Designing Navigation that Works

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Today’s Topics

1. Define navigation
2. Design principles, usability & standards
3. Critique of library navigation
4. Types of navigation
5. Navigation implementation
6. Navigation guidelines
7. Evaluating existing navigation
8. Developing a navigation plan
9. Resources
   • Appendices
Part 1: Define Navigation

Have you ever gotten “lost” on a website?

Ever had a hard time finding a resource you knew was there, somewhere?

Ever searched in vain for contact information, or an event calendar?

Why worry about navigation?

Chances are, your users have, too.
# Define Navigation

<table>
<thead>
<tr>
<th>Topic</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define Navigation</td>
<td>5</td>
</tr>
<tr>
<td>Metaphorical Illustrations</td>
<td>6-9</td>
</tr>
<tr>
<td>Purposes of Navigation</td>
<td>10-11</td>
</tr>
</tbody>
</table>
Define Navigation

Website navigation *provides a sense of location, direction & scale*, thus orienting visitors so that they can confidently proceed to access resources and accomplish tasks.
Frames the User Experience
Reveals Site Structure & Extent
Lights the Way; Provides Shortcuts
Connects Users to Resources
Define Navigation

Purposes of Navigation

1. Frames the user experience; grounds & orients users
2. Reveals the site’s structure & extent; provides cues on how to use the site
3. Illuminates the way; reveals the possible choices; provides multiple access points & shortcuts
4. Connects users to resources
5. Done correctly, builds trust & credibility
Define Navigation
Purposes of Navigation

Clear, well thought out navigation is one of the best opportunities a site has to create a good impression. — Steve Krug
Part 2: Design Principles, Usability & Standards: Rising Above the Rest
Design Principles, Usability & Standards

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Related Interface Design Issues 22-29
Design Principles, Usability & Standards
Why bother?

Save the time of the reader … who is your e-library visitor & user. — Ranganathan’s 4th Law of Library Science, updated
Design Principles, Usability & Standards
Why We Do It
Design Principles, Usability & Standards
Ensure Effortless Interactions

- The use of design principles & usability standards ensures that visitors to your library’s website will **effortlessly**:
  - Understand what you have
  - Find what they want
  - Do what they came to do
  - Discover a reason to return
Design Principles, Usability & Standards

Principles of Good Design

(Don Norman)

- Visibility
- Consistent Conceptual Model
- Valid Mappings
- Feedback
Design Principles, Usability & Standards
Principles of Good Design, 1-2

- **Visibility**: The user can see the state of the device & the alternatives for action—the choices for what can be done—at a glance.

- **Consistent Conceptual Model**: The designer has provided the user with a conceptual model that is consistent in the presentation of the system image, operations & results.
Valid Mappings: It is possible to readily deduce the relationships between actions & results, controls & their effects & between the system state & what is visible.

Feedback: The user receives full & continuous feedback about the results of every action.
Design Principles, Usability & Standards
The Well Designed Interface

• “… as soon as you see it, you make guesses about how it will work, and your guesses turn out to be right.”—David Gelernter

• How can we tell whether an interface is well designed and has appropriate navigation? Test it.
Design Principles, Usability & Standards
Visit any page; in 5 minutes:
(with a bow to Steve Krug)

1. What is the site & who publishes it?
2. What page are you on?
3. Your options at the level you’re on?
4. How is where you are situated in respect to the rest of the site?
5. What are the major site sections & resources?
6. What shortcuts & helpful aids exist?
7. Can you search the catalog, renew or reserve materials & accomplish other tasks?
Design Principles, Usability & Standards
Design & Communication

- Graphic design is fundamentally about communication.
- Tacit communication: the medium chosen to deliver the message
  - Includes size, shape, color, layout & other presentation choices
- Explicit communication: the message as expressed in the text & images.
- What are the tacit & explicit elements of navigation?
Design Principles, Usability & Standards
Consistency & Standards

• Consistency is considered one of the most powerful ways to meet users’ expectations: “… when things always behave the same, users don’t have to worry about what will happen … they know what will happen based on earlier experiences.”
Design Principles, Usability & Standards
Web Design & Use: Time-Savers

1. Use logical, hierarchical site structure & organization.
2. Apply graphic standards to page layout & web standards to text organization; follow accessibility guidelines.
3. Provide multiple, consistent, predictable navigation pathways to content & to quick, easy ways to accomplish things.
Design Principles, Usability & Standards

Information Hierarchies

• The careful organization of information into clear, logical categories is the basis for an information hierarchy.

