By: Camille R. Donoso

HISTORY OF EDUCATIONAL TECHNOLOGY

EDUCATIONAL TECHNOLOGY

 also termed instructional technology, information and communication technology (ICT) in education, EdTech, and learning technology.

EDUCATIONAL TECHNOLOGY

 Refers to the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources

EDUCATIONAL TECHNOLOGY

- used by learners and educators in homes, schools (both K-12 and higher education), businesses, and other settings.
- The term educational technology encompasses both material objects, such as machines and networking hardware, as well as theories such as instructional theory and learning theory.



- 1980: DOE formed
- 1981: Education Consolidation and Improvement
- Act Results Of EIEA 1983: A Nation At Risk published
- 1989: Charlottesville Education Summi

REALIZATION OF AN EDUCATION CRISIS



- 1990: Individuals and Disabilities Education Act (IDEA) 1990: Teach For America founded

- 194: Improving America's Schools Act
- 1887: The New Teacher Project
- 1997: \$2,258 E-rate discount

TIME OF CHOICE AND INNOVATION

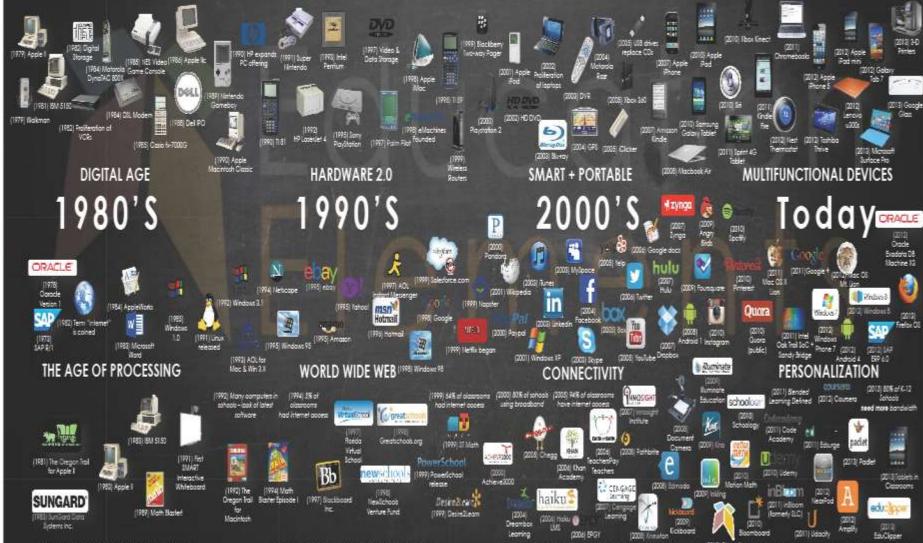


- 2010: -5,000 charter schools
- 2010: Investing in innovation [3] grant \$6450

- 2012 Race to the Top Districts \$400M

HOW DO WE MEASURE PROGRESS AND INCREASE ACCOUNTABILITY?

FOCUS ON 21ST CENTURY SKILLS AND COLLEGE READINESS



TECH AS A PERIPHERAL TOOL

TECH BEGINS TO SUPPLEMENT

TECH AS AN INTEGRATED TOOL

HISTORY

The history of "Educational technology ... can be traced back to the time when tribal priests systemized bodies of knowledge, and early cultures invented pictographs or sign writing to record and transmit information." (Paul Saettler, 1990)

Abacus (3000 BC)

Stonehenge (2300 BC)

