

# **Introduction to Electronic and Information Resources (EIR) Accessibility**

## **Introduction**

This course will introduce you to key concepts related to accessibility, such as who it benefits, how users take advantage of accessibility aids, and how you can improve the accessibility of resources that you or your agency provides to the public and to fellow employees.

By the end of this course you will be able to identify the following information:

- The definition of accessibility
- Laws governing accessibility
- Who benefits from accessibility
- How to make your own workplace accessible
- Accessibility resources

## **What is Accessibility**

- Accessibility means providing equal access to information and services regardless of a user's physical or developmental abilities or impairments. For example, many of us use curb cuts, motion-activated door openers, elevators, and other features that provide access to people with disabilities.
- Accessibility ensures that people with and without disabilities can access the same information, perform the same tasks, and receive the same services.

### **Making Technology and Electronic Information Accessible**

- Entrances to buildings, parking spaces, and restrooms designed to accommodate people using wheelchairs are all familiar examples of accessibility to physical spaces.
- What about accessibility to electronic information, such as Microsoft Office documents, Web pages, or email messages?
- This is equally important! Electronic and information resources (EIR) should also be accessible to everyone. For state agencies, as we'll see, it's the law. Electronic and information resources include phones, computers, software, electronic documents, videos, Web sites, copiers, and fax machines.

## **The Law**

### **What does state law require?**

As a state employee, you are required by law to ensure that any electronic information or technology resources you create or purchase will provide full access to agency information and services for your co-workers and members of the public.

Under state law, all people have the right to equal access to information and services.

Note: These requirements are described in Texas Government Code Chapter 2054, Subchapter M and Title 1 Texas Administrative Code (TAC) Chapters 206B and 213B. These requirements apply to state agencies and state institutions of higher education

### **What is the Americans with Disabilities Act (ADA)?**

The ADA is a Civil Rights law that prohibits discrimination against people with disabilities.

**Title I** of the ADA prohibits employers from discriminating against qualified job applicants and employees with disabilities. It further requires that employers make reasonable accommodations for employees with disabilities, including access to information and technology resources.

**Title II** of the ADA requires all state and local governments to take steps to ensure that their communications with people with disabilities are as effective as communications with others, and requires state and local government agencies to provide equal access to programs and services, unless doing so would fundamentally alter the nature of the programs and services. This includes making agency Web sites, electronic documents, software applications, and other technology resources accessible.

**Title III** of the ADA provides equal access to places of public accommodation including private businesses, commercial facilities, and Web sites.

### **How do we determine if our electronic information and technology meets the ADA requirements?**

Caption: Section 508 contains the standards for determining whether a Web site is accessible.

Just as we have standards for electrical outlets, driving, and telephone systems, we need a clear set of standards to make sure that electronic information can be made accessible for people using various types of computers and software.

These electronic and information resource standards are defined in Section 508 of the Federal Rehabilitation Act. By following these standards, Texas A&M University - Commerce can be sure that electronic documents, software, Web sites, and other information technologies will work for everyone, including people with disabilities.

### **Who benefits from accessibility?**

#### **People who have difficulty typing or using their hands work with**

- adaptive keyboards, trackballs, and pointing devices;
- tools to press keys and operate controls;

- assistive technology to minimize the effect of tremors or to enable activation of multiple key-presses simultaneously; and
- Voice-controlled software.

### **People with learning or intellectual disabilities or brain injuries may benefit from**

- alternative communication devices like a communication board that uses pictures;
- clear language and well-organized information;
- technology that enhances memory, such as electronic organizers or personal digital assistants; or
- audio books or computerized speech output, such as screen readers and talking browsers.

### **People with blindness, low vision, or color blindness may use**

- screen reader programs, such as JAWS and Window-Eyes
- screen magnification software like ZoomText and Magic;
- braille output devices or printers; or
- basic computer settings to control text size, color, and contrast.

### **People who are deaf or hard of hearing may use**

- captioned text for videos or audio information;
- text messaging using instant messaging programs, pagers, or other mobile devices;
- text and video relay services using a handheld device or computer;
- sign language and oral interpreters;
- video interpreter services; or
- assistive listening devices.

Note: You can make a call to a person who is deaf using the video relay service of your choice. These services are free and easy to use.

### **How does accessibility help the aging workforce?**

The global workforce is turning gray! Low birth rates and increasing life spans have created an older America. When the baby boomers (born 1946 -1964) retire (oldest group begins in 2011), there will not be enough younger workers to replace them, and the US could face a labor shortage of almost 36 million workers - 7 times greater than the largest labor shortage ever experienced. By retaining older workers, the shortage can be alleviated.

(<http://www.nowcc.org/aging/agingworkforce.aspx>, accessed 5/24/2010)

Many of these valuable older workers will need accommodations. That's where accessible technology can become the great leveler by

- removing workplace barriers (such as making computer tasks easier for people with painful arthritis by providing alternatives to the standard mouse or using voice-recognition software for hands-free text generation); and
- making all information and online services easily accessible to people with visual, intellectual, or physical limitations

### **How does accessibility benefit Texans?**

Every day, Texans use technology to access information about state government resources. For example, they may participate in online college classes, look for job at workforce centers, or apply for health care for their children. A primary role of technology in today's government is to simplify access and enable timely and effective delivery of government services. The tremendous growth in the use of e-government services and information by Texans indicates that the investment in these services is greatly valued by our state's citizens.

According to the Texas Department of Information Resources, in fiscal year 2008, Texas state agencies and institutions of higher education spent more than \$2.4 billion on information technology. These expenditures included the purchase of goods and services, and the total compensation of all staff that perform functions that are primarily technology-related.

Ensuring that the State spends tax dollars wisely on accessible information technology will help create a marketplace for accessible goods and services to meet business needs, deliver social services to all citizens more efficiently, and expand job opportunities for all citizens by eliminating barriers in the workplace.

### **How does accessibility help people without disabilities?**

- When we make documents easier to understand for people with cognitive disabilities, we make them easier for everyone to understand.
- When we make Web applications more efficient for people to use with nonstandard keyboards and pointing devices, we make them more efficient to use by people who are using a mouse or a mobile device.
- When we make Web sites compatible with screen readers and voice activation systems, we help make them more compatible with different operating systems and browsers.
- When we make our information easy to find for people who are blind, we make it easier for everyone to find using search engines.

### **Are there other ways we can make electronic information accessible?**

- Format your documents using document structures such as headings, subheadings, paragraphs, lists, and consistent layout.
- Write clear, concise paragraphs, and emphasize important points.
- Use standard resizable fonts and avoid distracting graphics, hidden text, and unimportant information.
- Describe complex graphs in text or data tables.
- Use alternate text to describe graphics.

- Do not use flashing graphics, which are distracting and can trigger migraines or seizures.
- Provide a text transcript of multimedia.

### **Exception Policy: What if I still can't make it accessible?**

Texas A&M University - Commerce strive to make all information accessible. Sometimes, circumstances related to difficulty or cost keeps us from making information fully accessible. Texas A&M University - Commerce allows you to provide accessibility through an alternative means by requesting an "exception." Exceptions can include alternate technologies or different means of accessing the same information.

For example, an employee assistance program that provides online counseling through an inaccessible Web site may, with an approved exception, provide an alternate means of access through telephone counseling while the Web site is revised.

Required documentation for getting an exception includes

- justification for the exception based on significant difficulties or expenses.
- the method that will be used to provide an alternative way to access the information or functionality that is covered by the exception.
- the time-frame covered by the exception.
- the cost of providing the alternative means of access.