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## ***Introduction***

Creating a web site is fairly easy. Programs like Front Page and Dreamweaver have streamlined the process to such a great extent that developing your own site is scarcely more difficult than typing a letter. Coupled with the relatively low costs involved, many people have taken to using the Internet to promote everything from pets to products to political statements.

But what separates a good web site from a bad web site? Although you have probably encountered both before, this class is designed to help you determine exactly why a site is good or bad and how you can use that knowledge to improve your own web site.

## ***Defining Good and Bad***

You have most likely been to web sites that you really hate, and it is possible that you have visited sites you really enjoy. This section looks to explain how and why those sites differ, and what you can do to replicate them.

### **Who is the Audience?**

The first thing a web designer should do is to determine for whom the web site is being designed. A parent may come to a web site with entirely different intentions than those of his or her children. A web site should “speak” to its largest target audience and try to identify with the user.

#### ***Define the Core Audience***

- Highest priority
- Who are they?
- What are they like?
- In what types of things are they interested?
- Site should speak to/identify with this group

### *Multiple Audiences*

- What commonalities do they share that should be exploited?
- What differences do they have that should be downplayed?
- If possible, define precisely who is more dominant

### *Examples*

#### CNN.com (good)

- Visited by information-seeking adults
- Design focuses on information over presentation
- Links to top news stories on main page
- Visitors quickly presented with news items
- Tends to be conservatively designed

#### MTV.com (poor)

- Visited by younger demographic
- Designed as a full-function portal
- Links to everything on main page
- Visitors presented with arbitrary links
- Site attempts to be all things to all people

#### Google.com (good)

- Visited by people wanting to search the internet
- Design almost absent
- Only immediately noticeable option is search
- Minimalist design to appeal to widest possible group

### **What is the Purpose?**

In connection with who is looking at the site, a good web designer will also look at what the primary purpose of the site is. Is it selling a product or service? Is it promoting a message? What is the underlying message with which users should leave the site?

*Define Content/Expectations of the Site*

- What will be important to the defined audience?
- What will be unimportant/irrelevant to the defined audience?
- What information is already available?
- What information needs to be generated?
- Is there a “call to action?”

*Define Content Hierarchy*

- What information is most important?
- What information is most requested?
- What information best suits the defined expectations?

*Examples*

Snoopy.com (good)

- Not geared solely towards selling product/service
- Not geared solely towards Peanuts comic strip
- Aimed at promoting the Peanuts franchise and increasing brand consciousness

SpiderMan.com (poor)

- Focus seems to be towards selling comic books
- Does not promote other merchandise
- Promotes Marvel and Spider-Man franchises equally

KMart.com (good)

- Most functionality is related to selling things
- Downplays corporate image
- Immediately presented with options to purchase products

## Where are the Fancy Graphics?

Many people associate “design” with lots of graphics. While a designer may opt to use flashy, eye-catching graphic effects to attract users’ attention, too many graphics can overpower the purpose to your audience. The graphics should serve only to enhance the user’s experience, not detract from it.

### *Design vs. Graphics*

- Design: the art of using elements to convey information<sup>1</sup>
- Graphics: a visual representation used especially for illustration<sup>2</sup>
- Design includes typography, images, layout, positioning, and all other visual cues

### *Examples*

#### AltaVista.com (good)

- Only has three graphics (20k total)
- Navigation links are all text
- Little question about functionality of site

#### SpringDot.com (poor)

- Extensive use of Flash animations
- Content is not very substantive
- Irrelevant music and sounds

#### NBC.com (good)

- Mostly text navigation
- Graphics used mainly to highlight a few key shows
- Simple use of color to differentiate various sections of page

## Why Should I Care?

Working as a webmaster for Wright State University, the criteria apply equally.

Wright.edu is an extension of the University as a whole, and the individual departments

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<sup>1</sup> Merriam-Webster Dictionary, 2002

specifically. Both prospective and current students use the Internet extensively and consider it a primary source of information.

### *Statistics*

#### Carnegie Communications Study<sup>3</sup>

- 55% of students find web more useful than print
- 68% of students find more in-depth information online than in printed pieces
- 59% of students use college web sites more frequently than print materials
- 66% of students would use the web over printed materials if given the option

#### Wright State Survey<sup>4</sup>

- 89% of wright.edu visitors use the Internet daily
- 34% of wright.edu visitors come to wright.edu at least weekly
- Additional 20% visit wright.edu daily

### How Do I Do That?

Although several courses in graphic design and user interface design would be necessary to adequately cover the nuances of the thought processes of a designer, some basic principles will be outlined here.

