

First Year Web Report

Cal Poly Pomona

2007-06-21

Introduction

Most web sites at Cal Poly Pomona are either institutional, representing administrative units or other organizations; instructional, containing course materials; or personal. Personal web pages are currently almost exclusively confined to the Cal Poly Pomona Intranet. Instructional pages may be in the Blackboard Learning Management System (not public, hence not included in this analysis) or on the Intranet, where they may be public. Institutional pages are either on the Intranet or on one of a number of servers run by individual administrative units.

Methods

Initial evaluation of the 35 targeted pages was manual, using the Web Developer Toolbar in Firefox. Analyses of the sites represented by these pages were carried out with AccMonitor, using the default Sect. 508 settings.

To estimate the number of user directories with public web pages, PeopleSearch (which queries the LDAP) was used to generate a list of users that end with a specified letter. The first fifty user URLs were visited and the number that had a publicly-viewable web site was recorded. This estimate was developed for other purposes, and no accessibility checks were done on these specific sites.

Twenty faculty sites and 10 student sites were selected for accessibility analysis with AccVerify, using the default Sect. 508 settings. For ease of locating pages, faculty sites were taken from departments having faculty lists with URLs, and student pages were taken from among Art, Computer Science, and Computer Information Systems majors, more of whom seem to have web pages than the average student.

Results

Organizational pages

Thirty-five pages were identified for the first stage remediation and all were remediated by the original deadline of 2007-01-30. The complete sites that contain these pages were chosen for full analysis using AccMonitor, to determine how far the remediation had extended into the sites (remediation normally involved changes to site templates rather than repair of individual pages). Twenty-two of the sites either already used the Cal Poly Pomona web templates, or were converted to them as part of remediation. Thirteen sites do not use the templates

Sites using the Cal Poly Pomona web templates

Campus Map

<http://www.csupomona.edu/map/>

Although the HTML files of the site are 100% accessible, providing navigation information to individuals who can't see maps is a separate (and very challenging) issue.

College of Agriculture

<http://www.csupomona.edu/~agri/>

The College of Agriculture was previously one of the least accessible sites on campus, with images for menu items, no alt text, and JavaScript menus that didn't even work correctly in all graphical browsers. The redesigned site is 96.6% accessible

College of Business Administration

<http://www.bus.csupomona.edu/>

The College of Business home page was completely inaccessible, consisting only of images with no alt text. Other pages were not quite as bad, but the complex navigation of the site and inconsistent use of alts for menu images made the site very difficult. The redesigned site has not yet been satisfactorily assessed: Only 5.6 % of the pages are accessible, because legacy calendar pages are inflating the count of inaccessible pages.

College of Education and Integrative Studies

<http://www.ceis.csupomona.edu/>

The previous site had issues with menu images and other images without alt text. The redesigned site is 98.5% accessible.

College of Engineering

<http://www.csupomona.edu/~engineering/>

The previous site was largely accessible, being based on a text-rich model from the 1990s. The redesigned site is 77.6% accessible; all the failed files are in two legacy areas.

College of Environmental Design

<http://www.csupomona.edu/~env/>

The previous site used frames, but was otherwise largely accessible. The redesigned site is 96.6% accessible.

College of Letters, Arts and Social Sciences

<http://www.class.csupomona.edu/>

This site was one of the first adopters of the university templates. The site is 57.5% accessible, with most of the inaccessible pages being departmental pages on the same server and legacy pages.

College of Science

<http://sci.csupomona.edu/>

The previous site had some accessibility problems. The redesigned site is 99.0% accessible.

College of the Extended University

<http://www.ceu.csupomona.edu/>

This college was also an early adopter of the templates. The site is 30.8% accessible. The inaccessible pages are all part of a legacy course schedule system that still needs to be remediated.

Collins School of Hospitality Management

<http://www.csupomona.edu/~cshm/>

The previous site had problems with menu images as well as other images. The redesigned site has 7 accessible pages (53.8%) and 6 inaccessible, most of the latter resulting from images added without alts since the redesign.

Diversity, HR and Employee Services

A single site was split into six:

<http://www.csupomona.edu/~dhres/>

66.7% of the pages (four of six) are accessible.

<http://www.csupomona.edu/~diversity/>

The Flash on the home page has alternate content. All the other pages are accessible.

<http://www.csupomona.edu/~hr/>

66.3% of the pages are accessible. The inaccessible pages are legacy content that have either not been converted or are deprecated but still linked.

<http://www.csupomona.edu/~jobs/>

100% of the pages are accessible.

<http://www.csupomona.edu/~payroll/>

97.5% of the pages (all but one) are accessible.

<http://www.csupomona.edu/~odt/>

94.6% of the pages are accessible.

Division of Academic Affairs

<http://academic.csupomona.edu/>

As a result of the redesign, the main division pages were moved to a separate server. They are 100% accessible. Other division pages remain on other servers, and have not yet been tested.

Division of Administrative Affairs

http://www.csupomona.edu/~adm_affairs/

The primarily-text design of the previous pages was largely accessible. The redesigned site is 80.0% accessible, with inaccessible pages being almost all legacy pages.

