheimer, in a recent article criticizing indiscriminate introduction of computers in schools, lists the following popular reasons for "computerizing our nation's [the USA] colleges,"

1. "Computers improve both teaching and student achievement."
2. "Computer literacy should be taught as early as possible; otherwise students will be left behind."
3. "Technology programs leverage support from the business community - badly needed today because schools are increasingly starved for funds."
4. "To make tomorrow's work force competitive in an increasingly high-tech world, learning computer skills must be a priority."
5. "Work with computers - particularly using the web - brings students valuable connections with lecturers, alternative colleges and students, and a good network of pros round the globe. Those connections spice the varsity day with a way of real-world relevance, and broaden the tutorial community."

Let us now hear a strong fighter for the introduction of computers in education, who gives deeper reasons. We will cite him in chronological order. In his book "Mindstorms" [2], S.Papert writes:

6. "I began to see how children who had learned how to program a computer could use very concrete computer models to think about thinking and to learn about learning and in doing so, enhance their powers as psychologists and as epistemologists."
7. " I believe that the computer as a piece instrument offers youngsters a chance to become additional like adults, so like advanced professionals, in their relationships to different intellectual product and to themselves."
8. "Increasingly, the computers of the terribly close to future are going to be the personalty of people, and this can gradually come to the individual the power to work out patterns of education. Education can become more of a personal act... there'll be new opportunities for imagination and originality."

9. " the computer could function a force to interrupt down the line between the 'two cultures' [humanities and science]. ... thus in this book I attempt to show however the computer presence will bring youngsters in a a lot of humanistic similarly as a lot of humane relationship with mathematics."
10. "LOGO environments are not [Brazilian] samba colleges, however they're helpful for imagining what it'd be prefer to have a 'samba college for mathematics.' ... the computer brings it into the realm of the possible by providing mathematically rich activities that might, in theory, be really engaging for the novice and the knowledgeable, young and old."
11. " The computer can be seen as an engine which will be controlled to existing structures so as to resolve, in local and incremental measures, the issues that face colleges as they exist nowadays."
12. " Computation can be more than a theoretical science and a sensible art: It may be the material from that to fashion a strong and private vision of the world".

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