• Hierarchies can be represented visually using graphic elements.

• The visual hierarchy should correspond to the logical hierarchy.

• A clear visual hierarchy should be displayed on each page of the site.
Design Principles, Usability & Standards
Visual Hierarchies

• The organization & display of elements on a page provide context, indicate relationships & proffer choices. Consider the …
  • Relative size of the elements
  • Placement or position; including the ordering of groups
  • Color & contrast
  • Movement (tacit: eye scan of the layout; explicit: animation, video)
Design Principles, Usability & Standards

Navigation & Information Architecture

- Navigation creates a sense of place by embodying the site’s hierarchy.
- Devise multiple access points by using a combination of topic, task & utility based navigation.
- When the logical structure is not supported or is contradicted by visual cues, confusion and frustration mounts. Muddled IA & labeling=messy navigation. For more information, see the appendices & the resources.
Design Principles, Usability & Standards

Beautiful Illusions that Work

• Strive for Gelernter’s *inevitability illusion*, the sense that you wouldn’t want it any other way than as it is.

• “When the illusion succeeds, the outcome is technology that works beautifully and that *is* beautiful.”

• The application of design principles & standards creates functional, usable, beautiful sites.
Design Principles, Usability & Standards

In Other Words …

• Users should be able to rapidly:
  • Perceive
  • Comprehend
  • Understand
  • Respond

• In well designed systems, users:
  • Experience
  • Learn
  • Enjoy
  • Return
Part 3: Critique of Library Navigation: Real World Examples

State of the art ..?
What I did & what I found.
Critique of Library Navigation

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Critique of Library Navigation
What I Did

- Examined information architecture, navigation schemes & usability at:
  - Illinois libraries of all kinds from one region of the state
  - 51 state & District of Columbia libraries

- Seeking evidence of:
  - Proper integration of information architecture, navigation & interaction design in support of content access.
  - Incorporation of graphic & navigation design standards
Visitors should engage with the site, not just gawk, wander about & leave; designs should integrate:

Structure
Navigation
Interaction
Content

The Library of Celsus
Critique of Library Navigation
What I Found

- None of the visited sites look as bad as the Library of Celsus but none met all standards.
- Many are just in need of a little tweaking here and there; a few need complete overhauls.
Critique of Library Navigation
State of the Art: Branding

- Every library should develop a brand identity in the form of a logo & 6-8 word tagline to differentiate the website & online services.

- The logo & tagline should be used as the site identification, preferably as the Home button in the global navigation bar.

- The ID should be used throughout the site, on every single page. No exceptions.
Critique of Library Navigation
What I Found:
Very Little Branding

- Logos & taglines are rarely employed.
- When used, implementation is inconsistent.
- Taglines do not always differentiate the organization or express the value provided.

Trend spotted: A few separate virtual library sites have been spun off from their state libraries. These sites are more likely to be branded & have their own logos.
Critique of Library Navigation
Examples of Branding & Taglines
Critique of Library Navigation
State of the Art: Labels & Ordering

- The home page icon should always be labeled, except on home.

- Subjects, tasks & utilities should be clearly labeled & grouped in the global navbar. (About Us should be considered a utility.)

- All over the site, proffered choices in navbars & menus should be grouped in logical hierarchies.
Critique of Library Navigation

What I Found: Labels & Ordering

- Home icons go unlabeled on site pages.

