

How technology changes america history essay



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The United States of America has always been a unique place. It is a country that constantly changes because it welcomes new ideas and new concepts and gives them a place to grow. In fact, changes that start here are repeated all over the world. America has been a breeding ground for technological revolutions. For instance, innovations in technology have drastically changed American life over and over again throughout our history. Some of these have been in the fields of transportation, medicine, communication and weaponry. These revolutions have morphed the United States into the place it is today, and in fact, have even changed the world.

The United States is a large place and developments in transportation have been crucial to the development of our industries, our commerce, and our culture. One of the most revolutionizing transportation inventions was the train. The train industry was very successful at creating jobs and stimulating the American economy. It also drastically changed our internal commerce (which also majorly boosted our economy) allowing companies and industries to sell to the whole nation in revolutionizing new speed. A farm in the west could ship produce to the whole country, and lands that were good for a certain kind of farming could be used to the full. The train also changed our culture because for the first time, there was a practical way of traveling across the nation. This allowed the gold rush to occur and it allowed thousands of people to instantly move to the west coast. This changed people's culture because they met new people with their own traditions and ways of life and they exchanged many ideas. Another major invention in transportation that massively changed America was Henry Ford's Model T. This invention was most revolutionizing in the way it affected industry.

Previously cars weren't practical or popular because of their price, but Ford changed that with the usage of assembly lines and interchangeable parts.

From then

on the concept of assembly lines and interchangeable parts is still used today all over the world and is very practical. When the car became common it changed American culture. People got their licenses, they built garages in their homes, families would drive on vacation. The car allowed Americans to experience tremendous freedom and that also affected the way they viewed themselves, as individuals. On December 17, 1903 the Wright Brothers invented the airplane. This was possibly one of the most important inventions of all time. The world was shocked. Industry-wise, the airplane gave birth to all the major airline companies today: American Airlines, Delta, Jet-Blue, etc. Each of these are huge moneymakers, hire thousands of employees, and are crucial to the American economy. The most revolutionizing (arguably) effect the airplane had was on commerce. Now, for example, Florida orange juice is drunk Oregon while eating beef from a cow from Texas while someone in Arizona is drinking glacial water. Airplanes allowed companies to expand their markets to the entire nation and to the world, and this helped our country flourish. The airplane also changed American culture. Many middle class and upper class Americans today can't imagine not flying to their cousins' house in Ohio for Thanksgiving. People can live far away from work and commute by plane each week. The Train, the Model T, and the airplane inventions each had their own specific way of changing America and each have changed America in terms of industries, commerce, and culture.

New and better medicines developed in America have also had a huge impact on life and culture. The creation of antibiotics was revolutionary. “Between 1944 and 1972 human life expectancy jumped by eight years – an increase largely credited to the introduction of antibiotics.” Antibiotics have saved millions of lives around the world since the 1930’s. Antibiotics are a medicine that kill bacteria, which cause diseases that before the invention of antibiotics were one of the most common reasons of death. Businesses that produced and supplied antibiotics were major moneymakers at the time, because they were crucial to survival. They made life longer and more stress free because people didn’t have to worry about bacterial infections as much. Culture changed because when life expectancy rose, people had more kids and grandparents were much more common. This led to a slightly changed and much larger family structure, which is good. Another major invention that totally changed America and the rest of the world was the vaccination. A Vaccination is when a small or dead bit of a virus is given to someone so that it is easy to fight off and they then produce antibodies against that virus to prevent future contraction. Vaccination was invented/discovered by Edward Jenner on May 14, 1796. Edward Jenner realized that farmers, who contracted cowpox, usually didn’t contract small pox. This thought led to his first usage of vaccination when he inoculated a farm boy with cowpox, he got sick and recovered quickly. Then he was inoculated with small pox, and his body refused to contract the disease. . This then lead to creation of vaccinations of many other viruses like the flu. Business was greatly helped because people all over America need vaccinations and they put whatever monopolistic price was possible. Vaccinations as well as antibiotics have saved many millions of lives and have dramatically changed America for the

better. Where America has been definitely changed and probably for the worse in the medical world is in the business of supplements. Pharmaceutical companies have sucked billions of dollars from American people by convincing huge amounts of Americans to buy their Fish Oil, Omega-3, minerals, and vitamin pills. For the most part, there is no real evidence that they are needed or even help anyone and now the pharmaceutical companies have those buyers in a chokehold because they need to stay “healthy” and the businesses know that as the buyers age, they will buy the 50+ vitamin pack, and then the 60+ and so on. We see a trend in medicine that has been clearer recently; we have gone from necessity to vanity. Aside from the supplement situation, all these inventions and changes have totally helped and reshaped the medical side of America into what it is today in their own unique ways.

