

Web Site Redesign Follies

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ABSTRACT

Once upon a time, word spread that geeks could get together in a new kingdom called Cyberspace. Subjects raced to upload information onto the new kingdom. Eventually, any old jester was uploading pages. It was wonderful! It was exciting! It was unmanageable! Sometimes it was downright ugly!

Nearly two years ago, California State University (CSU) Dominguez Hills initiated a Web site redesign with the goal of developing a site that is both beautiful and easy to use. At midpoint, the Center for Usability in Design and Assessment (CUDA) added a whole new set of design criteria by asking the question, "Can the site viewer find the piece of information s/he seeks?"

Jan Boucher is project manager of CUDA, located on the campus of CSU Long Beach, which serves both corporate and educational clients. Marion Smith, coordinator of instructional computing services at CSU Dominguez Hills, has been a CUDA client. Using CSU Dominguez Hills as a case study, they will outline the process and pitfalls of a Web site redesign, focusing on the following three areas:

- Political
- Web management/maintenance
- Interface

Jan will offer guidelines and considerations for redesigning an attractive and useful Web site that markets your institution and programs, provides easy access to information for site visitors, and is reasonable to manage and maintain. By identifying and balancing major stakeholders' needs you will have a better chance at keeping kings as well as jesters happy, so you can live happily ever after (yeah, right).

Keywords

Web site, redesign, Web site redesign, usability, CUDA, public affairs, information technology

1. INTRODUCTION

How's your Web site? Chances are you have redesigned, are redesigning, or plan to redesign the site you first uploaded for your organization a few years ago. If your case is typical, the site has grown in a disorganized fashion since first hitting the Web. These have certainly been the experiences for Marion Smith of California State University (CSU), Dominguez Hills (CSUDH) and the CSUDH Web site, <http://www.csudh.edu>.

If a fight for control of the site is being waged by various campus constituents, calling in a professional, outside organization can bring peace to your campus and sanity to the redesign. The Center for Usability in Design and Assessment (CUDA) is an organization that can unify the design of and moderate the battlefield for a new site. CUDA is housed appropriately in the CSU Long Beach psychology department. Directed by Gerry Hanley, Ph.D., CUDA's staff is comprised of human factors specialists such as project manager Jan Boucher. CUDA has an observation lab (one-way mirrors facilitate the observation) in which you can view subjects trying to navigate your site, and CUDA will come to your workplace to provide seminars and consultation.

This paper presents a chronological excursion through one university's Web site redesign, followed by ideas and tools you can use to make your redesign a peaceful, productive process that results in a site that viewers will want to visit and revisit.

2. A CASE STUDY

2.1 In the Beginning

In the beginning (five years ago), CSUDH hired a webmaster, who proceeded to get the university online. He had a nice combination of artistic and technical skills. The webmaster reported to the director of Instructional Computing Services, now a department of Information Technology (IT). He designed pages for some units, while department geeks designed many others. He granted file transfer protocol (FTP) access to the university site as requested. A site designed this way has several unavoidable problems:

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Table 1. Summary of redesign issues and a web site redesign calendar

Date	Web2K Committee Activities	University Environment	Web Site	Comments
November 1998		Interim president asks IT executive director for a quick redesign		
January 1999	Born; meets weekly		Redesign begins	
July 1999	Tier 2 Web developers (one from each division) join Web2K. Web2K writes report requesting this definition of responsibilities: <ul style="list-style-type: none"> • Webmaster (IT) • Designer (PPA) • Web coordinator [homeless] 	<ul style="list-style-type: none"> • New president arrives • IT executive director and Web2K chair resign • Webmaster takes different assignment • Web site designer resigns 	August 6 launch date is set	
August 1999			Site is launched as a test site	Test site gets high marks for color and design and low marks for loading time and navigation
September 1999	CUDA presents two usability seminars to Web2K, and Web2K sends another report to Cabinet requesting: <ul style="list-style-type: none"> • January launch • Training at the CUDA for Web2K • On-campus usability training for other developers • 2 part-time, 6i-month positions—designer/programmer and information manager • A meeting with cabinet to urge attention to the University Web site 		Redesigned site is abandoned and a new redesign begins. No launch date is set.	
October 1999	Prepares 2-minute Web redesign program for Cabinet	Cabinet does not have time for this program		The meeting with Cabinet has never taken place
November 1999		A new webmaster is selected		INS delays webmaster's first day of work to June 1, 2000
January 2000	Web2K sends another report to Cabinet requesting a permanent Web manager	IT and UA chiefs plan to ask Cabinet for funding for a ½ time Web manager	Re-redesigned site is launched	As of summer 2000, Cabinet has not responded to any requests or reports about the Web site. No one is in charge of the site.