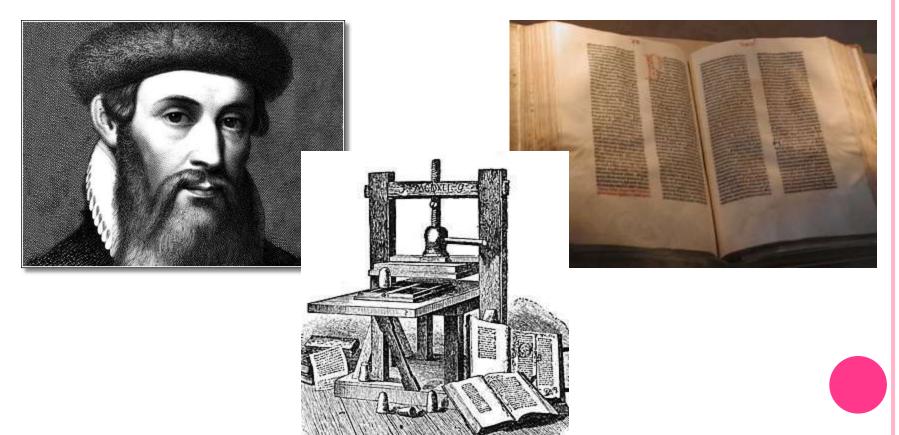
Marked the beginning of computers

Known as an "astronomical calculator"



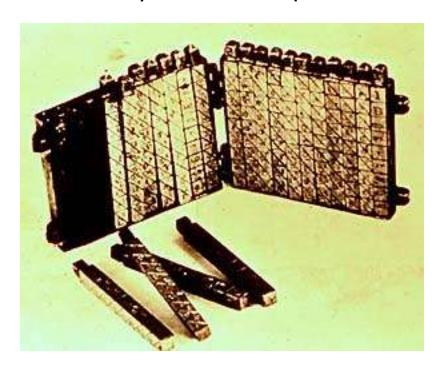
GUTENBERG PRINTING PRESS (1452 – 1456)

Johannes Gutenberg printed the first book ever, the Bible.



Napier's Bones (1617)

Created by John Napier as an aid to calculation





SLIDE RULE (1954)

By Robert Bissaker

 a precursor to the electronic calculator



JACQUARD LOOM (1725)

- Joseph-Marie Jacquard invented a way to weave silk using punched cards.
- The idea of using punched cards to control machines was considered to be the birth of modern day computer programming.





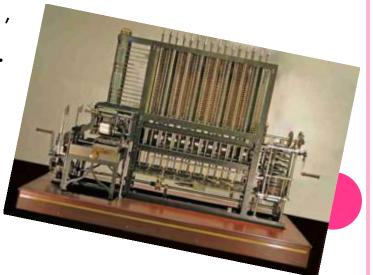
ELECTRICITY (1752)

Discovered by Benjamin Franklin when he flew his kite one stormy day.



CALCULATING ENGINES (1822)

- Charles Babbage is often considered the "Grandfather of Modern Digital Computing".
- He was the first person to realize that a computing machine must be composed of:
 - input device (the card reader),
 - memory (the store),
 - central processing unit (the mill),
 - and output device (the printer).

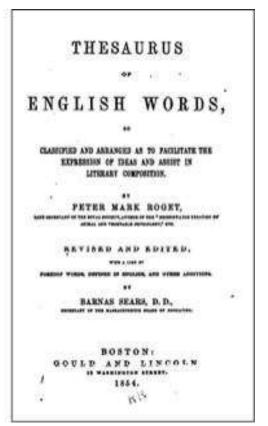


Motion Pictures (1824)

Thesaurus (1852)

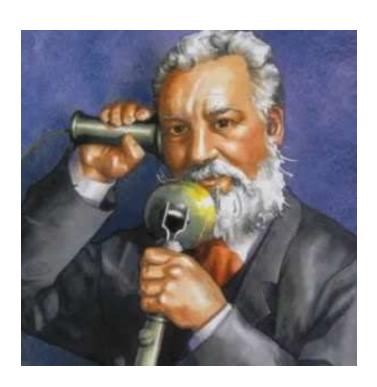
By Peter Mark Roget





TELEPHONE (1876)

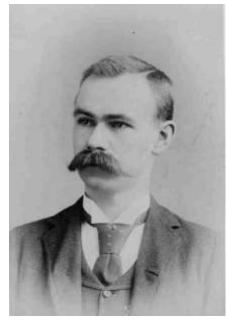
Alexander Graham Bell invented the electrical speech machine which we now call the telephone.



