New Media in Visitor Orientation: The Franklin Institute Science Museum's Unisystem

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New Media in Visitor Orientation: The Franklin Institute Science Museum's Unisystem

■ **Goal:** to mediate between the museum and the museum visitor, providing useful information for the general public audience (adults, older children, younger children, and K-12 teachers).

- Consists of:
 - @40 computer LAN, controlled by a 6 minicomputer LAN,
 - Information Stations,
 - Exhibit Enhancement Stations,
 - 5 Print Stations.
- Designed and implemented at the Franklin Institute Science Museum, Philadelphia, PA during 1989 - 1991.

- Exhibit Enhancement Stations (@28) are located in each exhibit area (including traveling / temporary exhibit galleries).
- As visitors interact, they can request takehome science activities (available at Print Stations).

- Information Stations (@8) are provided at key circulation points.
- As visitors interact, they have access to information on showtimes, demonstrations, and visitor services.

■ **Print Stations** (5) are provided in the Science Center and Mandell Center.

Funding Sources:

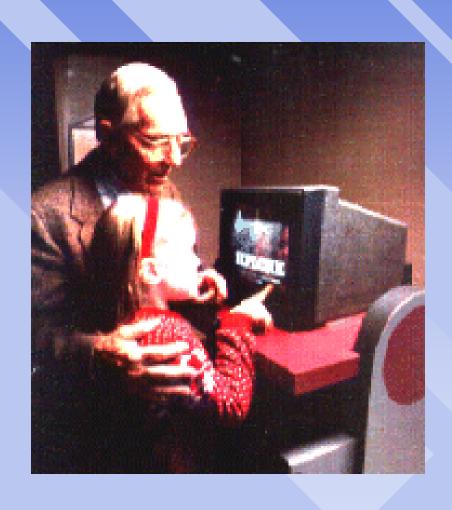
- Unisys Corporation,
- The National Science Foundation.

Developers:

- The Franklin Institute Science Museum,
- Unisys Corporation.

Kiosk Design:

- Wheel chair accessible,
- Movable platform, allows for custom viewing angles,
- Similar design throughout museum used as a unifying element,
- Unique color schemes used to blend in with individual exhibit areas.



User Interface:

- Graphical User Interface -- Icons,
- Touch Screen -- Level Menus,
- Bar Code Cards -- Usage Patterns.

Universal Accessibility Issues:

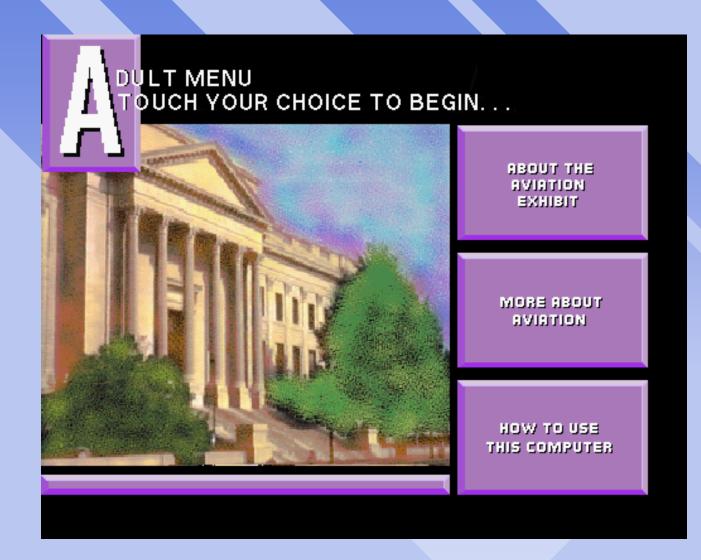
- close-captioning,
- physically challenged kiosk design issues,
- English as second language issues.

■ The Content Development Team:

- Writer/Researcher -- researches content, writes exhibit narrative, and creates storyboards,
- Graphic Designer -- creates graphics incorporating storyboards,
- System Adminstrator -- converts graphic files into user presentation, sends to client compters on museum floor for public access.

Science Center:

- Adults (middle school and above) -
 - » Exhibit Overviews (interpretive programs explore each exhibit's salient themes),
 - » Newscience (the newest developments in each field),
 - » How To Use This Computer (tutorial on interface conventions).



Science Center:

- Big Kids (grades K 6) -
 - » Games (interactive activities that emphasize each exhibit's salient themes),
 - » Take-home Activities (printed science activities to continue explorations at home),
 - » How To Use This Computer.



Science Center:

- Little Kids (pre-school) -
 - » Exhibit Slide Show (colorful graphics direct parents to experiences appropriate for the youngest visitors),
 - » Take-home Activities (printed science activities designed for parents and children),
 - » How To Use This Computer.