- Icons & labels may be inappropriate, inaccurate or out of order. For example, this looks more like “kiss a librarian” to me:

  ![Ask A Librarian](image)

- Lists of options are often disorderly; they do not mirror the site’s IA or any other system, like alphabetization.
Critique of Library Navigation
What I Found: Labels & Ordering

This scheme needs some help. It’s suffering from Krugitis.
Critique of Library Navigation
State of the Art: Home Page

- Site architecture should be clear from the choices on Home.
- Standards for design include a site ID, global navigation bars; a bottom of the page text directory of global navigation; & accessibility.
- Content should be limited to a concise welcome statement; brief introduction to site resources & updates.
- Home should include linked text & other navigation & orientation cues & devices.
Critique of Library Navigation

What I Found: Messy Home Pages

- Poorly thought out site structure muddled by inappropriate selection & organization of navbar links
- Cluttered, often with too many poorly organized choices
- Long welcome messages or other information
- Oversize layouts; some dramatic & creative
Critique of Library Navigation

State of the Art: Standards & Implementation

- Alternate text & use of <H> labeling for text readers
- Organization & categorization of navbars to provide access to global, regional & local levels of the site
- Consistent graphic expression (color choices, fonts, text size)
- Page title on every page.
Critique of Library Navigation
What I Found: Standards & Implementation

• Improper categorization of sections, tasks & utilities in global navigation
• Little consistency of application across the site for other types of navbars & text directories
• Subject hierarchies inconsistent & disorganized in regional navigation
• Graphic layout inconsistent at various levels
Critique of Library Navigation
Home Page & Navigation Critiques

• The two state library sites critiqued here were chosen because funds had clearly been invested in IT & graphic arts.

• Nevertheless, the sites violate various usability standards.

• However, with just a little reorganization …
Artistic Home Page
Critique

Specified user groups in eye-catching custom graphic on home page suggest site organization is based on types of users.

However, on site pages, the small text top navigation bar is murky & label names change.
More Issues

Nice thumbnail picture, but departmental identification is not a tagline.

Upper right corner of navigation bar is reserved for tasks, followed by site utilities.

It’s not a button. However, the list below is hypertext, partially alphabetized.

The bottom of page navbar should reprise the site’s global navigation choices. It does, and adds more.
Some Navigation Standards Violated

1. Home is not labeled.
2. Global navigation is scattered about, color in graphic treatment of text bar murky & text small.
3. Links not consistently labeled.
4. Links don’t change color after visitation.
5. Regional navigation menus are at the far right of the page.
6. Lists need more spacing between items to help with text scanning.
7. Pages lack titles.
Home Page: Traditional Layout

Welcome

“Our vision is to ensure that state government, other libraries and all residents of Indiana have access to whatever information and services they need today to help them plan for tomorrow.”

We encourage you to visit us in downtown Indianapolis, via our website, or through our Blog.

Featured Division

Indiana State Data Center

A federal and state cooperative between the Census Bureau and the State of Indiana coordinated by the State Library, the Indiana Business Research Center, and the Indiana Department of Commerce.

The Indiana State Data Center services include:

- Providing demographic and economic statistics from the Census Bureau and other federal and state agencies.
- Providing training and technical assistance in accessing and using all...
Critique

What is the rationale for the categories & order of the links chosen for the top of the page navigation?

Missing links! There’s *no* bottom of the page global navigation.

Are the pop-up menu items site divisions, or “aboutness” information?
This is a long list. I’m not sure whether it really corresponds to the *who we are* label. Are these even the right menu items?

I edited out a long combined welcome - mission statement.
Even More Issues

A helpful dropdown box lists search choices. What do you think of the order?

The page title is properly displayed but dated information is a no-no. (Screenshot from 1-18-05.)
Help!

Aside from the green border, there are no graphic similarities to other site pages. This page continues with more categories & many links below the fold. Internal page directories should be added.

The site architecture should be deepened & widened with separate portal page for each major category.
Some Navigation Standards Violated

1. The site organization is unclear. Global & regional navigation is scattered about.
2. There are no bottom of page navbars.
3. Organization of links in menus is confusing.
4. Site pages need internal navigation devices.
5. Site depth & breadth require expansion.
6. Site needs tagline & home graphic.
Home Page: Artsy/Simple

Let’s critique this one together.
Critique Conclusion

- Excellent navigation cannot fully compensate for structural problems in site organization.
- Understanding & using appropriate navigation (including labeling & grouping) increases site usability.
- Beauty should be a value,—but creativity & artistry are not a substitute for consistent standards.
- Have a viable rationale when departing from standards.
Part 4: Types of Navigation

3 main types of navigation & 2 kinds of site-wide shortcuts …
What could be easier?
Types of Navigation

Precept

In navigation design, it’s cruel and unusual punishment to offer chaos instead of guidance, self expression instead of shared communication.

