

Edison essay



**ASSIGN
BUSTER**

Thomas Alva Edison, a very famous inventor who lived during the 19th and 20th centuries, invented the incandescent light bulb, the phonograph, and over a thousand other devices. He was always thinking of new ways to do things. Perhaps his only invention that wasn't an "improvement" of another device was the phonograph.

Many of his devices paved the way for current technology, while others, although interesting, had no market for general use. He was one of the smartest, most inventive, productive, and persevering people in history. (Thomas Alva Edison Biography)

The first characteristic that is admirable is that Thomas Edison was very intelligent despite having only three months of formal education (Edison, Thomas Alva). At birth, he had an abnormally large head and was said to be very curious about things, even as a baby (Cousins 3). When he was twelve years old, his schoolteacher told his parents that he wasn't very smart and couldn't learn, so his mother began to home-school him. Years before that, Edison's mother had taught him to read (Thomas Alva Edison Biography).

One of his main sources of learning came from reading. He came to love reading, particularly science books, but he would read anything he could find. Since he loved to learn, he always carried a book in his pocket (Cousins 22).

Another main source for learning came from his lab experiments. Later in his childhood, he built a lab to do science experiments, first in his basement, then on the baggage car of the train he worked on (Edison, Thomas Alva).

He liked his experiments because he enjoyed finding things out for himself and tinkering with different things to find how they worked. Over time he also came to know how to make money through selling, first papers and food and later inventions (Thomas Alva Edison Biography).

Besides his lack of formal schooling, Edison also had to rise above another kind of disadvantage-by adulthood he was almost deaf. Early in childhood, Edison lost some hearing from scarlet fever.

His hearing then got much worse when he was pulled onto a moving train by his ears and he “ felt something snap.” He could have had an operation to fix his hearing, but later in life he said that not being able to hear well helped him concentrate. Despite his disability, Edison was able to later develop two devices that pertained to sound: the transmitter and receiver for the telephone and the phonograph (Thomas Alva Edison Biography).

Edison was very creative and inventive and continued throughout his life to think of new inventions and designs. Edison saw many ways to put things and ideas together in novel ways that made devices easier to use or more useful. Ideas didn't just pop into his head, except for the phonograph (Thomas Alva Edison).

He was always looking for solutions to problems. A premier example of this involved the light bulb. When Edison saw other inventors and scientists experimenting with light, he became excited and involved in trying to build a kind of electric lamp.

Oil and gas lamps of that time were smelly, dirty, and required lots of fuel.

Edison figured that the world would one day be lighted by electric lamps that “ turned night into day” (Cousins 90). He wanted to be the person who invented that electric lamp. He promised a good, cheap, safe electric light.

Edison and his “ company” worked long and hard on designing the light bulb.

This was his most difficult invention, for it was a challenge to find the “ right” filament. He spent several years experimenting and finally designed a light bulb that burned for nearly 100 hours (Cousins 65). In a section of New York City, he put the first electric system in place giving light to businesses and houses powered from a “ monster” generator (Cousins 122). The incandescent light bulb is Edison’s most famous and the invention that most changed peoples’ lives (Thomas Alva Edison).

Edison also made several improvements to the telegraph machine. He designed an automatic telegraph that increased the speed and range of the existing telegraph.

He made a machine that enabled two transmissions over a single line. After Alexander Graham Bell invented the telephone, Edison invented the carbon telephone transmitter. That device enabled two people to talk over the phone without shouting. Much like the search for the best filament for the light bulb, people were searching for the right material to use in the transmitter so that it would amplify one’s voice. (Cousins 59) Edison had a great variety of interests, from the vote recorder, his first invention, to the light bulb to the phonograph. As a child and teenager, he had experimented with many sciences.

At the library, his favorite books were about electricity, mechanics, and chemistry (Thomas Alva Edison). Electricity, in particular, fascinated him (Cousins 25). Through new and old knowledge, he was able to work with the light bulb. If not for this knowledge about electricity and physics, he would never have succeeded in realizing how to make the light bulb burn for a substantial period of time. (Thomas Alva Edison) There are several other examples of how his interest in the sciences propelled his inventions.