Division of I & IT

<http://www.csupomona.edu/~iit/>

This site was one of the earliest adopters of the templates. The site includes all the departments of the division except I&IT Learning. 100% of the pages are accessible.

Division of University Advancement

<http://e-advancement.csupomona.edu/>

This site was an early adopter of the templates. The site is 58.4% accessible, with most of the failing pages having a JavaScript function to display a lat-modified date, but without a <noscript>.

eHelp

<http://www.csupomona.edu/~ehelp/>

eHelp contains screenshots as illustration of the visual results of carrying out actions described in the text. Because the text stands alone without illustration, and because a description of a screenshot would not be useful to a user who cannot see the screen, it was decided to supply all screenshots with empty alt text. Currently, 94% of the pages are accessible; a number of the inaccessible pages need adjustments to properly account for imbedded Flash objects.

Office of the President

<http://www.csupomona.edu/~president/>

This site was an early adopter of the templates. It is 95.2% accessible, the two problematic files being recently added.

People Search

http://www.csupomona.edu/cgi-bin/intranet/ldap_search.pl

This page has always been accessible.

Theatre

<http://www.class.csupomona.edu/th/>

The original page used inaccessible Flash navigation and had many images without alts. The redesigned site is 96.5% accessible.

University Catalog

<http://www.csupomona.edu/~academic/catalog/>

The web pages are all accessible, but the PDF files of the current catalog have not been fully remediated, and previous catalogs have not been remediated at all. Future catalog PDFs will be produced in an accessible format.

University Home

<http://www.csupomona.edu/>

The university home page and the top-level pages to which it links are all accessible.

University Library

<http://www.csupomona.edu/~library/>

The previous site had issues with menu images and other images lacking alts. The redesigned site is 80% accessible. Most of the non-compliant pages are legacy pages that have not yet been converted.

Sites not using the Cal Poly Pomona web templates

Admissions and Outreach

<http://dsa.csupomona.edu/admissions/>

This site uses the Division of Student Affairs content management system, and is 100% accessible.

Associated Students, Inc.

<http://www.asi.csupomona.edu/>

The ASI site was undergoing a redesign when accessibility was first presented as a goal, and both the old site and the redesign had problems with accessibility. It was redesigned yet again, and the new site is 73.3% accessible, with most of the inaccessible pages being legacy pages which have not yet been converted.

Athletics

<http://dsa.csupomona.edu/athletics/>

This site uses the Division of Student Affairs content management system, and is 98.9% accessible.

Blackboard

<https://blackboard.csupomona.edu/webapps/login>

Tests of the student-facing part of Blackboard suggest that it is accessible (provided that it is supplied with accessible content), but the Control Panel functions cannot be satisfactorily navigated from the keyboard

Bronco Bookstore

<http://www.bookstore.csupomona.edu/>

The Bookstore site is very image-heavy, but remediation has made 94.6% of the pages accessible. Testing remains to be done on the e-commerce functions of the site.

BroncoDirect

<https://brncodirect.csupomona.edu/>

The PeopleSoft portal, as customized for Cal Poly Pomona, is annoying for both able and disabled users, and is unusable in browsers without JavaScript. Although it passes basic accessibility checks, we are not confident of its usability.

Career Center

<http://career.csupomona.edu/>

The site is 2.8% accessible; a legacy calendaring system has created thousands of pages that lack an alt for a "Search" graphic and have empty alts for page navigation.

Disability Resource Center

<http://dsa.csupomona.edu/drc/>

This site uses the Division of Student Affairs content management system, and is 100% accessible.

Division of Student Affairs

<http://dsa.csupomona.edu/division/>

This site uses the Division of Student Affairs content management system. Twenty-two of the 23 division-level pages (95.7%) are accessible.

Financial Aid

http://dsa.csupomona.edu/financial_aid/

This site uses the Division of Student Affairs content management system, and is 100% accessible.

Office of the Registrar

<http://dsa.csupomona.edu/registrar/>

This site uses the Division of Student Affairs content management system, and is 98.6% accessible.

Parking and Transportation Services

<http://dsa.csupomona.edu/parking/>

This site uses the Division of Student Affairs content management system, and is 94.1% accessible (a single image on a single page lacks an alt).

PolyCentric

<http://polycentric.csupomona.edu/>

This site uses a content management system. Of the pages accessible to AccMonitor, 77.6% are accessible; the inaccessible ones mainly lack alts for images. Large numbers of archived pages are only available through a search interface and were not scanned by AccMonitor.

