



جامعة الناصر  
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## The Impact of Technology on Education

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## **Abstract**

Education is something that was once not available in certain parts of the world. Even in countries where there was education, there were still many issues with getting it to the general public. There are many advances in technology that have helped education to become more readily available than it once was. Inventions such as the online class room have improved education in a significant way and it is growing around the world every day. Understanding the ways technology has helped with education and the actual impact this made will help you to see how vital technology has become in the education world.

## **Introduction**

As technology grows, there are many ways that it can be applied to different things. Education is no different. There are many technological advances that have changed the world of education in the 21st century. Knowing about these advancements and the impact they have on education around the world can will show just how essential technology is to education. These different technology uses in the class room have a vast impact on the overall education of students around the world which will be shown.

## **Online Classrooms**

This is one of the first things that many think of when it comes to technology and education. There are many ways that this has been implemented in all levels of school. There are classes that children can take online while they are still in school to earn extra credit. There are even online schools that children can do from home as well.

The impact for this technological advancement is on more than just a grade school level though. Today just about any college class that a person could want to take can be done online. Many people earn a degree online today. In fact in 2011, University of Phoenix gave out 6,000 online degrees. This is monumental when you compare it to other schools. For instance, Arizona State University, which is known for having a high number of students only gave out 2, 075 degrees that year, all of which were from on campus education. 1

This has become the ideal way for many people to earn an education. Single parents and those who must work and go to school find that this form of education is more suited for their needs. This is because it can easily be worked around the schedule of the student. While there are times that a student may need to be online, such as for required online discussion boards, tests or submitting the assignment, overall it is easier to fit into one's schedule than driving to a classroom at a specific time.

An online class can also be a benefit to students who have certain issues, such as attention issues or are hard of hearing. This is because while a person may not ask the teacher to repeat themselves or may not have the option during a physical class, when they are watching a prerecorded lecture, they are able to rewind and to see and hear the information again. This can help them to get a better understanding of the lesson which is the main goal.

### **The Global Impact of Online Classrooms**

Online classrooms are being used all over the world and are creating global classrooms. This can help to increase the number of students in developing and third world countries to get the education they need. Though the numbers of people enrolled in these schools is still lower than in America, it is climbing regularly. In fact, Russia had an increase in student registration by 230% in January of 2013. 2

With global classrooms more than just formal education can be found. There are sites that offer classes that can help to give people more knowledge. Even if this is something as simple as internet safety or something similar, it is still something that is worth knowing about. This can help to give people more knowledge and understanding that can help them throughout their life.

There are still some issues that the online classroom faces in other countries. One of the biggest issues is the fact that most classes are still in English. While there are some who may speak English, not all do, which can put certain students at a disadvantage. There are many online classrooms that work with translators and are slowly translating their courses so they can be used by people all around the world.

### **The Tablet in Place of Text Books**

There are several schools that have started moving to tablets instead of textbooks in the classroom. One school for example is Clearwater High School. The high school first made the switch four years ago and the results have been outstanding. For instance, the cost for the books was significantly reduced. This is because the Kindles the school uses only cost about \$70 which can be less than the cost of one text book.

The school found that this gave every student the ability to go on the internet which they may not be able to do at home, easily carry around their textbooks and study wherever they were. They found that test scores for students rose 18% the first year that the Kindles were introduced. Students are able to see their homework assignments, complete work, read their textbooks and much more right at the touch of their finger. 3

Every year since they first were released, tablets have come down in price. While there are top of the line models that will run several hundred dollars, there are many out there that can be purchased for under \$100. This can help to make these devices more readily available for schools with budget constraints as well as students who want to have them for their own educational resources.

### **The Growing Impact of Tablets in the Classroom**

While tablets can be a great source for textbooks in the classroom, there is much more that they have to offer. A survey of 150 teachers during the 2012 to 2013 school year stated that 87% of them felt that the tablets made a significant improvement to the learning environment. 4

One of the ways that tablets can help in the classroom is with the use of certain apps. There are apps that are educational on a number of different levels. Even for preschoolers and kindergartners, there are apps out there to help them learn their ABCs, sight words and addition facts. There are also apps such as SAT Math which is designed to work with the student in the classroom as well as at home. Schools that participate in this program will register kids with the program and send the registration information to the parents with the instructions for locating and downloading the app. Students will have math questions that are on their level and will help them to improve their math skills. The app also tracks the progress of the student to allow them to see their progress. 5

Another way that tablets have revolutionized the classroom experience is that they give the student the ability to be in a classroom via webcam. They can watch lectures, even if they are home sick or cannot be in the classroom for the day. This can also give them the ability to chat with other students for discussions. It also makes it easier for students to video chat when working on school projects from home.