—Jennifer Fleming
Types of Navigation

Major Types of Navigation

1. **Global** (primary or persistent)
   - Access to major sections of the site, also tasks & utilities

2. **Regional** (secondary or section)
   - Provides access to section organization & content at that level

3. **Local** (tertiary, page)
   - Provides access to end level content—there’s no going on, only elsewhere (on shallow sites, 2 & 3 are the same.)

4. **Specific Shortcuts**
   - Devices that direct users by offering a narrow, specific choice.

5. **Site-Wide Shortcuts**
   - Wide area access devices: search, site map, index
Types of Navigation

Book Navigation Devices

• Nonfiction Book (global)
  • Title, author, size/scale, table of contents (sequential), bibliography, index (alphabetical by topic)

• Chapter (regional, section)
  • Chapter title, may have brief table of contents or abstract

• Page (local)
  • Header, Footer & Footnotes: book title, chapter title, page number
  • Layout & Graphic Standards: paragraphing, negative space, widgets
  • MetaMessages: Communications, Advice & Instructions
    • More on this in chapter 5.
  • Sidebar (equivalent to hypertext link to additional information)
Types of Navigation
Cues & Devices

- The major items in use are:
  - Home Page, Link to Home & Browser Back Button
  - Global & Regional Navigation Bars
  - Directories, Hypertext Links & Page Anchors
  - Alternate Text & <H> Coding
- More than 15 categories & 50 items; see the list in the appendix.
Types of Navigation
Global Navigation

- It flies users to major areas of the site, thus needs to be available on every page—persistent.
- It manifests the site’s IA, and might be the first place most users will click—primary.
Types of Navigation
Global Navbar Cues & Controls

- Labeled link to *Home* positioned at the far left of horizontal bars, top of vertical bars; followed by section links.
- Site ID & tagline
- Group functions & utilities at the upper right of horizontal global navbars, bottom of vertical bars on short lists, top otherwise
- Text directory of the GNB is always at the end of every page

Deactivate the link on your Home page.
But where is the link to Home?
Types of Navigation
Setting Up the Global Navbar

- Categorization & Position (l to r)
  - Section Links (site content divisions)
  - Function Links (shortcuts to things to do on site)
  - Utility Links (help traversing the site: map, index)
  - Search box is often at the far right, or doubledeckered

- When there is no compelling hierarchy, set up section & all other headings & lists using alphabetization—it helps users quickly scan text.
Types of Navigation
Global at Top or Left Side?

Top is more of a standard. While the space at the left is theoretically unlimited, the top *can* also be 2-3 levels deep.

Consider the number of site divisions versus the number of section content listings, and the length of the name labels.
Types of Navigation

Vertical Global Navigation

Example

Link has been deactivated as a locational cue.

Faint lines separate sections of the bar.

Imagine it with buttons!
Types of Navigation
Vertical Global Navbar Sample

• Note the categories for the 3 sections:
  • Resources
  • Services
  • About the Library
• The catalog is listed first, a good usability feature.
Sites rich in resources can stack links 2 - 3 deep on a horizontal navigation bar.

- Grouping & alphabetization are essential.
- Limit to 18; try for less.
- Tabbed folder graphics load quickly. Use color coding & other graphic tricks to differentiate.
Types of Navigation
Home Page Differences

- *Always* deactivate the link to home.
- Switch the global navigation bar orientation if the layout requires it, but:
  - Maintain graphic standards & (near) identical link names.
  - Don’t do it anywhere else!
- Keep the page sleek.
  - Use *Home* to orient users to the resources; they can follow links to find the director’s message or the library board minutes.
  - Limit content to brief welcome, updates, login & specials or teasers.
Types of Navigation
Optional Home Page Navigation

- Reveal high level &/or popular section content using rollovers, drop down boxes, or small hypertext directories placed underneath the top navigation bar:

  Children’s Department
  - Homework Resources
  - Just for Kids Book Club
  - Story Hour Schedule
  - More *(this is the only acceptable alphabetical violation)*
Types of Navigation

Regional (or Secondary) Navigation

- Reveals resources available in the section level of the hierarchy, & orients users.
  - When space allows, reveal subdirectories in the navigation bar.
- Shuttles users to the resources.
- Usually located at the left side of the screen; however, can be ganged under global navbar.
- When breadcrumbs are used, they make skipping back over possible.
Types of Navigation
Regional Cues & Controls

• Navigation bar
  • Organize using an appropriate system: table of contents if information is related, numerical, date order, or alphabetical otherwise

• Page name & location:
  • In a consistent font, properly <H> tagged, and in the same location on every page; color may vary according to the plan.