Overall statistics

Status	Page Count	Percent
Failed	4,945	17.2%
Passed	23,826	82.8%
Total	28,771	100%

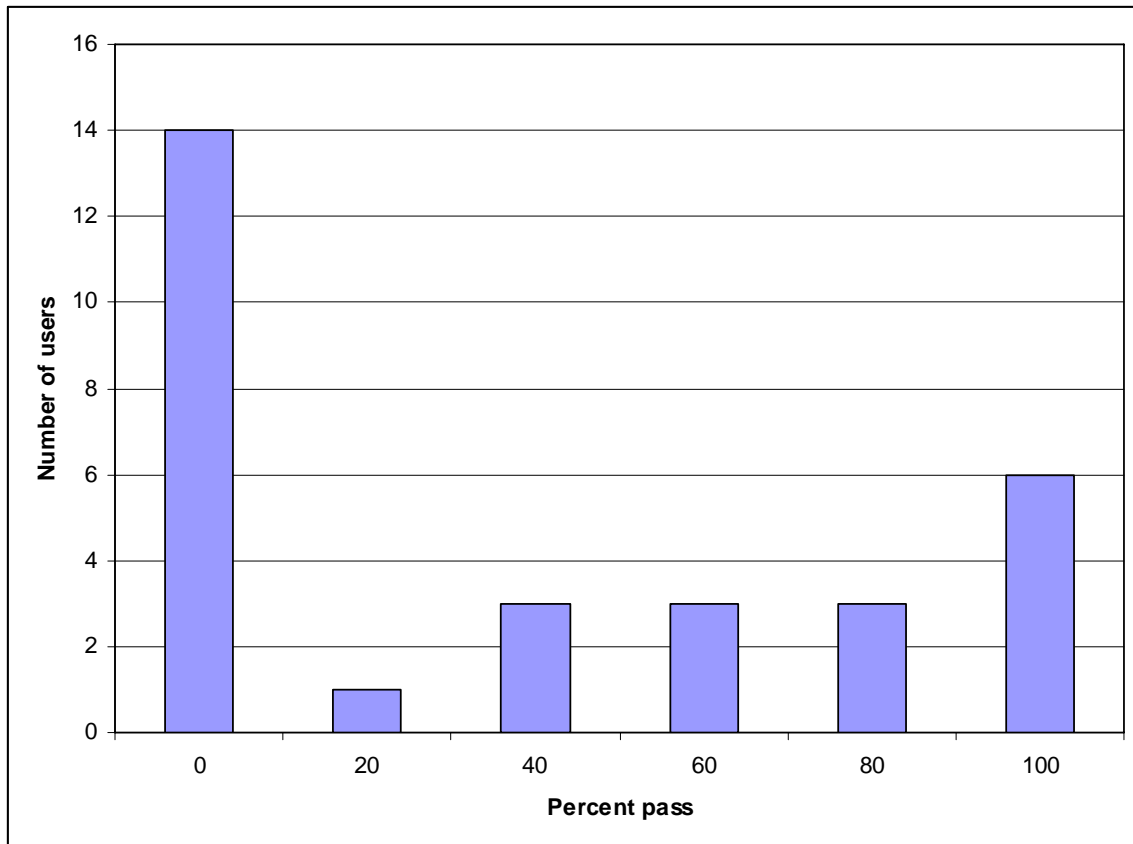
Personal and course web pages

Almost every individual in the Cal Poly Pomona identity management system, including all faculty, staff, students, and applicants, is provided space on the Cal Poly Pomona Intranet that may be used for public web pages. Potentially there could be as many as 83,000 web sites. Sampling shows that only 21% of faculty, 4% of staff, and 10% of students use their space for public web pages (applicants are not told that they have web space), giving an estimate of 259, 46, and 2950 pages, respectively. It was not determined which of the faculty sites contained instructional materials.

From these over three thousand sites, 20 faculty sites and 10 student sites were selected for accessibility analysis. For ease of locating pages, faculty sites were taken from departments having faculty lists with URLs, and student pages were taken from among Art, Computer Science, and Computer Information Systems majors, more of whom seem to have web pages than the average student.

The thirty sites contained 2078 pages, giving a mean of 69.3 pages per site, a standard deviation of 160.5, and a range from 2 to 761 pages. Overall, 47.3% of the pages were accessible. There was no correlation between the number of pages in a site and the percent that passed

It was predicted that pass rates would be bimodal: some users would be clueless about accessibility, with pass rates approaching zero, and others would understand accessibility, with rates approaching 100%. This is only somewhat supported by the data:



One possible explanation for the intermediate values is faculty who have been creating web pages for a decade or more, and whose recent pages are more accessible than the earlier ones.

Nevertheless, nearly half the users in the sample had no passing web pages; the challenge is clear.

Analysis

The accessibility of institutional web pages is an easily-met goal. The large-scale conversions to the Cal Poly Pomona web templates insure that sites will be primarily accessible, with a small number of pages needing remediation (usually images needing alt text), as contrasted to the situation a few years ago when some sites were fundamentally inaccessible, with graphic or Flash-based navigation that lacked alternatives.

Accessibility of user pages (including instructional pages in the user web space, rather than in Blackboard) is more of a challenge. Assuming ten pages per site (which is a lower number than

the average for our sample), there are over 30,000 pages that could be inaccessible. Because of the flat namespace of user pages, AccMonitor is unable to crawl them all in a single run, and there is no simple way to break them into sets. Compliance among user pages will necessarily rest on monitoring by the users themselves, and spot-checking centrally.