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<sup>2</sup> Ibid

<sup>3</sup> *Project Connect 2001*, 2001, p. 8

<sup>4</sup> *Wright State University Web Visitor Survey*, 2001, Internet Usage

### *General Graphic Design Principles<sup>5</sup>*

- Clustering
- Visibility Reflects Usefulness
- Intelligent Consistency
- Color As a Supplement
- Reduced Clutter

#### *Clustering*

Clustering is the process of keeping similar “controls” (e.g. menus, dialog boxes, etc.) in visually distinct areas. For example, keep the main navigation links in one area, but move the contact information to another part of the page to ensure they are not believed to be the same type of information.

#### *Visibility Reflects Usefulness*

By making controls that are used most frequently the most obvious and easiest to access, the implicit assumption is that those highly visible functions are more useful. Conversely, controls that are not as useful or important should be reduced in visibility to imply their decreased importance. For example, the “last updated” portion of a page should probably be a smaller font than what is used for the main body of the content.

#### *Intelligent Consistency*

By repeating screen designs and layouts through several different, but similar, functions, users can quickly become intellectually familiar with the page consistency. Several academic departments in the same college, for instance, could easily benefit by utilizing similar layouts and page structures.

#### *Color As a Supplement*

Color alone should never be used to carry information; it can enhance and emphasize but, since 7% of all adults have some form of color blindness<sup>6</sup>, it should not inform. Color

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<sup>5</sup> Lewis & Rieman, 1994, chap. 3

<sup>6</sup> Nielsen, 2000.

also has different emotional implications in different cultures that do not always convey the same implicit message you may have intended. Bottom line: Do not say, “Click on the green button.”

### *Reduced Clutter*

Many philosophies and religions have used the “less is more” concept, and design is no exception. Simply put, do not put too much on the screen. Give the user enough information for understanding, but not so much as to initiate confusion.

### ***Usability Over Accessibility***

You may have heard the terms “usability” and “accessibility” bandied about while talking about web sites. They are, in fact, two distinct properties of web sites with very different mind-sets involved. Accessibility is discussed frequently on Wright.edu, as well as in the Front Page training classes held here. Therefore, this section will focus on web site usability.

### Who Will Notice?

Usability is different than accessibility in that, while inaccessible web sites mainly affect only those with disabilities, web sites with poor usability affect every visitor. Web sites are rarely completely unusable; however, the degree to which they are unusable will have an impact a user’s reaction.

Highly usable sites often go unnoticed. If designed well, use of the site is so natural and intuitive that the user can focus all of their attention on their main intent (getting information) and not extraneous tasks (filtering unwanted information). Good information architects and designers are rarely given adequate praise for their work because it blends in with the utilization of the site so well that it becomes invisible.

Inadequately usable sites, on the other hand, do get noticed, generally for the last reasons that their creators would like. If information is hard to locate or retrieve, users become frustrated or angry. Those negative emotions generated by the web site often translate into negative emotions to the entity as a whole.

## What is the Difference?

“Simply stated, if the customer can’t find a product, then he or she will not buy it.”<sup>7</sup>

That, in a nutshell, is usability. An inaccessible web site will not be able to be used by some people with physical handicaps; whereas a poorly usable site will not be able to be used well by anyone.

### *Definitions (as they relate to WSU)*

- Usability: Whether or not your site can be easily understood
- Accessibility: Whether or not your site can be used with assistive technology

All web sites have a hierarchy, whether or not one was actually designed. Some information will be given more prominence than other information; a highly usable web site will structure all of the information so that the flow from the most to the least significant is as natural as possible.

### *Principles of User Interface Design<sup>8</sup>*

- Early and continual focus on users and tasks
- Interactive design in which potential users of the system participate in the design
- Usability testing
- Iterative design

The best designs generally come from projects that had a great deal of user involvement. Let the users dictate what their interests are. Let the users dictate what they want to see. Let the users make suggestions. Let the users make more suggestions once the design is complete.

This, of course, does not mean that you should follow each and every suggestion or request every individual makes, but it does mean if nine out of ten people have trouble

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<sup>7</sup> Nielsen, 2000, p. 9

<sup>8</sup> Mulligan, Altom & Simkin, 1991, p. 232

finding something, there is a strong chance that there needs to be an easier way to get to it. This does not mean that users should dictate the exact placement of elements or specific style preferences, but it does mean that they should help determine the hierarchy of elements and/or content.

The purpose of testing is not to prove an interface, but to improve it.<sup>9</sup> Testing results should be carefully studied, and design modifications should be made accordingly. With additional changes should come additional testing. The process of developing a web site ought to be a perpetual one.

### Where Should I Put Things?

The English language was designed to be read from left to right, top to bottom. Those fluent in the language expect their information to be passed along in this manner and, as a general rule, this holds true in web site design.

#### *Hierarchy*

The upper-most left-hand portion of any web site should contain the single most important piece of information on any page. Generally speaking, that means you need to quickly identify with whom or what the web page is associated. The user needs to know whose page it is onto which they have stumbled. This is often done with the entity's name and/or logo. At Wright State, we are trying to bring students to campus, so name recognition is of the utmost importance.