• You are here cues in the form of:
  • Color changes, pointers, and deactivated links.
  • Section introduction page that briefly tells about each subsite or topic area, and provides text links in addition to the navbar.
  • Optional: Breadcrumbs show users how they got there.
Types of Navigation
Regional Navbar Sample

• The list is alphabetized but not categorized. Tip: Subheads would be helpful.

• Expert users are assumed; there are many acronyms. Tip: Add rollovers or pop-ups to clarify content.
Types of Navigation
Regional Navigation Example

<table>
<thead>
<tr>
<th>Home/Logo</th>
<th>Children’s Department</th>
<th>Calendar of Events</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This top navbar is for the global links.</td>
<td>Select from the list below, or view monthly calendar of all library events.</td>
</tr>
<tr>
<td>Children’s Department</td>
<td>Our Public Library ➔ Children’s Department ➔ Calendar of Events</td>
<td></td>
</tr>
<tr>
<td>Book Clubs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>➔ Calendar of Events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Puppet Show</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Story Hour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Poetry Slam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homework Help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Story Hour Times</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teen Scene</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This is the content of the selected page. Note the page title.
Types of Navigation

Local Navigation

- Connects users to sub-site or page level content.
  - Pages at this level may require many specific shortcuts (anchors, etc).

- Differentiated from the regional level by:
  - Format & location—a top of the page text directory is a good format when the top of the page has the global, and the side the regional navigation bars.
  - Color, typeface &/or size of font used

- Customize navigation for special purpose pages
  - Pages with specific functions, like forms & search pages, should have custom navigation developed.
## Types of Navigation

### Putting It All Together

<table>
<thead>
<tr>
<th>Home</th>
<th>Book Clubs - Children’s Dept - Just for Teens - Reference - Catalog - Magazines &amp; Databases - Renew Books - Site Map - Contact Us</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Our Public Library ➤ Children’s Department ➤ Calendar of Events</td>
</tr>
</tbody>
</table>

### Children’s Department

- **Book Clubs**
  - Calendar of Events
    - Puppet Show
    - Story Hour
    - Poetry Slam

- **Homework Help**

- **Story Hour**

- **Teen Scene**

### Calendar of Events

Select from the list below, or view monthly calendar of all library events.

- Puppet Show
- Story Hour
  - Toddlers (2 & up, with adult)
  - Pre-school (3 -5)
- 6 & up
- Poetry Slam

---

On this site, local navigation is limited to text links. Once everything is properly organized, it can be fancied up.
Types of Navigation
Specific Short Cut Aids

- Anchors
  - Alphabet Bars
  - Heads & Subheads; Top & Bottom of Page
- Directories & Menus
  - Dropdowns
  - Rollovers
  - Pop-ups
  - Tables of Content
- Communication & Feedback Notices
  - For example, more*
Types of Navigation
Specific Short Cut Examples

- Printer Friendly Page
- My Library Account
  - Renew Library Materials
  - Update Personal Info
  - View Items Checked-Out
- Chat with a librarian, available 8:am - 4:pm M-F

- A
  - About
    - Academic Search Premier
    - AccessScience (McGraw-Hill Encyclopedia of Science & Technology)

- Libraries by Type/Kind
  - K-12
  - Public
  - Academic
  - Other

- Live Homework Help
  - Available everyday 3 – 10 pm
  - Click here to connect to a tutor
  - First-time download required
Types of Navigation
Site-Wide Shortcuts

• Search Boxes/Results Pages

• Site Map
  • A hypertext representation of all levels of the site hierarchy, shown in hierarchical outline form.

• Site Index
  • An alphabetized hypertext list of all the site’s page titles. (Granularity can be finer, if desired.)
Types of Navigation
Site-Wide Example

This is a hybrid. Site headings are in alphabetical order, listings by position in hierarchy.

