

**Putting the U in the W:
A Non-Technical Introduction to Web Sites for Archives**

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Abstract

A non-technical introduction to the design of web sites for archives based on the experiences of the SLAC Archives and History Office in designing and redesigning its own web site.

Introduction

I am here today to give you a non-technical talk about creating a web site for your archives. I will not be talking about html, but instead talking about the design process and showing how that turned out in the web site that I designed for the SLAC Archives. I'll be speaking from my experiences creating the SLAC AHO web site and the current process of redesigning it.

First let me say that I am not a computer guru. At a previous job I was seen as such because I grew up with computers starting in the days before everything was Mac or DOS let alone Windows so everyone came to me with every little computer problem. Now I work at a place where the archives is a minor player in the use of computer power. Unlike other institutions where the archives is a big user of computer power because of their extensive use of databases, at SLAC the scientists make much larger demands for running their experiments and storing and analyzing their data. It's not called big science for nothing.

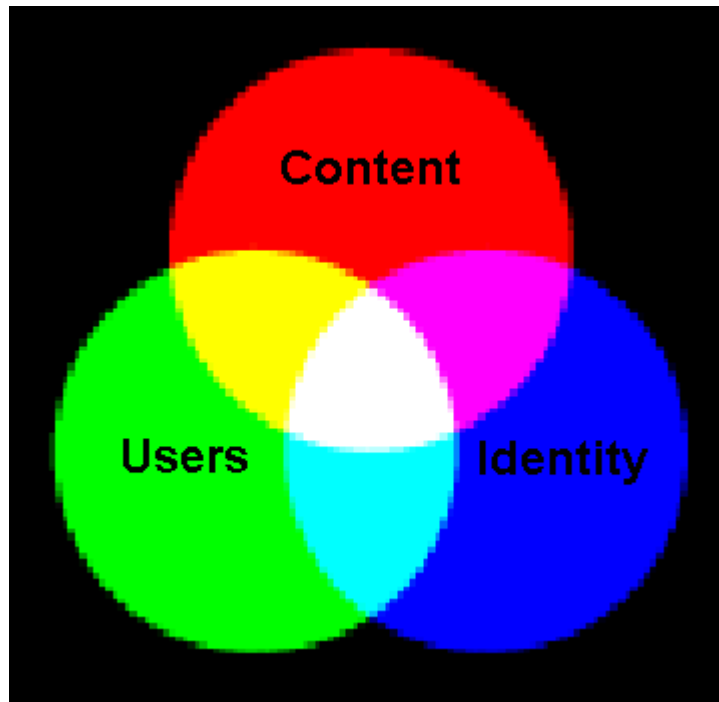
While I am on the topic of the scientists at SLAC let me do a little bragging. The first web site outside of Europe was at SLAC. The web was invented at CERN, the European research laboratory, as a way for international collaborations of physicists to share information easily.

Design process

My point in saying that I am far from a computer guru is that this is a process which you can do. In fact, you must be involved in the design process. Some of the technical pieces and perhaps the visual pieces are best left to someone else, but you must provide the vision and the content. Without content a web site is not of much use.

Define your goals. First let's think about uses for a web site—why you want one (other than that every one has one). Do you want a digital brochure? In a way you can think of the web as a HUGE vertical file of information that is constantly accessed and accessible. Or do you want more of an online reading room or reference desk room—with access to your collections perhaps through a database interface. Are you looking for a place to present educational material? Are you looking for a place to share your policies and procedures?

There are three aspects that you need to define—content, users, and identity. They intersect and it is sometimes difficult to consider them separately.



Content is what you put on your pages—what you write, how you write it. Your goals should define how you create and present your content. If your goal is to inform the public that you exist then your content will be voiced like an informational brochure or a press release. If it is to educate K-12 then make your voice and content instructional. You probably have some of this written in publicity brochures, publications, handouts, and policies. Unkindly, this is known as shovelware, but if you take a look at what you have and match it up with what you want, do a little editing to unify the voice, you've got the kernel of your content.

Users are your audience. As you know, the web is global, but you need to define your audience so that you create your content and identity to best convey your information to them. Is your audience other archivists? Is it archives users and researchers that are known to you? Is it unknown researchers in your field of collection? Is it your institution? Or is actually the general public who comes? What are the expectations of these users? What are the demographics (who they are) and psychographics (what they do)?

