

TOOL - INTERNET: AN OVERVIEW

OPERATION OF DEVICES > 0.5 USING THE INTERNET

TARGET GROUP	AGE GROUP	PROFICIENCY LEVEL	FORMAT	COPYRIGHT	LANGUAGE
Facilitators	N/A	Level 1	Preparatory guide	Creative Commons (BY-SA)	English, French

This document contains background information for facilitators before they run the workshop with participants. It gives information on how the internet began and shows how its functioning has changed over time.

General Objective Knowledge acquisition

Preparation time for facilitator less than 1 hour

Competence area 0 - Operation of devices

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Resource originally created in French

WORKSHOP DIRECTIONS

1 Definitions

The internet is a global telecommunication system of interconnected computer networks. Using the internet, users can access a wide variety of data such as videos, music, text, games, etc. More accurately, such web resources are accessible via the World Wide Web, which represents a service communicated via the internet. ([Source](#))

While the concept of a 'network' may seem technical and even complex, it is important as a digital educator to understand the basic principles.

A computer network is a group of computers that exchange digital information. Within the network, computers are interconnected via physical (cables) and non-physical (Wi-Fi – 'wireless fidelity' – mobile networks, satellite links).

Being connected to a network does not necessarily mean being connected to the internet. Essentially, we are referring here to local area networks (LANs). The internet represents the interconnection of all LANs and therefore of computers and devices all over the world.

In order for two people to communicate between themselves, they must either speak the same language or pass via an intermediary who understands both languages involved. This principle is the same for a computer network, only that rather than languages, communication protocols are used. A communication protocol refers to the particular rules and procedures governing how a computer transfers information via networks.

Therefore, while computers can be interconnected to exchange information, their communication must respect certain protocols.

Note: your computer can be connected to a network physically (wired connection) or wirelessly (Wi-Fi or mobile networks such as 4G). Regardless of the method, you need to use services of an internet provider (or, in the case of mobile networks, a mobile operator) to whom you pay a monthly subscription fee. Subscriptions to mobile operators usually entail a limit representing the amount of data consumed on a monthly basis, represented by gigabytes.

2 Some history

The internet was invented in the US during the 1960s. It was originally referred to as APRANET (*Advanced Research Projects Agency NETwork*). It was using this that Ray Tomlinson, an American engineer, sent the first emails. In the 1980s, three engineers created a new protocol ([TCP/IP](#)) designed to provide end-to-end communication, specifying how data should be sent and received. This was the protocol to which we owe the development of today's internet. In 1989, English computer scientist Tim Berners-Lee invented the World Wide Web while working for CERN in Switzerland. This was based on the protocol [HTTP](#) and the programming language [HTML](#).

Let's recall some key dates :

- 1983: creation of Mosaic, the first web browser
- 1989 : first internet provider is established in Australia and the US
- 1998 : Google
- 2005 : YouTube
- 2006 : Facebook and Twitter
- 2007 : internet-connected phones become commercially available

[For a historical overview, see this quite comprehensive graphical chronology.](#)

3 Who can access the internet?

Many populations around the world still do not have access to the internet. Whereas most of the population of the global north have internet access, many people in developing countries do not yet have this privilege. See [here](#) for a detailed presentation of the data.

4 Going further

[The Internet: Crash Course Computer Science](#)

[The World Wide Web: Crash Course Computer Science](#)

(It is not necessary to have followed the other parts of this series to understand the material in these videos.)