Also note the global navbar & breadcrumbs.
Types of Navigation

Site Map Hierarchy Example

Return to top
Commonwealth Libraries

LEARN ABOUT
State Library of PA
About Us: Hours & Location
Collections
Federal Documents
Genealogy/Local History
General Collection
Law
Newspapers
Pennsylvania Publications
Rare Books/Assembly Collection

Directory of Staff
Genealogy/Local History
Interlibrary Loan
Orientations and Tours
State Employee Orientations
School Groups
Other Groups
Reference Services
State Library Computer Use Policy
State Library History

Services and Information for Pennsylvania Libraries
Advisory Services For Libraries

This is only a small portion of the map.
Quick List shortcuts are a nice usability feature.
Types of Navigation
Helpful Index Usability Tip

It’s helpful to note the type & format of the resource. For example, PDFs should be labeled.
Part 5: Navigation Implementation
Navigation Implementation

Universal (Site-Wide) 89
Global Navbar 90
Regional Navbar 91
Page Level Navigation 92
Specific Shortcuts & Cues 93
Site-Wide Shortcuts 94
Navigation Implementation
Universal (Site Wide)

- Alternate text for images, icons, tables
- Bottom of page text directory of the GNB
- Color & graphic cues
- Deactivated link(s) for current page
- Footer (copyright notice, etc.)
- Global Navigation Bar (GNB)
- Home page icon says *Home*
- HTML <H> headings & subheadings
- Page titles
- Pointers (*You are here.*)
- Section Navigation Bars
- Site ID & tagline
- Visited link color changes
- Optional: Breadcrumbs

*Everywhere except on the Home Page.
Navigation Implementation
Global (Top) Navbar

- Home Link
  - Site ID & Tagline
- Section & Task (Function) Links
  - Optional: Subdirectories
- Utility Links
  - Site Index Link
  - Site Map Link
  - Contact Us Link
  - Optional: Help

If you need help deciding how to organize your site, see the resources list, and in particular, *Web Site Design with the Patron in Mind* by Susanna Davidsen & Everyl Yankee.

Would you locate search the site differently from search the catalog?
Navigation Implementation
Regional (Side) Navbar

- Use an appropriate hierarchical organizational scheme to display choices—a table of contents, for example.
  - In the absence of a compelling hierarchy that reveals logical relationships, order the sections & subsections alphabetically.*

- Do not confuse the content revelation & access role of the Regional Navbar with the site-wide functions of the Global Navbar.
Navigation Implementation
Page Level Navigation

• Routine Use*
  • Anchors
    • Bottom & top of page
    • Headings & subheadings
  • Page directory &/or table of contents
  • Text links, when relevant

• Notices/Links
  • Long Scrolling Page
  • More,
  • New
  • Updated

• Instructions & Directions
  • As needed.

*Check the Universal (Site Wide) Implementation page for additional devices & cues.
Navigation Implementation
Specific Shortcuts & Cues

• Devices
  • Menus
    • Dropdown | Popup | Rollover
  • Selection Devices
    • Buttons
    • Check Boxes
    • Images/Icons
    • Radio Boxes
    • Specialty

• Advice, Directions & Instructions
  • This long page requires scrolling.
  • You must login to check out materials. Click on “My Account” to begin.

• Feedback
  • Acknowledgement messages (after form submittal, task completion)
Navigation Implementation

Site-Wide Shortcuts

- Search Boxes/Results Pages
- Site Index
  - An alphabetical hypertext list of page titles; if the budget allows, organize also by concepts, &/or refine granularity to the subhead level.
- Site Map
  - A graphical representation of the site organization & contents showing structural relationships; text should be clickable.
Part 6: Navigation Guidelines
Navigation Guidelines

A Dozen to Do 97-99
A Half Dozen to Avoid 100-101
Navigation Guidelines

A Dozen to Do

Be consistent in the way you use navigation.