One is his design of the battery. The battery has many chemicals in it, which are what makes it store electricity. Although it took over 10,000 experiments to get it right, he would never have succeeded if he had not researched chemistry. Edison's favorite invention, the phonograph, also relied on his scientific knowledge—this time of mechanics. One can surmise that he had extensive knowledge about mechanics, since the phonograph was a “spur-of-the-moment” invention. He had accidentally discovered how to make a phonograph when a wire poked him while he was working on the telephone receiver.

He realized that different sounds made the needle move more, so he figured that maybe the wire could make grooves to record sound. This led to his invention, the phonograph, which was operated by turning a handle to have the needle reproduce the sound “recorded” in the grooves (Cousins 65). In addition, Edison believed that hard work and determination were needed to get anywhere in life. He is famous for saying, “Genius is one percent inspiration and ninety-nine percent perspiration” (Edison, Thomas Alva).

Living by his motto, he was very productive during his lifetime and patented almost 1300 different inventions (Thomas Alva Edison Biography). He was always thinking of inventions and new ways to design things, which led to his working 20-hour days. When working on several inventions, Edison stayed awake for a week straight (Cousins 104). Furthermore, Edison never took time off.

Even in his “vacation house” in Florida, he had a lab built so he could have working vacations (Thomas Alva Edison). Edison was a very prolific inventor. When he first started inventing, he forced his workers to stay at the shop for several days working to get a product “right.” He promised to turn out one minor invention every ten days and one major invention every six months. Many times, Edison was working on several inventions at once.

He had to keep not one invention in his head, but several. He recorded at least one invention a year for 67 straight years (Conot 79). Thomas Edison was awarded Time magazine’s “Man of the Millennium” for all of his hard work changing the world and bringing it into the 20th century (Thomas Alva Edison). One of Edison’s famous attributes was his perseverance. He never stopped until something was done.

After periods of time, if an invention was being used or there was a way to make it better, he would take the time to improve it. Though he waited a decade after his first prototype, he made some vast improvements on the phonograph. When first invented, the sound was recorded on a cylinder, which was hard to store. He worked hard on making a flat disk-shaped phonograph.

It helped make the phonograph more popular to the public because the “ records” were easier to store. He also made some other improvements on the phonograph with the newly designed player. Despite his improvements, he still preferred the older phonograph. (Thomas Alva Edison Biography)After developing another favorite invention, the kinetoscope, or moving picture, he wanted to have sound to go with his movies.

So he synchronized his phonograph and kinetoscope to make a “ talkie,” or a movie with sound. Although this was a commercial failure because movie companies did not accept it, it demonstrates his wanting to improve previous inventions. His perseverance also was evident during his work on the light bulb. After first getting the light bulb to work, he worked continuously to improve it. After finding a workable filament, he worked to find a better one. He also worked on a way to produce the energy needed to power the light bulb.

(Cousins 111)

Even in his old age, Edison still worked hard and tried to continue inventing. Up to a couple years before his death when he became very ill, he was experimenting with a way to grow a plant that would produce rubber in the U. S. so that rubber would be cheaper than importing it.

His perseverance even while ill is probably due to several factors. Apparently, he had never taken a break from work. Also he had never really been sick and forced to take time off. Thus old age and illness barely slowed him down.

(Cousins 160)

Through his great inventions, Edison changed the way people live in this world. He brought light to the dark, he brought sound where there was none before, and he brought movies into the world. He led the world into the 20th century in style. His inventions paved the way for many other inventions such as radio, TV, and many other electronics. All of these attributes are what make me admire Edison. I admire his intelligence, his self-taught knowledge and his self-directed experiments.

I admire his ability to put together new ideas. I admire his perseverance in improving his inventions. I like that he persisted in creating inventions throughout his whole life, even in old age. And lastly, I admire him because his inventions have had a lasting effect on society.