## Technical Description of Using Multiple Browsers In Denton ISD

By Garrett Chandler

The global IT industry, as a whole, is in an interesting transition period. There are a variety of variables that play into why users, both consumers and enterprises alike, must use a number of different web browsers on their computer. In order to understand why we are experiencing these issues today, it's important to look at three things: where the IT industry once was and where it's going, the current trends of web developers, and finally, how Denton ISD utilizes certain services such as Eduphoria, and TAC. Please bear with me as things may get slightly technical.

HTML 5 is code for designing web pages on the Internet. HTML5 has grown tremendously over the past few years and is quickly becoming the code of choice for web developers. Eventually, trends suggest, that HTML 5 will be the standard code across the web, as designated by the World Wide Web Consortium (W3C). However, this adoption is entirely up to the web developers and how it meets their requirements in the services they provide, their business goals, and marketing strategies. HTML 4.01 is the current standard by W3C, which has been the standard since 1999. Aside from HTML, as the web has grown from its adolescence, it has learned new languages in the form of other types of code, especially as technology as a whole progresses.

For years Internet Explorer was the most common web browser on PC's as Microsoft dominated the enterprise market. However, with the imminent demise of Microsoft Windows XP on the horizon, other companies like Google and Mozilla have seized the opportunity to own the web. Microsoft's Windows XP will only support up to Internet Explorer version 8. Internet Explorer 8 is not considered a modern browser according to the code of the majority of current web sites and services due to its lack of HTML 5 support. As Microsoft watched Google Chrome and Mozilla Firefox grow in popularity, and become preferred browsers of choice, they developed Internet Explorer 9, offering full support for HTML 5. The catch here is that Microsoft had to redesign the engine Internet Explorer runs on, which now requires Windows 7 or higher. Chrome and Firefox are not as particular in what operating system they are installed on. Each company has a slightly different engine that processes the HTML 5,

as well as other codes such as Javascript, CSS, APIs and more; displaying it all slightly different on each browser. One engine excels in CSS (Firefox) while another excels in HTML 5 (Chrome) and another in Javascript (IE 9). This provides web developers with freedom and is a good thing, though frustrating on our end at times.

With that said, Denton ISD provides a vast amount of tools and resources to our faculty and staff, that we feel outshine other services in their designated areas, such as Eduphoria and TAC. Through proper, thorough and intense testing, district administrators with guidance from the School Board, make decisions on which services to utilize that are best for our district. Once we adopt a service, like Eduphoria, we are then subject to that provider's conditions. In this particular case, we see some of the technical conditions and restrictions. Eduphoria's site and services work best in Google Chrome, because Eduphoria designs their site with HTML 5 code. TAC, hosted by eSchoolPlus, relies on CSS in their web pages. This is best viewed in Mozilla Firefox. Schoolwires, now Centricity, which host's our district web page, runs on standard HTML 4.01 code, and works best in any version of Internet Explorer.

It's also important to understand that no matter what operating system platform the district standardizes on, whether it be Microsoft Windows 7, Mac OS X, or another operating system, we will still need multiple browsers on that system. As a matter of fact, Firefox and Chrome both have browser apps for even iOS and Android mobile platforms, and Microsoft's Internet Explorer mobile platform is growing. Mobile devices also need separate browsers to view certain content on the web. Please know that Denton ISD is not the only organization that is struggling with this issue, and we will continue to strive to not only provide our faculty and staff with the best experience possible, but the most efficient. We hear your concerns and frustrations, and furthermore, share them with you. No one is exempt from these circumstances. However, we are confident that making all three browsers available to you to use, is a small price to pay for the incredible services our district offers to our faculty and staff. Thank you for understanding, and I hope this answers your question.