- The university site did not have a consistent design or navigation;
- The webmaster did not have the authority to relegate a page to a lower level (and everyone wanted to be on the top page!);
- The university logo appeared in many variations—frequently ugly!—on the site.

Exactly two years ago, CSUDH was searching for a new president. One candidate called the interim president to complain that he was unable to find a vice president's telephone number on the university's Web site. Uh oh. This call led to an urgent request from the president to the executive director of IT to fix up the highest level pages—fast. IT's executive director appointed one of his directors to do the work--fast. When he went to Publications & Public Affairs (PPA) to borrow campus photos for the site,

PPA's director said, "What new Web site? We're developing a new Web site!"

The result? A shotgun wedding of Information Technology and University Advancement (UA) in January 1999. Their baby was the Web2K Committee, chaired by an associate VP of UA. Two directors and the webmaster from IT and a graphics designer/photographer, contract programmer, and the PPA director comprised Web2K. The eighth member was an artist who had never designed a Web page, recently hired by PPA to redesign the university site.

Web2K met weekly. In April 1999, a nationally known Web marketing consultant presented sessions to Web2K and the president's Cabinet, emphasizing the critical importance of the Web to the university's future and urging an integrated marketing approach to the Web site redesign.

2.2 Summer 1999 - Original Launch Date

July 1999 produced a few personnel changes:

- IT's executive director and Web2K's chair resigned;
- A new permanent president arrived;
- The webmaster took a different position at the university;
- Skipper resigned, effective August 31, 1999.

August 1999 was an important month for two other reasons:

- August 6 was set as the official launch date for the new site;
- Tier 2 Web developers (one from each university division) were added to Web2K.

Web2K immediately redefined the campus's Web staffing requirements:

- Webmaster (reporting to IT)
- Graphics designer (reporting to PPA)
- Web coordinator (homeless)

The Web coordinator was to work with the webmaster and graphics designer as a content specialist in a 6-9 month ½-time position.

August 6 came and went without the Web site launch. Instead, on August 10 Web2K announced the redesigned site as a test site, asking for campus viewers to complete a survey. The test site got high marks for color scheme and design and low marks for loading time and navigation. One Web2K member said, "Have you thought about performing a usability study on the new site?" What? What a concept! She knew about CUDA from CSU system-wide academic technology conferences.

2.3 Fall 1999 - New Design and Launch Date

CUDA presented the first of two seminars to Web2K in early September. About the same time, the PPA graphics designer/photographer who was a charter member of Web2K became the new site designer, and the launch date of the re-designed site became uncertain. Web2K sent a 1999-2000 report to the VP of UA and the executive director of IT recommending:

- Setting a Web site launch date at the end of January (start of the spring semester);
- Sending Web2K members to the CUDA lab in Long Beach;
- Providing on-campus usability training to key constituents;
- Hiring two part-time, 6-month people (January to June 2000): Web designer/programmer and information manager.

Note: With a January launch date, the quick Web site redesign would take more than one year.

