

The Journey InsideSM: Introduction to Computers

Student Handout: Libraries

Libraries

Early libraries stored information on clay tablets and, later, information written by hand on animal skins or paper scrolls. Today, libraries contain paper documents, microfilm, photographs, videotapes, and musical recordings. Most modern libraries also contain computers that store information in electronic form.

Two thousand years ago, few people knew how to read or write, and few people owned books. Books were handwritten. To produce a second copy of a book, someone had to copy the original book by hand. As a result, books were very valuable. Of the few people who could read, only a few owned books, and then usually only one or two volumes. Reading them was a ritual. Books were revered, and often libraries put chains on the books to protect them from theft.



In about 1440, Johannes Gutenberg invented a new way to produce books. He made small print blocks of individual letters, digits, and punctuation marks. Gutenberg's movable type improved on techniques being used by the Chinese and Europeans of the time. To make use of his letters, he developed a machine he called a printing press and a special type of ink to use. This printing press made it possible to produce books at a faster rate than by handwriting. This new method also made books cheaper so more people could afford to own them.

Today, large collections of books are found in libraries and many homes. When most people hear the word library, they think of a building where books and other information are stored. But computers are changing this definition. More and more information can be accessed by a computer. By connecting computers together in a network, information can be shared from building to building and country to country. The computer eliminates the requirement that the person using the resources of the library must go to the library building. Many people can access the same information at the same time, so the library no longer needs multiple copies of the same information.

Activities

1. How are a desktop computer and a library alike? How are they different? In answering these questions, you might want to talk about the four major components of a computer: input, storage, processing, and output.
2. Describe how your school library makes use of computers.
3. Suppose that you were able to access all of the items in your school library without having to actually go to the library. Instead, you could get library information from your own home or while sitting at your desk in your classroom. What are the advantages and disadvantages of being able to do this?
4. Suppose that there were no books in your school library. Instead, imagine that the library uses CD-ROMs to hold all the information that was previously available in book form. How would this change the way you located the information you need?