Students will also have an array of different information right at the push of a button with a tablet. This is because tablets are designed with wifi capabilities so the student can find internet when they are out and about. Even in the classroom, a child can find the answer they are looking for simply by using a Google search. Students can also use the internet to get a deeper understanding of the information given to them in the classroom. They can use Google Earth to get a better understanding of terrain in different parts of the world and can explore the cosmos in the same day.

### **The Introduction of the SMART Board**

When many people think of the most crucial tool in the classroom, often times it is white board. This is because it is where the teacher can teach visually to the class while teaching a certain topic. It is important because people learn in different ways and learning a lesson in numerous ways can help to give a deeper understanding that will stay with the student. With the introduction of the SMART Board, the white board will never be the same.

The SMART Board utilizes a digital projector to project the data on a synched computer to the white board in the classroom. This has come to be used by all levels of education, from pre school through to graduate classes. There are many ways that it can impact the classroom.

Using these boards makes the learning experience more comprehensive for the students. Teachers are able to use different resources on their computers while teaching that before were unheard of. Even if this is just something as simple as watching videos on a topic or being able to see pictures related to the topic, it can make a significant impact on the way students understand the lesson they are being shown. It has even been shown to be very helpful for children with special needs. 6

The SMART Board can be a great way to conference with others, which can be used in many capacities. Students could talk with other students on the other side of the world. There is

even the opportunity for students to watch a presentation by a presenter from another location and ask questions just as they would if the person was right in front of them.

### **Instant Messaging and Texting**

While texting may be frowned upon during class, there is a major benefit that it can provide for the learning experience. It can allow the student the ability to communicate directly with teachers as well as other students. This can help them to get a better understanding of the subject matter. They can even ask questions that they were too afraid to ask in class.

There are many ways that this can be done. Most schools that offer this do it through a service that gives students private access. This helps to ensure that the chat rooms stay school related. This can also give the student the ability to ask a question in private to faculty if they do not feel comfortable asking about it in a public forum.

These forums are a great way to help students learn to collaborate with their peers, which is a necessary skill for the work place. They will be able to learn to work together on projects as well as debate topics. It can also be a great forum for teaching children about ethics and other lessons that they will need to learn about.

The involvement of teachers on these sites varies drastically depending on where the school is. There are some schools where there is no requirement for faculty involvement which can lead to less beneficial results than those where teachers are required to be online with the children for a certain time. It can help to not only help enrich the student's understanding but also help to strengthen the bond and trust they have for the teaching faculty at the school.

### **Computers in the Classroom**

Computers have become an essential part of life for most parts of the world. Even in third world countries. many have started using computers to help improve the education. The impact of the computer in the classroom is far reaching. 7

The computer will give the student the chance to strengthen their skills with these machines as society grows more dependent on them for every day functions in life. It is important for

people to understand the basics of the computer as well as navigating the internet. Depending on the career path of the student there will be a varying degree of necessity with the computer though.

Students can engage in games that can help them to learn lessons. In fact, there are many educational games out there that are so fun for children that they do not even realize that they are learning while they playing. With this, there are games that can help to improve mental acuity, which can be a huge help when it comes to learning.

### **Virtual Gaming and the Impact on Education**

For many, video games and virtual reality bring up an image of relaxation and time for fun. The truth of the matter though is that they also have their place in the classroom. They are important for those who are going into digital and video game programming. However, the reach of this technology reaches even further.

There are virtual reality games out there that can help people learn technical skills. One of the biggest examples of this is with virtual gaming for surgical students. By being able to practice the surgery in virtual environment they are able to get the experience they need for operating on a live human being. 8

### **Conclusion**

One of the best things about technology is that it is constantly changing. As technology changes, so will the effect it has on education. For instance, in the late 90's, schools started offering more computers in the classrooms and this was the only technology they had. Today, just about everything in the classroom can be done electronically. This can help to streamline education, grades and most aspects of the class. While this effect is most noted in North America and Europe, the impact of the technology can be seen around the world.

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