TABULATING MACHINE COMPANY (1884 – 1890)

Herman Hollerith was an American statistician and inventor who developed a mechanical tabulator based on punched cards to rapidly tabulate statistics from millions of pieces of data.





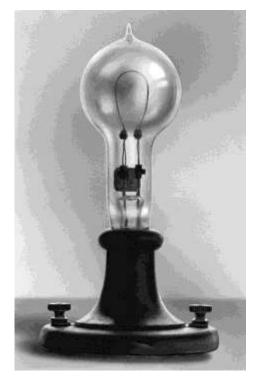
PHONOGRAPH, MOTION PICTURE CAMERA AND ELECTRIC LIGHT BULB (LATE 1800s)

 Developed by Thomas Edison that greatly influenced life around the world.

He was also one of the first to produce films for

classrooms.

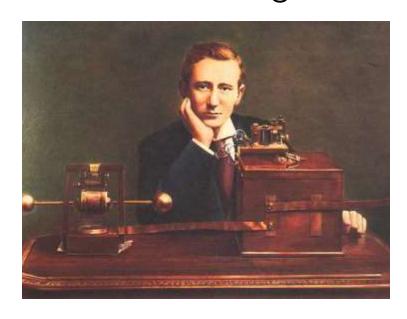






Long-distance Radio Transmission and Radio Telegraph System (1895)

Guglielmo Marconi successfully sent signals using electromagnetic waves between a transmitter and a receiving antenna.





EDUCATIONAL FILMS (1900s)

- Projector
- Mechanical Teaching Machines
- Television

Differential Analzyer





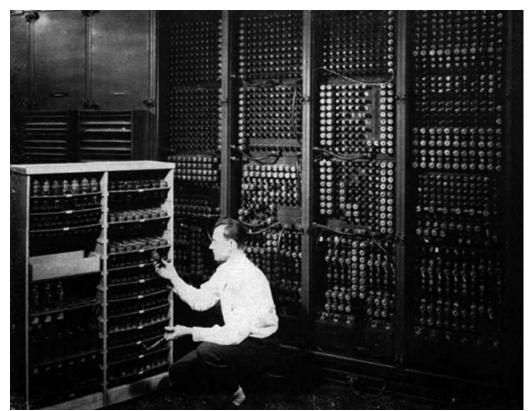






ENIAC (1941)

 Electronic Numerical Integrator And Computer was the first electronic general-purpose computer





Computers in classrooms

Floppy Disks

ARPANET

Microsoft



Microsoft

APPLE (1976 – 1977)

Founders Steve Jobs and Steve Wozniak



1980

CAI

Computer-Assissted
Instruction

LOGO

- By Seymour Papert
- a tool to improve the way that children think and solve the problems.

1984

Macintosh Computer

 Apple first introduced the Macintosh Computer. The mouse and the icon became the major tools for computer interaction.

1990s

- Windows 3.01 was developed and networked systems were introduced.
- During 1991, GOPHER and the World Wide Web (WWW) were released.
- In 1992, Windows 3.1, the Pentium processor by Intel and Hewlett-Packard laser jet printers were all introduced.
- In 1994, shopping malls arrived on the Internet, allowing a new method to shop at home.
- 1995 saw the introduction of Windows '95.
- Video disks (VCD)
- CD-ROMs
- Multimedia
- DVD
- Teleconferencing

2000 to present

- Virtual reality
- Online life
- Wireless Internet access
- Mobile computer labs







RESOURCES:

- http://en.wikipedia.org/wiki/Educational_techn ology#History
- http://www.edelements.com/setting-thecontext-a-brief-history-of-edtech/
- http://www.britannica.com