Identity is the look and feel of your pages. You want to have unity so that your web users are oriented and come away with the information that they wanted (hopefully this matches up with what you want to tell them). Disoriented users leave in frustration. And you want happy users to know who you are so be sure to keep a strong identity throughout the site. (I suppose if you have a disjointed site then you don't really want the user to know who you are.) Templates are useful for supporting consistent look and feel. You want the users to know exactly where on the page to look for their answers as they move from page to page. Choosing a consistent color scheme also helps. In fact color and other visual clues are very helpful to users. Use that visual strength of the web (but remember to use alternate text for any images to make the site more accessible to visually handicapped and those with non-graphical browsers).

Your structure pulls all of this together. Separate the information into page-sized chunks; connect the pages along routes of use and user thinking; provide information, context, and navigation cues; create a consistent look and feel; and finally create an extendible directory and file structure. Breaking the information up increases the chances that the users will absorb it. Organizing it in tandem with user thinking makes it more likely that the users will find what they want quickly. Providing consistent navigation aids them in jumping from one thing to the other and finding it again. Consistent appearance provides a sense of security and reliability. And finally a flexible structure helps you making it easier to update and adjust your site as you have new goals.

All of the preceding is done on paper in outlines, tables, and storyboards; now you create and test your site. There are many tools available for creation—FrontPage, Netscape Composer, even MS Word allows you to save a document as HTML. Check the technical construction of web with validation tools such as Bobby and NetMechanic. I've put a list of resources at the end of the handout. Have co-workers and friends who haven't been involved in the creation test the site to evaluate information consistency, usability of the navigation tools, and durability of the links. Check implementation in various browsers especially Netscape and MS Internet Explorer. Finally, publicize your site so that others can visit: announce it on the A&A list, announce it on lists pertaining to your subject, contact the owners of those web sites that list archival web sites, put your URL on all of your other publicity.

Oops, did I say finally? One thing you should take away today is that a web site is never done. You should be ready to continuously and creatively work for improvement to meet user needs. As you and others use the site you'll discover pieces that need tweaking, get requests for other pieces that should be incorporated (that's why you make your structure flexible). There are tools that can help you analyze your use statistics. You can study what parts of your site get the most traffic, which parts generate the most errors, that type of thing. And as you become at ease with creating web pages you'll want to integrate more and more into your site. Just remember that it is a tool not an end in itself. It should make your work easier not harder.