Where technology has possibly revolutionized America the most is in communication. A letter from the New York City to Sacramento would take months to deliver by horse or stagecoach, but now it would take only seconds to send by email. That progression was not immediate and there were several revolutionizing inventions that came in-between, but each became outdated as the next invention came out. The first major advancement came with the invention of the telegraph. The telegraph sent messages through electrical wires with electrical impulses in Morse code. The message would travel through the wires until it reached the receiver who then decoded it. It could not carry sounds or images, but it was revolutionary in the way it changed communication in America and the rest of the world. Alexander Graham Bell changed the world forever and made

the telegraph a thing of the past when he spoke the famous words, “ come here Mr. Watson, I want to see you.” This was the first time a sentence had clearly been sent through electrical wires and heard on the other side. On July of 1877, the Bell Telephone Company was formed. From then on the world had long distance communication by telephone. Like the telegraph, there were some issues with practicality because telephones needed the usage of electrical wires and most houses during the time of the invention, didn’t have them. These problems were soon eradicated with the creation of the wireless phone and the cell phone. On April 3, 1973, Martin Cooper created and displayed the first working cellular telephone, the Motorola Dyna-Tac. While walking on the street, “ sophisticated New Yorkers gaped at the sight of someone actually moving around while making a phone call.” This showed how remarkable this invention was in society and how revolutionary it truly was. The first cell phone weighed over 2 pounds, was about the size of a brick, had about a 30-minute battery life, and a ten-hour recharge time. So like the first telephone there were some practicality issues, but none-the-less it opened up many new doors and possibilities. The last major invention that totally redefined communication was the E-mail. This allowed people to write extensive letters with computers, and with the usage of the Internet, send them across America (and even the whole world) in a matter of seconds. As always, there is a positive side to all these advancements in communication, and a negative side. Positively, advancements in technology have made communication infinitely more efficient and have globalized our world, and negatively there has seemed to be a loss of social skills in the younger generations because face-to-face contact is becoming more and more uncommon. The evolution of

communication in America seems to have one major theme: That technology has repeatedly revolutionized methods of communication with the creation of new inventions that always outdate the previous one.

America has evolved into a global power largely in part because of technological advancements in warfare and weaponry. America is a place where new ideas are given a chance at realization, and that is why we see most of the major inventions of this world created in America. America's first major military invention was the Gatling gun, or the machine gun. In 1861, the American Doctor Richard Gatling invented the Gatling gun, a six-barreled weapon capable of firing 200 rounds per minute. This changed the ways war would be fought forever. No longer would men line up in ridiculous formations and actually take turns shooting each other, but trench warfare was the new means of battling. In trench warfare, armies would dig trenches and fire at soldiers in other enemy trenches. Machine guns proved to be even more effective than expected. If one thing has changed our country and the rest of the world more than anything else, it was the invention of the first nuclear bomb. Nuclear means pertaining to the nucleus of an atom. Leo Szilard discovered the possibility of a "controlled release of atomic power through a multiplying neutron chain reaction, and also realized that if such a reaction could be found, then a bomb could be built using it". He and many other famous scientists like Albert Einstein, helped fund/create and run the Manhattan Project. This was the project of successfully creating a fully operational nuclear bomb. On the morning of August 6, the world drastically changed forever. That was the day the first atomic bomb, nicknamed Little Boy, was dropped on the Japanese city of Hiroshima. Three days later, the

second atomic bomb, nicknamed “ Fat boy” was dropped on Nagasaki. The world had never seen such total destruction. The two bombs killed over 100,000 people instantly and many more for years to come because of the radiation. On the brightside, the bomb led to the end of the war with Japan and the entire world war. Fortunately, since then, there hasn’t been usage of the nuclear bomb since. Before World War 2, the planet as a whole had always seemed eternal and safe, but since then, America has put the entire world in a fear of a nuclear holocaust. The nuclear bomb made the cold war so much more important than before, because now, there are more than enough nuclear bombs to destroy the entire world. Technology has definitely revolutionized warfare, and in turn, has changed America drastically.

This paper talked about how technology changed America and it broke technology down into four sections: medicine, communication, transportation, and warfare. Each subdivision of technology each had its own specific revolution over time, and in turn slowly changed America as a whole. Medicine turned from local herbs and prayer, to antibiotics and vaccination; which have saved many millions of lives. Transportation went from riding your horse, to cars, trains, and even airplanes. Trips that used to take months, now took days or even hours. Communication went from face to face contact and letter carrying, to the telegraph, then the phone, and finally email. This made communication infinitely more speedy and efficient. Warfare went from men lining up to shoot each other with inaccurate and inefficient rifles, to the usage of machineguns that were capable of mowing down entire enemy lines and eventually weapons of mass destruction such as the nuclear bomb. As each one of these subdivisions of technology

changed, we slowly saw America change until what it is today. In each of these areas, Americans or American immigrants led the way in innovation and the desire to try something new. It is something that characterizes our country, and I truly believe that our country will keep producing new and fascinating technologies that will continue to change the world because that is the American spirit and as we seen in our history class, history repeats it self over and over again.