

Internet and Education

Internet, a system architecture that has revolutionized communications and methods of commerce by allowing various computer networks around the world to interconnect. Sometimes referred to as a “network of networks,” the Internet emerged in the United States in the 1970s but did not become visible to the general public until the early 1990s. By 2020, approximately 4.5 billion people, or more than half of the world’s population, were estimated to have access to the Internet.

Today the global system of telecommunications unites thousands of various computer networks. The variety of these networks is explained by the variety of their organizational structure, communication lines they use, and protocols, or rules and standards that describe the procedure of data exchange between any two computers within the network. Taking this into account we may divide the computer networks into two main groups:

1. Networks that unite small personal computers directly via switched telephone lines and provide the file exchange between them.
2. Networks that belong to Internet Society and which give the users the shared access to distant information resources (file archives, software applications, data processing centers, etc.) in real time mode.

In order to transfer the information between two or more incompatible networks (having different protocols) special devices like gateways are used. They transform the format of the data in the appropriate form. The Internet is the most dynamic and largest world system of global communications. It does not have any specific organizational structure, and in fact is a conglomerate of independent computer networks. They are united by standard protocols of information exchange like TCP/IP (Transmission Control Protocol/Internet Protocol) that they use as the basis protocols. Thus, the words



“switching to the network”, or “IP-connectivity” mean, in fact, switching to one of the telecommunication networks that supports the TCP/IP protocols and belongs to the Internet Society.

Importance of Internet to Education:

The Internet has introduced improvements in technology, communication and online entertainment, but it is also incredibly useful for education purposes as well. Teachers use the Internet to supplement their lessons, and a number of prestigious universities have opened up free online lectures and courses to everyone. It has even allowed retired teachers to read to and educate children in poorer countries. Widespread use of the Internet has opened up a substantial amount of knowledge to a much broader range of people than ever before.

Enhanced Lessons

Teachers can make use of the Internet by giving students extra resources and material from the Internet, such as interactive lessons and educational games. Many college courses use a "hybrid" model where many lessons are done online, requiring fewer in-class meetings. This saves students from having to commute to campus with their heavy textbooks every day. Tests, homework, collaboration with students and research can all be done from any computer with Internet access. Even for non-hybrid classes, the Internet is used as an addition to normal studies.



Study and Research

The Internet contains a wealth of knowledge that is available instantly upon any search. Because of this, the Internet has superseded libraries as a source for information gathering and research. Many teachers will now ask students to visit specific websites to study from home, and online encyclopedias provide masses of knowledge on almost every topic imaginable. The variety of sources allows students to pursue subjects in much greater detail rather than being limited to whatever the teacher sends home.

Communication

It used to be that students that forgot work, missed a lecture or couldn't remember an assignment were out of luck until talking face to face with a teacher or a classmate. However, the Internet allows instantaneous connection to your



classmates and teachers. Improving communication between students and teachers allows teachers to assist students without having to stay after class. It also allows for students to have greater efficiency when working on projects with their peers when everyone cannot attend or asking for clarification when something is unclear.

Accessibility

A number of universities, such as Harvard, Yale and Stanford, have opened up free courses on a variety of subjects that are accessible to anyone for free. These typically come in the form of lectures on video, but some also have notes attached. This means there is easy access to plenty of free lectures without emptying your bank account to pay tuition. The Internet also makes education accessible to impoverished communities. The "Granny Cloud," for example, made use of Skype as a number of volunteers, mostly retired teachers, read stories aloud over Skype to children in India to teach them how to read.

References:

<https://www.britannica.com/technology/Internet>

<https://iite.unesco.org/pics/publications/en/files/3214612.pdf>

<https://www.klientsolutech.com/importance-of-internet-in-education-at-schools/>

<https://itstillworks.com/importance-internet-education-1232.html>