

Instructional Technology 1973- 2013

A Reflection of 40 years.

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- Like the evolution of life-forms, the pace of technology has greatly accelerated over time.

Futurist Ray Kurzweil

16mm Film Projector



Slide Projector



Overhead Projector



3/4" U-matic tape



VHS

Video Home System



Top view of a VHS cassette

Media type Video recording media
Encoding FM on magnetic tape
Developed by JVC (Victor Company of Japan)
Usage Home video, Home movie

Beta

Betamax



Media type Magnetic tape
Encoding NTSC, PAL, SECAM
Read mechanism Helical scan
Write mechanism Helical scan
Standard Interlaced video
Developed by Sony
Dimensions 158 x 98 x 25 mm
Usage Home movies, Home Video

Cassette Tapes



Cassettes of varying tape quality and playing time. The top is a Maxell MX (Type II), bottom right is a TDK SA (Type II) and the bottom left is a TDK D (Type I).



One of the first (portable) cassette recorders from Philips, the Typ EL 3002 (1968)

DVD



DVD-R rewritable disc	
Media type	Optical disc
Capacity	4.7 GB (single-sided, single-layer, constant), 8.5 GB (2000 high-speed), double-layer
Speed	1.35 GB (single-sided, single), double-layer (max)
Size	11.95 cm (double-sided, double-layer (max))
Weight	160 mg (max), 13.8 mg (1.4)
Material	PLS (polycarbonate)
Notes	DVD-R (DVD-R)
Developed by	DVD Forum (DVD Forum), Philips and DVD-Video Alliance
Standard	ISO 9660 and DVD-Video Alliance specifications
Weight	160g

Thumb/Flash Drive



SanDisk Cruzer Micro, a brand of USB flash drives

SD-Secure Digital

SD, SDHC, SDXC	
SD (Sec), SDHC (Secure Digital), SDXC (eXtended Capacity)	
Media type	Memory card
Capacity	SDHC (SD) 1 MB to 2 GB, SDXC (SD) 2 GB to 32 GB, SDHC (SD) 4 GB to 32 GB, SDXC (SD) 48 GB to 1 TB
Developed by	SD Card Association
Standard	ISO 7810 (SD), ISO 7811 (SDHC), ISO 7812 (SDXC), ISO 7813 (SDHC), ISO 7814 (SDXC), ISO 7815 (SDHC), ISO 7816 (SDXC), ISO 7817 (SD), ISO 7818 (SDHC), ISO 7819 (SDXC)
Weight	SDHC (SD) 2 g, SDXC (SD) 2 g, SDHC (SD) 1.5 g, SDXC (SD) 1.5 g
Usage	Portable devices, including digital cameras and handheld computers
Associated term	MultiMediaCard (MMC)

The Cloud

- Icloud
- Drop Box
- Google Drive



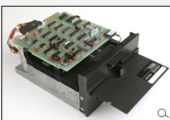
APPLE II



- The Apple II became an instant success when released in 1977 with its printed circuit motherboard, switching power supply, keyboard, case assembly, manual, game paddles, A/C powercord, and cassette tape with the computer game "Breakout." When hooked up to a color television set, the Apple II produced brilliant color graphics.

5 ¼ floppy drive

Storage



Original Shugart SA400 5 1/4

- The 5 1/4" flexible disk drive and diskette were introduced by Shugart Associates in 1976. This was the result of a request by Wang Laboratories to produce a disk drive small enough to use with a desktop computer, since 8" floppy drives were considered too large for that purpose. By 1978, more than 10 manufacturers were producing 5 1/4" floppy drives.

Osborne 1981



MacBook Air

11-inch MacBook Air



Accomplishments at EIU

- Ethernet replaces token-ring
- 205 Classrooms Technology Enhanced
- Centralized Distributed Support
- Virtual Desktop Initiative
- Expanding Wireless Access
- Currently working on a comprehensive framework for Electronic Learning Materials (standards and procedures)

Emerging Trends in Instructional Technology

- Mobile
- Learning Management Systems (LMS) will evolve to support formal, informal, social and non-formal learning
- Birth of new authoring tools
- Gesture-based computing
- Semantic Web and 3D internet Web Applications

Emerging Trends in Instructional Technology

- 3D Printing
- Games and Gamification
- Wearable Technology
- Flexible Displays