Later in September, CUDA presented its second seminar to Web2K, and this seminar resulted in a significant shift in Web2K thinking: *We will focus more on navigation and accessibility than graphic design.* A word about accessibility: Up to this point, Web2K's definition of "accessibility" referred to modem speed and monitor size. ADA accessibility didn't come up. Another major revelation, thanks to CUDA, was that CSUDH organized the old site by *topic* (e.g., academic affairs, IT), rather than *task* (e.g., "Do you have a geology major?" or "Can I use a computer

lab on Sundays?"). Viewers usually have tasks in mind when they come to the site. Web2K wrote new assumptions:

- The home page is a launch pad to the university;
- Design and text should be simple and inviting;
- User groups should be clearly defined at entry;
- Design the site for the lowest common denominator (modem speed and monitor).

Later in September Web2K developed lists of questions viewers would ask of the site, made initial plans to form a Web Developers Group of tier 3 (department level) developers, and planned to give a 2-minute overview of Web usability to the president's cabinet. (The latter meeting was cancelled and has never been rescheduled.)

In November, the authors attended SIGUCCS User Services 1999 in Denver, CO. Jan Boucher facilitated an informal birds-of-a-feather session on Web site redesign. The nodding heads in the room confirmed that many campuses have faced a tension between UA and IT over control of the university's home page. Later that month a CSUDH search committee selected an excellent candidate to become the new webmaster. (Unfortunately, the Immigration and Naturalization Service delayed his first day of work to June 1, 2000.)

In January, IT's executive director and the associate vice president of UA planned to ask Cabinet for funding for a ½-time Web manager. What they didn't specify was the division to which this person would report. At the same time, Web2K delivered another report to Cabinet. Short-term requests were repeated in the report, but long-term requests were added:

- A permanent university Web manager;
- A procedure to identify pages not up-to-date, to notify responsible people, and to remove obsolete pages;
- A redefinition of Web2K as an ongoing body for reviewing Web content and design.

As of summer 2000, there has been no response from Cabinet to any of Web2K's reports.

2.4 Winter 2000 - Launch Time...or is it?

Meanwhile, it was the end of January--the start of the spring semester--and the redesigned site wasn't ready yet. Further, the designer had pneumonia and was sent to bed by his doctor. Another Web2K member saved the day by fixing links and uploading the new university Web site. It's beautiful, but long lists comprise tier 1 pages. Web2K's usability training is not in evidence.

A Web Developers Group (WDG), comprised of anyone on campus who was developing pages for the university site, was launched in February. Some attendees came with initial hostility: They didn't want to be required to change pages to conform to the new design, and some had already redesigned pages to conform to the summer 1999 official design--now abandoned. Attendees were relieved to discover that WDG was instead created for mutual support and an exchange of information. WDG continues to meet biweekly for an hour and appears to provide benefit to developers--especially those who have responsibility for a site but have never created a Web page.

The university's new home page had immediate problems. One significant problem was that tier 1 pages did not conform to the definition of an "official page," as stated in the university's 1997 Web policy (never updated). That policy says that official pages must include the university logo. The new tier 1 pages include the university seal—as a watermark—and no logo. Web2K revised the Web policy to say that official pages had to include the "logo or seal."

2.5 Summer 2000 - The Dance Continues

By summer 2000 the state of the CSUDH Web site was:

- The revised Web policy has not been approved by Cabinet; therefore tier 1 pages and many other pages remain unofficial;
- WDG has turned out to be a wonderful, useful product of the Web site redesign;
- There's still no decision on whether UA or IT is in charge of the Web site.

IT is responsible for the main Web server and simply assumed control of content in June. Marion Smith and the webmaster are helping developers add pages to the site, fixing broken links, and tackling the important questions of best practices and policy, including ADA accessibility. In short, significant Web site work is getting done—almost two years after the president requested a quick redesign—while the slow dance between UA and IT continues.

3. MAKING THE CASE FOR USABILITY

3.1 Four Major Aspects in Evaluating How "Usable" Your Campus Web Site is

This case study demonstrates the power of politics encountered in a Web site redesign. When politics can be set aside, a university Web site redesign offers an unparalleled opportunity to turn a musty first-generation site into an engaging, contemporary site—a site that will work effectively for a wide range of visitors including computer-savvy and not-so-savvy students, parents (prospective and current), corporate partners, and university staff and administrators.

