Case Study

Victor Valley College Goes Mobile Using OU Campus™

Key Takeaways:

- In an era of nearly 90 million mobile Internet users (projected to exceed 130 million by 2013), higher education institutions must not ignore mobile browsing needs
- Cascading Style Sheets (CSS) allow for easier extension of usability and accessibility of college and university websites on mobile devices
- CSS files provide better compliance and support for assistive technologies

Located in the High Desert region of Southern California, Victor Valley College (VVC) offers two-year degrees through traditional and online courses. The college supports the diverse communities it teaches by promoting educational excellence, enhancing local prosperity, and ensuring environmental leadership.

A Fresh New Look

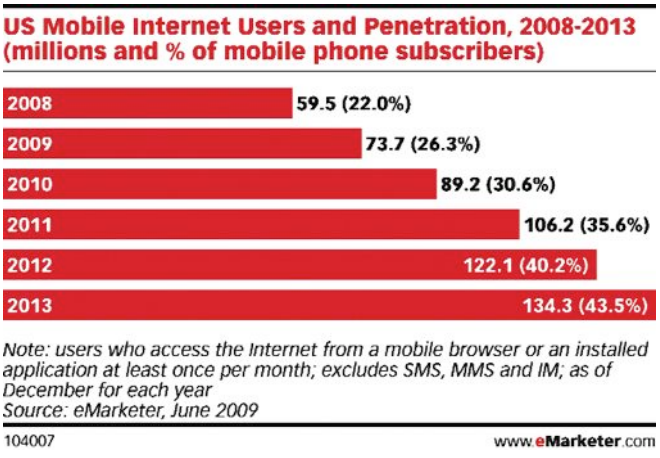
When Justin Gatewood first started at VVC as Webmaster in March 2006, the institution's website needed help. Over the course of a couple months, Justin made two significant moves toward addressing the institution's site and the mobile Internet needs of its visitors. He first purchased OmniUpdate's OU Campus™ web content management system (CMS) to help VVC better manage content. Content experts across campus were trained and empowered to update and manage content directly through the website using the CMS, complete with accessibility controls, publishing approval processes, and many more powerful editing and management tools. Adoption of the CMS by content contributors was immediate.

A month after implementing OU Campus, Justin initiated a full website redesign project and incorporated new layouts. The result was a site with much more design cohesion and administrative control that takes advantage of advanced XSLT functionality found in OU Campus.

Catering to a Mobile World

With such growth in mobile Internet browsing (nearly 90 million mobile Internet users reported in 2010 by eMarketer.com), VVC quickly moved to ensure its website was apt to service students, faculty, and staff looking to access information on the college site from their mobile devices.

VVC identified various ways of catering to the limitations of viewing on a mobile device. It was concluded that content should be standards-based and structured (e.g., XHTML), and the presentation (e.g., Cascading Style Sheets [CSS]) needed to be separated from the content to allow the college website to work with most mobile browsers.



Scaled-Down Mobile Rendering vs. Full Web Page Mobile Rendering

Modern mobile devices interpret CSS in a variety of ways, from text-only to the near full-desktop experience, so it was critical for VVC to create style sheets that work well with a handheld device. To render the CSS specifically for mobile devices, Justin structured the content according to standards that ensure information is accessible and compliant with the Americans with Disabilities Act requirements and recommendations. Second, the CSS and CSS profiles were applied to present content based on the agent requesting it. Once that was done, behaviors (e.g., JavaScript, AJAX elements, etc.) were added to enhance the VVC website for the browsers that support that functionality. This method provided the best practices needed to ensure as much conformance, adaptability, and compatibility with as many different environments as possible. It also broke down the content and structure into a format that is easily read by assistive technologies with a minimum number of errors or confusion in the output it generates.

Website content should be standards-based, structured, and separated from the presentation.

After those two primary steps were followed, user agent queries (i.e., browser sniffing) were then used to deliver the content appropriate for specific mobile devices. Browser sniffing reduced the cost to the user because the user isn't paying for unnecessary data being transferred to the mobile device.

Planning for the Mobile Future

In 2010, a variety of research sources claimed that more people access the Internet through a mobile device than on a PC. Because of this, VVC plans to continue making strides to improve its delivery of browser-based content. As Justin explained, "The generation entering college today literally brings the web with them to school in their pockets, so ensuring that our standards-compliant website can be accessed on a mobile, web-capable device is vital to our success."