- Use the site ID & tagline on all pages, since users may click in from a search engine.
- Always add the word *Home* to the image/icon used as a link to that page.
- Deactivate all links to the page the user is on (do not remove them).
- Separately group links to sections, tasks & utilities in navigation bars.
Navigation Guidelines
A Dozen to Do

• Alphabetize link presentation unless topic, user studies or Web standards indicate otherwise.
• Be sure link labels match up to page titles.
• Provide a bottom of each page hypertext directory with the same links as the global navbar.
• Use subtle cues like pointers & color changes.
• Use breadcrumbs if possible.
Navigation Guidelines
A Dozen to Do

• Use internal page anchors/links, like *back to top* notices & other shortcuts, especially on long scrolling pages.
• Page titles should always be in same place, font, size & color for their place in the hierarchy. Do use alternate text & meet ADA standards.
• Provide a site map; content rich sites should also provide a site index.
Navigation Guidelines
A Half Dozen to Avoid

• Not having an established hierarchy; muddling up global & regional or regional & local navigation.

• Organizing links by guessing at users’ interests—group &/or alphabetize systematically & consistently; users will rapidly learn how to navigate your site.

• Arranging page layouts & navbars so that horizontal scrolling is required.
Navigation Guidelines
A Half Dozen to Avoid

- Stretching out resources to provide the illusion of a larger site. Properly organizing them will save work when the site expands.
- Stranding users on *form* or any other pages with no way back.
- Content errors, like filling up Home with a large picture of the library, text-heavy messages, or outdated information.
Part 7: Evaluating Existing Navigation: Shedding Some Light
Evaluating Existing Navigation

Questions to Ask

104-107
Evaluating Existing Navigation Questions to Ask

- Are Home & section welcome pages designed primarily for orientation & access rather than content?
- Are the site ID & tagline visible on every page?
- Does the navigation reveal & provide access to all the organizational schemes for content (topic, task or user group oriented) that have been devised?
Evaluating Existing Navigation
Questions to Ask

• Is the global navbar in section-task-utility order? Is it present both graphically & in text form on all pages of the site? Is it consistently located?
• Is the regional navbar in table-of-contents or other appropriate order? Is it present on all relevant section pages? Is it consistently located?
• Ditto for local navbar.
Evaluating Existing Navigation

Questions to Ask

• Does every page have a descriptive title in a consistent location & style?
• Are alternate text & <H> commands in use?
• Are specific shortcut navigation devices used appropriately? Are they graphically consistent?
• How many *You are here* pointers display at once?
Evaluating Existing Navigation Questions to Ask

• Have search, form, submission & other specialty pages been developed?
• Does the site have a hypertext map that shows the information hierarchy?
• Is there a site index of page title?
• Have all site menus, directories & lists been organized by category, alphabetized or numbered?
• Is there a rationale for changes to standards?
Part 8: Developing a Navigation Plan
Developing a Navigation Plan

Review the Site Plan & Objectives  110
Develop & Test Preliminary Designs  111
Iterative Process  112
Developing a Navigation Plan
Review the Site Plan & Objectives

- What sections, tasks & utilities are required?
- What standard, specialty & site-wide shortcut navigation will be needed?
- Will there need to be any special pages (search, form, calendars, feedback, etc.)?
- Develop a rationale for any changes to standards.
Developing a Navigation Plan
Develop & Test Preliminary Designs

• Use paper prototyping techniques to develop & test preliminary designs for the:
  • Global (top) navigation bar & bottom of page text directory of it.
  • Regional (side) navigation bars based on the content & its organization.
  • Any differences in Home page design & navigation
  • Local navigation standards.
  • Navigation for all specialty pages.
  • Specific & site-wide navigation shortcuts.
Developing a Navigation Plan

Iterative Process

• Adjust work based on feedback.
• Create a web prototype.
• Test the prototype.
• Adjust work again.
  • Continue until 4 out of 5 new people tested can easily get around the site to accomplish tasks & locate information.
Part 9: Resources

Design

## Resources

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>113</td>
</tr>
<tr>
<td>Information Architecture &amp; Usability</td>
<td>115</td>
</tr>
<tr>
<td>Library-Specific Web Design</td>
<td>116</td>
</tr>
<tr>
<td>Online Library Collection Development</td>
<td>116</td>
</tr>
<tr>
<td>Page Layout</td>
<td>117</td>
</tr>
<tr>
<td>Technology &amp; Human-Computer Interaction</td>
<td>117</td>
</tr>
</tbody>
</table>
Resources

Information Architecture & Web Usability

Resources

Library-Specific Web Design

Online Library Collection Development
Resources

Page Layout


Technology & Human-Computer Interaction

• Keep bridging the chasm between information & access.