WHAT TO EXPLORE IN AVIATION:

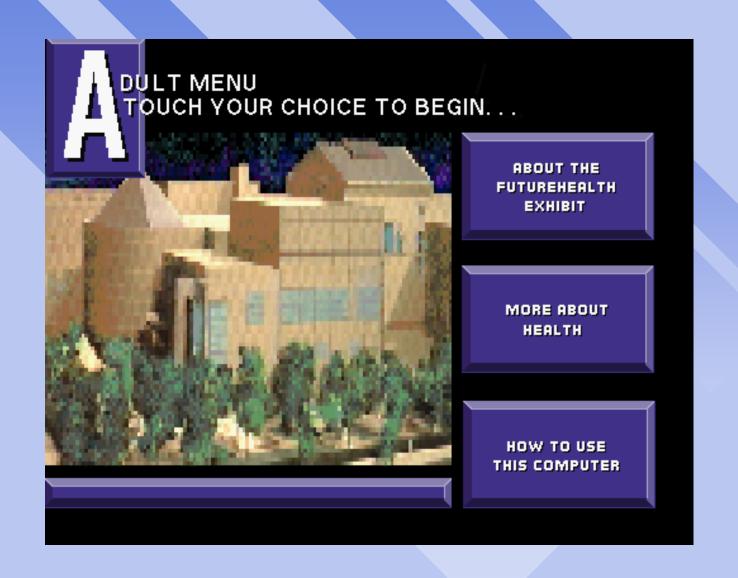
IN THE
HALL OF
AVIATION
SEE AND
FEEL THE
EFFECTS
OF AIR.





■ Mandell Center:

- Adults (middle school and above) -
 - » Exhibit Overviews (an introduction to the exhibit),
 - » Choose the Future (an interactive poll raises science-related issues and encourages visitors to register their own opinions),
 - » Newscience,
 - » Infoprint (additional topical information -- like Weather Basics),
 - » How To Use This Computer.



Mandell Center:

- Big Kids (grades K 6) -
 - » Games,
 - » Choose the Future,
 - » Take-home Activities,
 - » How To Use This Computer.



■ Mandell Center:

- Little Kids (pre-school) -
 - » When I Grow Up (a look at topical issues that may affect a visitors future),
 - » Take-home Activities,
 - » How To Use This Computer.



Unisystem Information Stations

Science and Mandell Center:

- What's Inside? -
 - » What Else To See (a guide to all museum public programs),
 - » Maps,
 - » Showtimes,
 - » How To Use This Computer,



Bat Tales

DAILY: 12: 15, 2: 15.

The Sky Tonight

DAILY: 1: 15

The Other Side of the Universe

WEEKDAYS: 3:15

WEEKENDS: 11:15, 3:15, 4:15.





Unisystem Information Stations

- Science and Mandell Center:
 - What's Inside? (cont.) -
 - » Visitor Services:
 - Food,
 - Stores (Science For Sale),
 - Rest Rooms,
 - Membership (print-out),

Unisystem Information Stations

- Science and Mandell Center:
 - What's Inside? (cont.) -
 - » Visitor Services (cont.):
 - Volunteer opportunities (print-out),
 - American with Disabilities information.

Unisystem Print Stations

■ Science and Mandell Center:

- Obtain printouts from current visit,
- On-screen explanations.

Teacher Bulletin Board

Originally available via modem:

- Pre- and post-visit materials for teachers in grades K-3, 4-6, 7-8, and 9-12,
- Starwatcher's Guide to the Night Sky,
- Ask an Expert.

The Franklin Institute Online

- Now available online via the World Wide Web at http://sln.fi.edu:
 - Integrated Search Engine (LYCOS),
 - Monthly Sky Report,
 - Ask an Expert,
 - Educational Hotlists,

The Franklin Institute Online

- Now available online via the World Wide Web at http://sln.fi.edu:
 - Units of Study,
 - Hotlists of Online Exhibits, and Kid's Stuff,
 - Virtual Exhibits, including traveling exhibit support and enhancement,
 - Monthly Publications -- InQuiry Almanack, Philadelphia Inquirer Health & Science.

■ Goal: to mediate between the museum and the museum visitor, and now the online museum visitor, providing useful information for the general public audience with refined demographic subsets (adults, older children, younger children, and K-12 teachers and students).

■ The Challenges:

- Building a bridge between the museum floorbased experience and the online experience,
- Integrating a scrolling slide show design (museum floor - Unisystem "Classic") with a hypermedia environment (the Internet / World Wide Web / Netscape v.2.x),
- Wayfinding in a hypermedia environment (interface design issues),

■ The Challenges (cont.):

- Staying abreast of the rapid technological innovations occurring on the Internet:
 - » 2D text-based multimedia environment (HTML v.3.0) vs. 3D multimedia environment (VRML, Hot Java, Netscape v.2.x, etc.),
 - » Resources integrated with a Search Engine (like LYCOS, InfoSeek, etc.) to facilitate user searching by key word, natural language, etc.,

■ The Challenges (cont.):

- Staying abreast of the rapid technological innovations occurring on the Internet (cont.):
 - » Resources integrated with an "electronic librarian;" an integrated agent-based software environment,
 - » Integrated file access by all users -- from the museum floor (floor-based print stations, email to themselves or others),
 - » Integrated file access by all users -- remote access via the WWW (email, ftp, other).

■ The Challenges (cont.):

- Staying abreast of the growth of our Internet audiences (@ 12 million WWW users, @20-30 million Internet users),
- Defining the demographics of our Internet audience (regional vs. global),
- Obtaining funding sources,

■ The Challenges (cont.):

- Defining internal policies and staff management structures to allow museum-wide participation in creating and managing online resources.

■ The Unisystem Online (www.unisystem.fi.edu):

- Unisystem online to be available on November 1, 1996 via the Inside Information Exhibit in the lower level Mandell Center.