

Tools of Technology
by Elizabeth Baldwin



What do these photographs have in common?

Changes in Technology

100 years ago, life was very different than it is today. For one thing, you wouldn't be reading this on a computer! **Technology** has changed our lives in many ways. Technology is using what we know of science, math, and **engineering** to solve problems or invent tools. Technology builds on what we already know or experience to make our lives easier, faster, safer, and more fun.

You might think technology is a new idea. But humans have been using technology to invent tools for thousands of years. When people wonder about things, they come up with new ideas. They make a guess or **predict** how a tool can be better. Then they build on what they already know about that tool. For example, people may have used sticks or rocks as tools to find food. As time went by, they invented tools like bows and arrows to make it easier to hunt. Then plows to make it easier to farm. Later, people invented different kinds of technology to be able to travel faster. People used horses and wagons instead of walking, and then cars replaced the horses and wagons. For a long time, people used oil or candles to light their homes. Later the lightbulb was invented. The photographs above show how mail used to be delivered by horseback, and then by train, and finally by truck and airplane.

100 Years Ago

People who lived about 100 years ago were just getting electricity into their homes. Some homes even had a



Washing machines made life easier for women who were used to washing every piece of clothing by hand or on a wash board.

telephone! Families enjoyed listening to the radio and seeing silent movies. The new Model T car was invented, and airplanes were just starting to take off. New inventions, like washing machines and vacuums made chores even easier.

50 Years Ago

People continued to guess and predict what would make life better, and then they created tools based on those predictions. 50 years ago people went to the library to do research. If you wanted to send a letter, you had to take it to the post office. If you made a phone call, the telephone was attached to the wall. Your grandparents may have listened to music on a record player. They may have watched television on a black and white T.V.



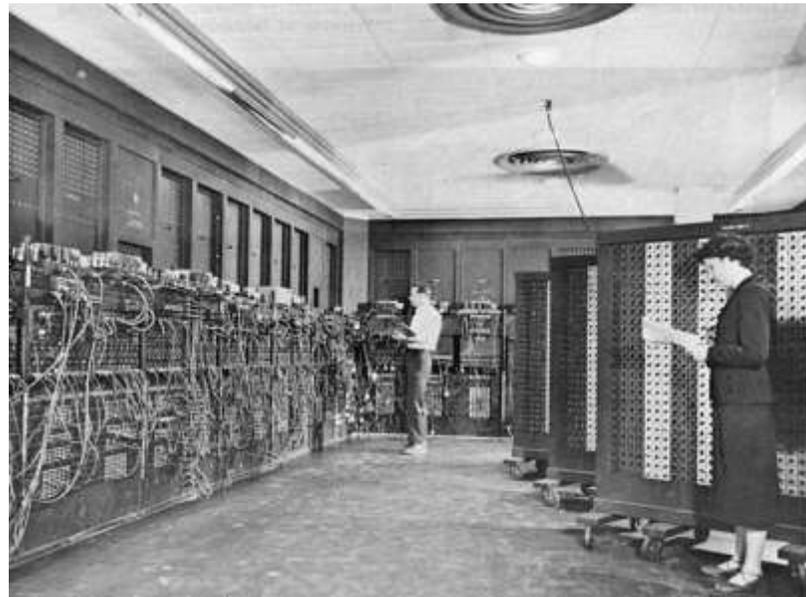
A boom box radio also played cassette tapes, the next advancement in music recording after records. Not all new technology is a replacement for old technology, however. Records are still being made today!



But the most important tool in technology was just starting to develop. This tool would affect how we communicate and how we get information. It is even a tool for listening to music. Can you predict what it is?

The Computer Age

If you thought of the computer, then you were right! The computer was created by putting many ideas together. It was based on the work of Alan Turing in the 1930's. Today's computer is the result of a computer created by Johan Mauchly and Presper



This is a photograph of the world's first computer called the ENIAC (Electronic Numerical Integrator And Computer).

Eckert in 1946. It took up the space of an entire room! Early computers were created to solve math problems. Today, computers are used for much more than math. The invention of the computer got people thinking. What is possible?

Without the computer, we would not have gone to the moon! Today's movies use effects that are only possible using computers. We can send a letter using electronic mail (email). We can even use our voice to talk to computers. Today, we use computer technology on our smartphones to send messages and to take pictures. We also use our smartphones to watch videos and to listen to music.

Technology has changed the way we communicate and find information. It has changed the way we play or pass the time. It has also changed the way we learn. Technology helps scientists develop medicine and gives teachers better tools. It makes space exploration possible and makes our homes safer. Technology makes our lives better, but it can also affect us in a different way.



What do you notice about these children playing a game? Can you predict how children will play in the future?

Technology Changes Jobs

What is common for you today was not common for your grandparents or even your parents! It will be the same for you as you get older. Jobs will change as technology changes. For example, when the telephone was first invented, many telephone operators were needed to connect calls to one another. That job no longer exists because phone technology changed. People will always be trying to make jobs faster and safer using technology. Robots may be used more often in factories instead of people. Businesses may use driverless trucks to deliver goods to stores or packages to your front door! People who have those jobs, like truck drivers and factory workers, may need to find different work in the future.



The Ford Company is hoping this robot will have an advantage over other self-driving mail delivery vehicles. It can go upstairs to deliver packages right to your front door. Mail delivery technology is currently being tested in cities around the world.

Technology Changes Lives

The main character in the movie *Robots* had a saying, “See a need; fill a need!” When you have a problem, you try to solve it. In the future, technology will continue to be used to make our lives easier, faster, or safer. Technology may change the way you do your homework. It may change the way you do your chores. It may be hard to imagine life without a cell phone. But we may not use a phone in the same way in the future. After all, smart watches don’t just tell the time! Technology might even change the way we travel through space! Humans are capable of great things. We can make things better by thinking about a problem and working it out with others. Can you predict what will make your life in the future easier, faster, safer, or more fun?