Thanks
Appendices

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Labeling Guidelines 121
Grouping Guidelines 122
Graphic Standards 123-124
Navigation Cues & Devices 125-131
Appendices
Quick Site Testing (Steve Krug)

- Print out a dozen pages from different sites.
- Color print them.
- Hold & arm’s length & squint.
- How quickly can you locate the items from the list on slide 21? The crucial indicators should pop out at you.
- Repeat using your own pages as you work on your site.
Appendices
Labeling Guidelines

• Avoid vagueness.
• Be consistent! Use the same label to refer to the same thing across all site pages.
• Avoid the use of synonyms on labels on the same page (confusing whether links lead to the same or different places)
• Avoid ambiguity in labeling; test to determine if context clarifies. The indexing process may introduce ambiguity.
• Retain consistency of granularity in labeling. Use indentation or font size changes to show differences in granularity.
Appendices
Grouping Guidelines

• Categorizing & grouping reduces cognitive overload. It makes things controllable & simplifies decision making by providing an illusion that there are less choices.
• It also saves the time of the reader by speeding text scanning.
• Organize groups in logical hierarchies based on relationships; use indentations to subgroup.
• When a subject based hierarchy is not possible, organize numerically, by date, or alphabetically, depending on the resource.
Appendices
Graphic Standards

• Use multiple navigation aids—people have different navigation, search & browse styles, and will respond to the cues (color, size, location) that affect them.

• Text links should be colored and underlined to achieve the best perceived affordance of clickability.

• Images require alternate text—so do tables because text readers garble them.
Appendices

Graphic Standards

• Draw organizational information from print publication standards for non-fiction books. Scannability of text, headlines & sizing, images & captions, sidebars, footnotes, footers, tables of content, chapter headings, index & so forth.
Appendices

Navigation Cues & Devices

• Accessibility
  • Alternate Text
  • HTML Heading Codes (H1, etc.)
• Alphabetization
  • Directories
  • Lists of Subject Links
• Anchors
  • Back to Top & Bottom of Page
  • Headings/Subheadings
• Breadcrumbs
Appendices

Navigation Cues & Devices

• Calendars/Event Schedules
• Communications & Feedback
  • Acknowledgment Messages
  • Contact Us
  • Directions (*How to get somewhere*)
  • Instructions (*How to do something*)
  • Labels
  • Notices (*More, New! Updated, etc…*)
• Page Titles & Subheadings
• Sound Tones
• Webmaster ID & Contact
Appendices

Navigation Cues & Devices

• Directories & Menus
  • Bottom of Page Text Version of GNB
  • Drop Down Boxes
  • Navigation Bars
  • Pop-ups
  • Rollovers
  • Tables of Content
Appendices

Navigation Cues & Devices

• Graphic Cues
  • Color Coding Sections/Tasks/Utilities in Global Navbar
  • Color, Font & Size Coding of Heads & Subheads
  • Deactivation of Self-Page Links
  • Icon/Button Design
  • Page Titles
  • Pointers ("You are here.")
  • Placement on Page
  • Visited Link Color Change
Appendices
Navigation Cues & Devices

- Global (Top) Navigation Bar
  - Home Page Link
    - Site Identification & Tagline (Logo)
  - Regional Links (Site Content Divisions)
  - Task Links (Site Functions, including Search)
  - Utility Links (use these or relevant others)
    - Contact Us
    - Help Link
    - Site Index
    - Site Map

The GNB is in order of layout here, as a mnemonic.
Appendices

Navigation Cues & Devices

• Regional (Side) Navigation Bar
  • Section Directory/Table of Contents
  • Subdirectories

• Search Boxes

• Selection Devices
  • Buttons
  • Check Boxes
  • Hypertext
  • Radio Boxes
  • Specialty
Appendices
Navigation Cues & Devices

• Security Procedures (Login Boxes)
• Special Pages
  • Acknowledgement of Form Submittal
  • Pop-Up Pages
  • Results
  • Search
  • Other
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