Our site

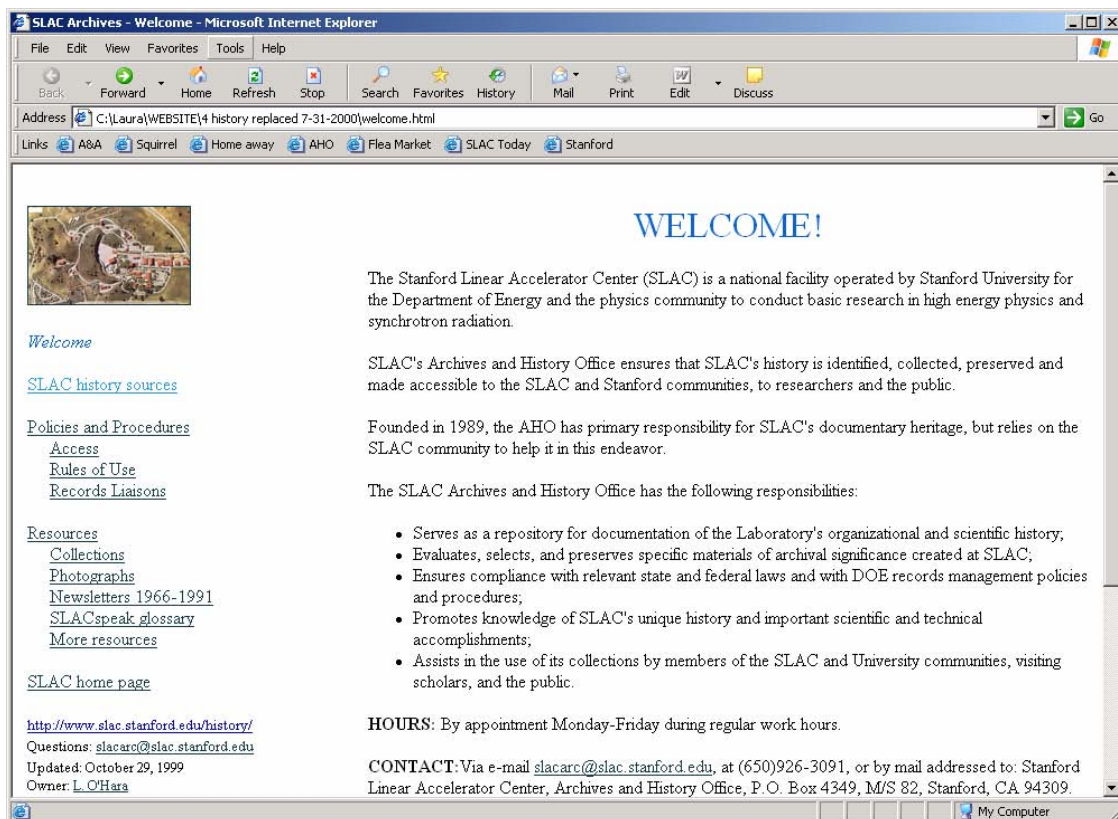
We created our site at SLAC for three purposes: to provide our policies and procedures so that we could easily answer questions from the records creators at SLAC and from potential researchers; to provide access to our collections through description and interfaces with our databases; and to educate users about SLAC history. The overarching purpose of the site is to head off those frequently asked questions about us and our collection freeing us to concentrate on other responsibilities. Our technical requirements were to keep it fast loading, keep page content as concise as possible to minimize scrolling, and keep the site accessible by as wide a range of platforms and browsers (remembering that many users will have older equipment and software). We also required flexibility in structure. Parts of our site are fairly static—our policies remain the same—while other parts need to be changed to reflect new knowledge as we work with our collections.

We defined our success metrics for each section of the site:

- For SLAC history: if we continue getting requests for additions to this portion of the site causing it to become better balanced with the other sections
- For policies and procedures: if we get fewer cold calls about policies and procedures
- For AHO resources: if we get fewer calls asking us to find material about a specific subject and instead get more calls requesting specific items or collections

We defined our users by section as well. The SLAC History and Resources sections serve SLACers and the general public (often high school students doing history or science projects). The Policies and Procedures section is used primarily by SLACers, especially records liaisons, people who are in control of records at SLAC—creators and maintainers.

Once we defined our goals and audience, we got down to the business of planning the site. I started by visiting as many other archives' web sites as possible—evaluating what I thought worked and didn't work, what I liked, and what I thought we should include in our own site. I came up with three very different favorites as well as the lists of must-haves and to-avoids. Our summer student then looked at a selection of the same pool of others' sites and gave us input as to what worked and didn't work for her, someone from outside the world of provenance and accessioning, someone not inculcated with the terminology and habits of the archival field. We then took what we wanted to put on the site and what we knew we could create as part of the project and started the planning. This was in the form of paper mockups of the pages which I taped on big sheets of paper hanging from our supply shelves. This process allowed us to rearrange and rewrite the site before we had done the time-consuming task of coding it in HTML.



For our identity, we chose a page format that repeats across the site. Each page has an image in the upper left corner, a table of contents for navigation on the left, followed by identifying and contact information including date of last update (this identification and update information is one of the few requirements from SLAC's web coordinating committee and I think a useful thing that everyone should use), and then the content on the right. The left stays the same from page to page with the exception of the image—each section has a corresponding image—the aerial for Welcome, the spark chamber pattern for History, the quadrupoles (magnets that guide the beam in the accelerator) for Policies and Procedures, the wizard for Resources, and a cutaway of the waveguide for the FAQs. Of course there are exceptions, there are always exceptions. The section for our Program Review Committee has a different format as do the record retention schedules. This reflects the different needs that are addressed by these pages.

