# INSTRUCTIONAL COMPUTING COMPUTING

Engage the Students. Infuse the Curriculum. Empower the Faculty. Enhance the Administrative Process.

# Making Your Blackboard Courses Accessible to Students with Disabilities

### What is accessibility?

**Accessibility** refers to creating information, services, and environments that can be used by people with disabilities, including those with visual, hearing, cognitive, and neurological disabilities. Products and environments that incorporate the principles of **universal design** can be used by all people including those with disabilities. There are many options when designing your blackboard course by applying the principles of universal design that will benefit all students.

### What is assistive technology?

Assistive technology includes a range of devices that may be used by people with disabilities. These assistive devices need to be taken into consideration when designing accessible web-based and digital materials. Commonly used assistive devices include:

**Screen readers**: Software that interprets what is being displayed on the computer screen and translates it to speech or Braille. Examples include JAWS and Window-Eyes for the PC, and VoiceOver for the Mac. Your Blackboard site and the materials you upload to it should be designed to allow screen readers to "see" and interpret what appears on the screen. If you are using Jaws, we recommend that you use Internet Explorer as your browser. Blackboard has created a tutorial for using screen readers with Blackboard.

**Speech to text software**: Converts spoken word to text. Examples include Dragon Naturally Speaking and MacSpeech Dictate.

**Alternative input devices**: Devices such as joysticks or trackballs may be used by individuals who have difficulty manipulating a keyboard or mouse. Specific Jaws Keyboard commands may also be helpful for students who have difficulty using a mouse. For other options and more information regarding Assistive Technology please go to http://www.hunter.cuny.edu/studentservices/access/access/accesscenter

## How can I make my Blackboard course accessible?

To create an accessible Blackboard site, it is important to consider both the design of the site itself and the format of materials, such as audio, video, images, and documents, which you post to the site. The principles of universal design can help guide your Blackboard site creation. These principles suggest conveying information in as many ways as possible in order to accommodate a range of users. Below are some ideas to consider when designing your Blackboard site:

- Include descriptive text for all non-textual elements. This text, also known as **alt text**, allows screen readers to provide students with visual impairments with a description of the visual features. Blackboard's visual text box editor can be used to add these descriptions.
- Use descriptive names for files you upload so that screen readers can easily identify them.
- When designing the left navigation menu in your course site, maintain a high contrast between the text and the background color.

- Use san serif fonts (e.g., Arial, Helvetica, or Verdana) throughout your Blackboard site. Use a dark color font that is easy to read on a white background. While black and white offers the highest contrast, students with low vision may have other color preferences. Be sure to ask them. Avoid using colored fonts to enhance meaning. Keep the format simple and avoid patterns in the background, e.g. power point slides with extraneous graphics, borders, etc.
- If you use Blackboard to give timed exams, you may need to create a second copy of the exam for students who need extra time, since it is not possible to change test settings for one individual while others are taking the exam. This alternative copy of the test can be made available only to specific students by using the adaptive release function of Blackboard.
- Files such as PDF or Word documents should be created with accessibility in mind. Keep in mind that scanned documents will not be readable by screen readers unless OCR (optical character recognition) is used. The Technology Resource Center can help you create accessible scanned documents. Visual features such as graphs, charts, and diagrams should be created using alternative text.
- Audio files and video files that contain speech or music with lyrics should be accompanied by a text equivalent, either a transcript or captions.

### **Additional Resources**

#### The Georgia Tech Research on Accessible Distance Education (GRADE)

http://www.catea.gatech.edu/grade/ has many valuable suggestions for creating accessible materials for students with different types of disabilities: http://www.catea.gatech.edu/grade/factsheets.php

#### The Hunter College office of AccessABILITY

(http://www.hunter.cuny.edu/studentservices/access/access/accesscenter) provides general accessibility services to students and faculty. If you are a faculty member with questions about making digital course content accessible to students with disabilities, contact Sudi Shayesteh, Director of the Office of AccessABILITY, at 212-772-4857 or Ron Rateaus at 212-772-5478.