To begin an assessment of your site, ask yourself the following questions:

1. Is your Web site effective?
2. Is it intuitive for first-time users?
3. Is it expedient for return visitors?
4. Are users drawn to or compelled by it?

These are achievable goals that can (dare we say should) drive your redesign.

3.2 Everyone Has an Opinion

One thing that is true of all university sites is that they serve many masters and purposes. Some of these masters may be familiar with your university organization (internal masters) while others may not (external masters). Users of your site usually include:

- Potential students and alumni (external)
- Current students (internal)
- Parents (external)

- Faculty, staff, and administrators (internal)

Content providers usually include:

- Admissions office (internal)
- Alumni office (internal)
- Financial aid office (internal)
- Public affairs office (internal)
- Faculty and academic departments (internal)
- IT Help Desk (internal)
- City and county agencies (external)

Keep in mind that these are only partial lists; you may have others to add before all your site's "masters" are identified. You can expect an opinion about the site from everyone. The Web viewer says, "Does it meet my goals?" This is the challenge to Web interface design and usability. The Web developer says, "Does it meet users' goals?" The developer also asks, "Does it meet my goals and constraints?" The latter is a critical question to the success of the site. The developer may be caught up in campus politics, as developers at CSUDH were, with no clear direction from the top. The developer also needs to ensure that maintenance and management of the site are workable.

3.3 Usability Guidelines for Your Web Site

Some basic organizational usability guidelines to apply to your site are:

- Do organize the site by user task;
- Do not organize the site by topic, with these exceptions:
 - The topic also supports a task;
 - It is absolutely necessary.

Some basic political usability guidelines to apply to your site and redesign process are:

- Do get stake holders to identify and agree on the site's goals, the main user groups, and the main user groups' goals (don't forget Web site maintainers, an easily forgotten but important user group);
- Do collect data to inform and persuade decision makers and implementers;
- Do consider using site administration and management software, such as Team Fusion, to delegate content maintenance, yet keep quality control, on a large Web site;
- Do make sure your goals are based mostly on your visitors' goals;
- Do spend serious time on ADA accessibility for your site.

Recent federal lawsuits have been filed and won regarding accessibility of Web sites for the disabled, especially in the area of screen readers for the blind.

3.4 Web Site Redesign References and Resources Available Online

Many resources regarding Web accessibility are available and include:

- U.S. Department of Justice's Web site Accessibility Checklist, <http://www.usdoj.gov/crt/508/webpage.html>, is the official word on Web site ADA accessibility in the U.S.;
- World Wide Web Consortium's (W3C) Web Content Accessibility Guidelines 1.0 (<http://www.w3.org/TR/WAI-WEBCONTENT/>) provides comprehensive guidelines concerning ADA accessibility from around the world;
- W3C's HTML Validation Service, <http://validator.w3.org/>, provides an free, online, and fast ADA accessibility evaluation for a submitted URL;
- The Access Board, <http://www.access-board.gov/>, is a federal agency committed to ADA accessible design;
- Center for Applied Technology's (CAST) Bobby Web site, <http://www.cast.org/bobby/>, offers another free, online, and fast ADA accessibility evaluation of the URL you submit;
- Accessible Web Authoring Resources and Education Center, <http://www.awarecenter.org/>, a central resource for learning about Web ADA accessibility, is a service of the HTML Writers' Guild.

Similarly, the Web offers numerous resources for studying usability:

- Dr. Jakob Nielsen's Alertbox contains articles from the most highly regarded author on Web usability (<http://www.useit.com/alertbox/>);
- Usable Information Technology, <http://www.useit.com/>, is Nielsen's home page;
- Usable Web: 793 links about Web usability, <http://usableweb.com/>, is a collection of links about human factors, user interface issues, and usable design;
- Center for Usability in Design and Assessment, <http://www.csulb.edu/~cuda/>, can provide objective, third-party guidance for your redesign.

Introducing usability and ADA accessibility to your Web site discussion and design will produce a site that users will return to—with ease and with pleasure.