Much of our content was created for other purposes and then made part of the site or integrated at a later date. Obviously many of our policies and procedures pre-date the web site. In addition, as we answer reference questions we get a sense of what topics our users are interested in and using our research we create new "Did you know?" pages. This double-duty approach has worked the other way as well, we have created two brochures based on content of our web site. Both brochures refer readers to our site for more information. This is where the flexibility of the structure is so helpful. For example, as we neared the 25th anniversary of the November Revolution (the reason for our just past director's Nobel Prize), we created pages to provide background for SLACers and the general public. The addition of this page was announced in the QuickNews, a web bulletin board at SLAC, and we saw a 90% increase in traffic to our site. So you can see that flexibility can greatly enhance your site's usefulness.

I've shown you pieces of the History section of the site and I am sure you are all familiar with the type of thing that can be found in the Policies and Procedures section of the site. I want to show you the Resources section of the site. This is the part of the site where we called in an expert (who, I'm sorry to say, we just lost to the dot-com world). As part of our work we create databases; our databases are on the UNIX mainframes at SLAC in SPIRES, a database system that was created in the Stanford physics department and spread to all of campus. Our expert created web-based interfaces to make these databases accessible to our users. [Demonstrate PhotoIndex and SLACspeak] We plan to roll out the other interfaces as time and staffing allow.

The site I've shown you today is our original site with the additions that we have made over time. I am taking the advice that I am giving you today and working on improving it. I have already made the plans that will even out the content, reorganize the structure to reflect users needs, and finally consistently apply our new logo to all pages so that we remain in the mind of our site users.

Conclusions

Now that I've walked you through the process, think again about what you want out of a web site. Think back on what I've said about defining your goals, identifying your audience, creating your identity.

You can create a site by yourself—you can buy a book to teach yourself html, you can get products to help in the creation (some are even free), you probably have to buy space on a server or get space on your home institution's server, or, if you are really ambitious, you can become a web server administrator and host yourself.

Or you can hire someone to do it for you. Just be sure that you involve yourself in the design so that the product is something that you can use and be proud of.

Whether you do it in house or contract out remember, it takes time to keep a web site cohesive and timely. Little bits of time to make corrections, additions, keeping a unified look, updating time-critical information such as a calendar of events—they all add up. Either build that time into someone's duties or, if you contract out, build it into the contract that services either include updates, modifications, and maintenance or the product must be designed so that such activities do not require extensive knowledge on your part.

Resources

Putting the U in the Double-U
A Non-Technical Introduction to Web Sites for Archives
Laura O'Hara, Stanford Linear Accelerator Center Archives and History Office
Society of California Archivists Northern Spring Program
Make New Friends and Keep the Old: Outreach and Public Relations in Archives
May 12, 2000

Laura Lemay and Denise Tyler, *Teach Yourself Web Publishing with HTML 4 in 21 Days*

This is a more recent edition of the book I used.

useit.com: usable information technology

<http://www.useit.com/>

I especially recommend reading "Top Ten Design Mistakes," "Top Ten Mistakes' Revisited Three Years Later," "The Top Ten New Mistakes of Web Design," and "Ten Good Deeds in Web Design."

Webmonkey: The Web Developer's Resource

<http://hotwired.lycos.com/webmonkey/>

Graphic, Visualization, & Usability Center's (GVU) 10th WWW User Survey

http://www.cc.gatech.edu/gvu/user_surveys/survey-1998-10/

Redesigning Your Web Site >> David Hendee

<http://www.engineered.com/~david/redesign/>

This was the web site for a class I took at Stanford. David links to several examples and resources.

Bobby

<http://www.cast.org/bobby/>

Bobby is a web-based tool that analyzes web pages for their accessibility to people with disabilities.

Net Mechanic

<http://www.netmechanic.com/>

Give your site a tune up! Find problems before your visitors do!

Web Site Garage

<http://websitegarage.netscape.com/msfp/>

Web Site Garage provides services for maintaining and improving your Web site. Automate site maintenance checks, optimize your graphics and analyze your traffic.

Yahoo directory to everything WWW

http://dir.yahoo.com/Computers_and_Internet/Internet/World_Wide_Web/

Yahoo directory to Log Analysis Tools

http://dir.yahoo.com/Computers_and_Internet/Software/Internet/World_Wide_Web/Servers/Log_Analysis_Tools/

AccessWatch

<http://accesswatch.com/>

AccessWatch is one of the most popular website traffic analysis tools on the net. It is designed to be easily installed and create comprehensive reports to summarize activity on your site.