The next most important piece of information should go just to the right of that. In most cases, the page itself needs to be identified. Users should not be forced to read through the page to learn what it is about; present the subject matter as simply and quickly as possible. Within the context of a University, it is often appropriate to place equal emphasis on both the page itself, as well as the department that is providing the

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<sup>9</sup> Lewis & Reiman, 1994, chap. 1

information since many element categories, like “contact information” or “office hours,” are common throughout many departments.

Users often come to pages by following random links, not necessarily from your site. If the page does not contain the information for which they are looking, they need to be provided with as easy a way as possible to get to what they do need. Navigation, therefore, becomes a largely critical component of web pages. Not only where it is located (third in the overall page hierarchy), but how it is defined.

### *Navigation*

There are two main factors in making navigation usable. First and foremost, the user must be able to read the information. While this may sound obvious, many people use decorative fonts, while others use only graphic icons. Both of these can hinder a person’s ability to understand what content is behind a link.

Second, but equally important, is the exact verbiage itself. Does a link that simply says “Staff” mean that clicking on it will call up a page about the staff members, or does it call up a page for staff members? Using concise, but descriptive, link names to let users know what content is behind each link.

### *Example*

#### WSU Prospective Students

- Average prospective student is 17-18 years old
- Many prospective students do not understand the word “prospective”
- “Prospective Students” link was re-titled “Future Students”

### *Content*

Although it is often considered the most important part of any web page, content is actually fourth on the list of a page’s informational hierarchy. Since the body of a page usually accounts for, rightfully, most of a screen’s “real estate,” coupled with the fact that

most people are able to scan the other information in a matter of microseconds, page content is frequently given more importance.

### *The Web Is Not Power Point*

Frequently, web site creators develop web pages that look and feel like Power Point slides. The information is presented in a linear fashion and users must read from beginning to end in order to receive information in any sort of intelligible manner. While this may be useful for a large, captive group, the online experience is a uniquely personal one and must be treated as such.

Individuals have different reasons for coming to a web site and are often looking for specific pieces of information. Rather than force them to wade through several pages (slides) of unwanted information, a web site developer should provide access to any and all information as equally as possible without overloading the user with options.

### *Example*

TestDriveGQS.com (poor)

- Text is limited to one or two sentences per screen
- Forward and Back buttons suggest linear construction
- Clearly written as sales copy
- Does little to engage the user

### Why Don't People Read My Page?

Getting users to actually read a web page requires additional work. Monitor resolutions are notorious for the amount of eye strain they can cause. A Morkes and Nielson study<sup>10</sup> found that 79% of users always scan a web page before reading it. After making sure the user is capable of getting to the information, a site designer needs to also work to ensure the information is as digestible as possible.

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<sup>10</sup> Nielsen, 2000, p. 104

Although the reasons why people scan are still somewhat unclear, the effect that fact should have upon online writings remains the same. Text should be broken in to smaller chunks with descriptive headings. Bulleted lists help break up the page and provide easily read copy. Make the text as easy as possible to scan, giving users several “resting points” throughout the copy.

Writing in an “inverted pyramid” style also makes reading easier online. Used frequently in journalism, writers start by presenting a topic as succinctly as possible. Subsequent sentences and paragraphs should only serve to elaborate on the main point, and a reader should be able to stop anywhere in the text and still have a clear understanding of the topic.

### How Do I Fix It?

The first mistake many web developers make is skipping the planning stages. As with any complex project, planning ahead is crucial for a successful outcome. Take some time to determine for whom your site is, what the purpose is, and how relevant graphics are to that message. In most cases at Wright State, the audience is current and prospective students, and the purpose is to get or keep them enrolled in school.

### *Statistics*

#### Wright State Visitor Information<sup>11</sup>

- 44% of wright.edu visitors are undergraduate students
- 23% of wright.edu visitors are prospective students
- 8% of wright.edu visitors are graduate students
- 6% of wright.edu visitors are alumni
- 5% of wright.edu visitors are employees

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<sup>11</sup> *Wright State University Web Visitor Survey, 2001, Relationship to WSU*

#### Wright State Web Site Uses<sup>12</sup>

- 38% of wright.edu visitors access the site to view ROX
- 37% of wright.edu visitors access the site to view Directory Information
- 37% of wright.edu visitors access the site to view Work/Business Information
- 29% of wright.edu visitors access the site to view Educational Opportunities
- 28%% of wright.edu visitors access the site to view Library Resources

Generally speaking, when a site is in need of a substantial update, it is better to start with a new foundation. By simply adding to the site or moving portions around, the site will almost inevitably hold vestiges of previous problems, some more grossly apparent than others. By starting over, and taking the time to analyze what the site should be and do, the updated site will be better able to handle the changes that are implemented.

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<sup>12</sup> *Wright State University Web Visitor Survey, 2001, Reasons to Visit the WSU Site*

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