Impact of modern technology in education

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Abstract

Technology is a gift of God. After the gift of life, it is perhaps the greatest of God's gifts. Technology is the mother of evolution, of arts and of sciences. It has changed our way of life. It has obstructed different facets of life and redefined living. There is no doubt, it plays a significant role in every area of life. Many manual tasks can be mechanized, thanks to technology. Many composite and critical processes can be carried out with comfort and greater competence with the help of modern technology. Thanks to the claim, living has changed, and it has changed for better. It has transformed the pitch of education. Importance of technology cannot be ignored in schools. It has become very easy with the help of technology for teachers to impart knowledge and for students to gain it. Technology has made enjoyable all teaching and learning process.

Keywords:Education,modern technology,teaching

Introduction:

21st century era is often regarded as an era of technology. Technology, in these days plays an important role in our life. It is seen as a basis of growth of an economy. An economy that is poor in technology can never grow in today's scenario. Technology makes our work easier and less time consuming. Impact of technology can be seen everywhere one such field is Education.

Modern technology in education

According to the modern insight as to how accurately modern students of today prefer to the use of technology and how does their learning get an impact if they use technology, it was exposed that the use of modern apparatus technology and tools, the learning and interactivity of the students growths. They also find it much more interactive, as well as full of interesting areas, when aided by technology. The transfer of knowledge becomes very easy and suitable, as well as effective. What this means is, that our minds now tend to work faster when supported with the use of modern technology ,be it any part of life, here we talk about education. The reliance and dependence of such an invention, that simply makes life an easy, smooth journey in completely inevitable these days even in schools, universities and colleges. Students today can make use of technology in the following ways:

Using projectors and visual

Visual images always have a strong appeal compared to words. Using projectors and visuals to aid in learning is another form of great technological use. Top institutions around the world, now rely on the use of amazing power point presentation and projections in order to keep the learning interactive and interesting. Technological use such as projectors within the schools and colleges can take the interaction and interest levels right up and also improve motivation. Students like to see appealing visuals and something that entices them to think rather than just reading words. The learning part also becomes efficient when it comes to technology.

Digital footprint in the education sector

If we talk about digital and education, then the penetration of digital media within the education sector has now grown. This penetration has resulted in round the clock connectivity with students and different forums that are available for different kinds of assignments or help. As the power of digital increases, there are and there will be more applications that will assist students in development and learning.

Online degrees with the use of technology

Online degrees now have become a very common phenomenon. People wish to take up online courses for their learning and certifications. Top institutions offer amazing online programs with the use of various applications and the internet. This is a concept that will continue to rise as it gets more support and awareness. The online degree scenario around the world is more famous among students who work and look for flexible studying programs.

Importance of technology in education

The importance of technology in education is undoubtedly the ability to reach more students more efficiently. After all, technology is all around us and only continues to expand in its many uses.

Although many people like to rely on traditional methods on teaching, the possibilities that open when technology is brought into classroom are endless. For one, access to education has been significantly broadened as a result, including a wide range of learning styles and degree options. Even if you are not a student or an education professional, it is crucial to note the importance of technology in education.

To really utilize these tools, teachers should ask themselves why students want technology in the classroom ,not just why they need it .It can definitely help education professionals in the monitoring of individual development and innovative lesson planning .But the students who learn through technology can create a set of skills that will help them throughout their own future careers.

Factor affecting technology in education

Jung talks about the enormous challenge teachers are facing in our society due to the rapid expansion of knowledge. The modern technologies are demanding that teachers learn how to use these technologies in their teaching. Hence these new technologies increase the teacher's training needs. Gressard and Loyd (1985) asserted that teacher's attitudes toward computers are a key factor in the successful implementation of ICT in education. They pointed out that teachers do not always have positive attitudes towards computers and their poor attitudes may lead to a failure of the computer-based projects.

Also, the most commonly cited barriers are:

- Lack of time:
- Lack of access:
- Lack of resources:
- Lack of expertise and
- Lack of support

Another barrier given by Butler and Sellbom (2002) and Chizmat & Williams (2001) is reliability. Reliability included hardware failures, incompatible software between home and school, poor or slow internet connectivity and us of data software which are available mostly at school while the students/educators are having more up-to-date software at home.

Impacts of ICT in education

Information and Communication Technologies (ICT) is a term which refers to technologies which are used for collecting, storing, editing and passing on information in various forms [1]. A personal computer is an example of the use of ICT in education. Multimedia is also a frequently used term to refer to a combination of data carriers, for example video, CD-ROM, floppy disc and Internet and software in which the possibility for an interactive approach is offered [2].

ICT enable the transformation of teaching, research and learning processes at all levels. It empowers teachers and students, making significant contributions to the education fraternity.

