Designing Accessible Web Materials
As web-based electronic content becomes a staple of instruction, marketing, and information delivery in higher education, we have a responsibility to make sure those materials are accessible to all students. Much like the facility adaptations that have been necessary to our buildings, we must also make adaptations to our web-based environments for those with special needs. The World Wide Web Consortium (W3C) developed guidelines for developing accessible webpages, based on four design principles: perceivable, operable, understandable, and robust. You can review the entire guidelines document by visiting http://www.w3.org/TR/WCAG20. The guidelines are detailed and include technical information for programmers and designers.

The TTU IT Division suggests a few general tips:
• Use images in a deliberate manner and include a text alternative that describes the image and its importance to the text. Using images merely for aesthetic purposes may not be appropriate, given the purpose of the webpage;
• Avoid using color to indicate meaning unless you have a text alternative that explains the meaning;
• When selecting colors for your webpage design, select colors that have a high contrast to aid those with color blindness, other visual impairments, or special cognitive needs. In particular, make sure that any color in the background is easily distinguishable from the text on the page. For instance, using a darker shade of a color for the background and a lighter shade of that same color for the text may be difficult to discern for those with special visual and cognitive needs;
• Avoid using complex tables when possible. Text readers follow the text by line, so column and row distinctions may be difficult for some to understand if the table contains many columns, rows, and headers/sub-headers. Consider bulleted lists and simple tables as alternatives; and
• Create a consistent navigation scheme throughout the website. A consistent navigation structure is useful for all that use the webpages, but particularly aids those with special needs to create a mental image of the site. A consistent site organization and navigation plan increases the usability of the site.

Texas Tech University offers additional training to help you build accessible websites:
• Technology Support ShortCourse for all web designers (806)742-1650 or http://www.itts.ttu.edu;
• TTU IT Division Computer Based Training contains online learning materials for creating accessible web applications (806)742-1650 or http://cbt.ttu.edu;
• Teaching, Learning, and Technology Center ShortCourse for faculty (806)742-0133 or http://www.tltc.ttu.edu.

The most important guideline: design with everyone in mind!

Adaptive Workstations Available to Those with Special Needs
The Advanced Technology Learning Center (ATLC) is located in the west basement of the Library building and is managed by Technology Support in the TTU IT Division. Services are available in the ATLC for all TTU students, faculty, and staff, including the Disabled Access Priority Area (DAPA) and Visually Impaired Access Stations (VIAS). These Internet-connected computer stations are equipped with software and hardware for people with various special needs. The VIAS station has a Braille printer, Duxbury Braille translator, Arkenstone OpenBook Ruby Edition, Henter Joyce MAGic, and Henter Joyce JAWS. In addition, we have workstations in each lab adapted for those requiring wheelchair accommodations. If you would like more information about the DAPA or VIAS computer stations, please visit the ATLC, call (806)742-1650, or visit http://www.itts.ttu.edu/labs/atlc/accessible.php.
Roundtable on Accessibility and Electronic Information Resources - All Invited

The TTU Information Technology Division, in partnership with Student Disability Services and the Department of Procurement Services, cordially invites you to a roundtable on Accessibility and Electronic Information Resources at Texas Tech University. The Texas Administrative Code details a number of factors in providing information resources for faculty, students, and staff who face challenges in the use of these resources. Representatives from all three entities will provide presentations to the campus on the topic of accessibility and the requirements of state law, as well as providing a question and answer session for the group. In addition, Student Disability Services will be setting up demonstrations of accessibility resources for our guests to review.

The roundtable will be held in the Red Raider Lounge of the Student Union Building on Tuesday, October 20th from 2:00 to 4:00 p.m. Refreshments will be provided and anyone interested in this topic is encouraged to attend. Please RSVP to britta.tye@ttu.edu if you plan to attend.

State of Texas Addresses IT Accessibility

The Texas Administrative Code (TAC) is one of the many bodies of regulatory rules that Texas Tech University has to comply with as a state institution. In addition to Section 508 of the Federal Rehabilitation Act, TAC also stipulates specific accessibility requirements for electronic and information resources (EIR), which includes, but is not limited to, software, desktop/laptop computers, telecommunications products such as telephones, information kiosks, websites, multimedia, and office equipment such as copiers and fax machines.

TAC Chapters 206 and 213 both address accessibility issues. While Chapter 206 addresses the accessibility of state websites specifically, Chapter 213 focuses on EIR in general. In Chapter 206, the TAC outlines specific requirements for making state agency websites accessible to people with disabilities through the use of text equivalents for graphics, and the implementation of frames. Such techniques improve content readability when using assistive technologies. Chapter 213 requires all purchases, modifications, or development of electronic and information resources to be accessible by persons with disabilities. To determine if an EIR is compliant, the TAC includes a set of accessibility standards for each of the five categories of EIR: software and operating systems; telecommunications products; video and multimedia products; self-contained, closed products; and desktop and portable computers. The technical standards for each of those categories can be found at http://www.itts.ttu.edu/documentation/laws/EIR.html.

Both TAC Chapters 206 and 213 require the publication of an accessibility policy and the appointment of an accessibility coordinator to aid in the implementation. TTU’s EIR Accessibility OP, 52.05, can be found at http://www.depts.ttu.edu/opmanual/OP52.05.pdf. The Managing Director for Technology Support (currently Allen Young) has been designated as the University’s IT Accessibility Coordinator. For more information or answers to your questions, please contact the IT Accessibility Coordinator at (806)742-1650 or at allen.young@ttu.edu.

Understanding Student Challenges

Guest article by Tamara Mancini, Larry Phillippe, and Jeff Taylor - Student Disability Services

Texas Tech University currently provides accommodations and services for over 900 students with disabilities. A significant issue facing students is simply the ability to access the technological resources that Texas Tech University has available. For many faculty and staff, understanding the challenges that these students encounter is difficult to understand. Two examples begin to illustrate the complexity that some students face:

- Rebecca is a student with visual impairment, so she must rely on software that translates text on the screen into audio. The screen reader she uses requires a keyboard to traverse the webpages. Many of the webpages do not contain text alternatives, so she is unable to experience the meaning of the images, as well as some critical text. Compared to her peers in the class, she is posed with an unfair disadvantage.

- Jerry has dyslexia coupled with a verbal processing disorder:

Every sentence he reads could look like this (“…he reads could look like this”).

He has processing issues and sometimes cannot tell where one word ends and the other begins; he has issues differentiating between the letters a, p, q, b, and d. Reading a magazine, journal, or website requires intense effort and time that far exceeds the time required for a student without such a challenge. Study time for his reading-intensive history class will be markedly more compared to his peers.

Students with disabilities at Texas Tech University have substantial technology needs. We want to offer them the equal opportunity to succeed, learn, and thrive in our environment. When we take their needs into consideration, we make a significant investment in their future, as well as ours.

From here it is possible. . .for everyone!