In general terms, we can categorize functions of the use of ICT in education as:

ICT as object.

This refers to learning about ICT. The ICT has been organized in different courses according to the goal, purpose and area of applicability. What is being learned as well depends on the type of education and the level of the students. Education prepares students for the use of ICT in education, future occupation and social life.

In the education sector, we have seen ICT having a huge impact in the schools and colleges curriculum by introducing it as a area of study. For example, in Universities and tertiary colleges, KCA as an example, we see ICT as a field of study in different professional disciplines. Some of the disciplines include Information Technology, Computer Science, Software Engineering, Data Communications, Computer Engineering, Management Information Systems, Mobile Computing, among the many others. This in turn has led to professions in the ICT, both in education system and the industry. The ICT as an object is a key driver on the use of ICT in other application areas.

ICT as a tool in education.

In most cases, ICT is used as a tool, for example while making assignments, collecting data and documentation, communicating and conducting research. Typically, ICT is used independently from the subject matter. In current higher learning institutions, coursework's, assignments and other work are no longer done the traditional way of paperwork. They are done and submitted electronically.

ICT as a medium for teaching and learning.

ICT has transformed the way the education is delivered. It is as a tool for teaching and learning itself, the medium through which teachers can teach and learners can learn. There are many different types in which ICT has been envisaged as a medium for teaching and learning included computer assisted learning, web-learning, computer-classes, online training, distance education, eLearning, virtual learning, digital training, etcetera.

ICT is used as a tool for administration and management of record such as school examination preparation and printing, examination results compilation, timetable, school fee and school attendance.

In most primary and secondary education sector in Kenya, the actual situation is that most teachers and schools do not possess sufficient ICT educational skills and equipment at present. Although teachers consult each other more frequently, the teacher decides on the educational practice in his classroom. He is responsible and has the opportunity to teach in the way he pleases. However, in practice (the classical teaching situation), the teaching method usually seems to be determinative and limits the teacher in his possibilities. Education and teacher are tied to a specific content of education, timetables, amount of face-to-face instruction, instruction time, classrooms, etcetera. Even the teacher's status is laid down. Legal provisions also determine the educational practice in schools.

Because of these constraints' teachers are insufficiently challenged and stimulated to create powerful learning environments and guide students in their learning processes individually and therefore, the use of ICT does not take place.

Positive Impact

1. **Enhanced Teaching and Learning**
   - Technological developments like digital cameras, projectors, mind training software, computers, Power point presentations, 3D visualization tools; all these have become great sources for teachers to help students grasp a concept easily.
   - It has to be understood that visual explanation of concepts makes learning fun and enjoyable for students. they're able to participate more in the classroom and even teachers get a chance to make their classes more interactive and interesting.
2. **Globalization**:
   - When school in different parts of the state, students can "meet" their counterparts through video conferencing without leaving the classroom.
   - Some sites, such as www.glovico.com are used to help students learn foreign languages online by pairing a group of students with a teacher from another country.
3. **No Geographical Limitations**:
   - With the introduction of online degree programs there is hardly any need of being present physically in the classroom. Even several foreign universities have started online degree courses that student can join.
   - Distance learning and online education have become very important part of the education system now a day.

Negative Impact

1. **Declining Writing Skills**:
   - Due to the excessive usage usage of online chatting and shortcuts, the writing skills of today's young generation have declines quite tremendously.
   - These days, children are relying more and more on digital communication that they have totally forgot about improving their writing skills.
   - They don't know the spelling of different words, how to use grammar properly or how to do cursive writing.
2. **Increasing Incidents of Cheating**:
   - Technological developments like graphical calculators, high tech watches, mini cameras and similar equipment have become great sources to cheat in exams.
   - It is easier for students to write formulas and notes on graphing calculators, with least chances of being caught.
3. **Lack of Focus**:
   - SMS on text messaging has become a favorite pastime of many students. students are seen playing with their cell phone, iPhones day and night or driving and very often even between lectures.
   - Being ever connected to the online world has resulted in lack of focus and concentration in academics and to some extent, even in sports and extracurricular activities.

Advantages

1) It makes students more excited to learn.
2) Decrease paper and photocopying costs, promoting concept of "green revolution".
3) Prepares the generation for what life is like in an up to date environment.

Disadvantages

1) Can be dangerous, if used in the wrong way.
2) It is costly to install such technology.
3) Can cause more problems than successes if the equipment is abused in an ill manor.

Conclusion

Technology has a positive impact on education and at the same time may also pose negative effects. Teachers and students should take advantage of this in the good light and eliminate the drawbacks which are pulling back many of students as well as schools from achieving excellence. It is thus time for every country to introduce a more technologically equipped education sector in the future.

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