



Quality Matters Accessibility Policy for Online Courses

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The purpose of this document is to outline a generic accessibility policy to serve as a starting point for Quality Matters subscribing institutions who wish to develop accessibility policies and practices to create robust online courses. The policy is designed as a set of dynamic guidelines rather than a legal document.

The policy focuses on online courses and includes the following components:

1. Goals
2. Laws
3. Definitions
4. Accessibility / Universal Design Committee
5. Online Course Design Practices for Accessibility
6. Disability Services
7. Accommodations
8. Procurement
9. Budget
10. Additional Information
11. References
12. Acknowledgements
13. Authors
14. Appendix

1. Goals



It is the goal of the University that all course material be as accessible as possible to all students. The purpose of the University Accessibility Policy is to provide guidelines regarding the proactive design and development of robust courses in a format that is easily accessible to online students. The goal of proactively creating accessible courses is to minimize the need for individual accommodations as students with disabilities complete online courses.

2. Laws

There is no specific law or court decision that expressly relates to the design and development of accessible online courses. Key federal legislation related to online courses in higher education includes the following:

- a. Rehabilitation Act passed in 1973 made it unlawful to discriminate against persons with disabilities in all federally assisted programs, services, and employment.

Section 504 stipulates that "no qualified individual with a disability in the United States shall be excluded from, denied the benefits of, or be subjected to discrimination under any program or activity that receives federal financial assistance."

Section 508 is a 1998 amendment to the Rehabilitation Act that requires electronic and information technology developed, procured, maintained, or used by federal agencies to be accessible by people with disabilities.

- b. Americans with Disabilities Act (ADA) is civil rights legislation signed in 1990 to prohibit discrimination based on a student's disability.



The ADA Amendments Act of 2008 clarifies the definition of “disability” and broadens the number of individuals who are eligible for the protections of the ADA, including accommodations for temporary disabilities.

3. Definitions

For purposes of this policy, the following terms are defined:

- a. Disability – a physical or mental impairment that substantially limits one or more major life activities.
- b. Accessibility – students with disabilities can perceive, understand, navigate, interact, and contribute to their Web-based courses.
- c. Universal design – the proactive design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.
- d. Accommodation – necessary and appropriate modifications to ensure that individuals with disabilities have access to Web-based course materials. Examples of accommodations include extended time on exams, note takers, sign language interpreters, and electronic print materials.
- e. Assistive Technology -- any piece of equipment that is used to enhance the functional capabilities of students with disabilities. Examples of assistive technologies include screen reading, text magnifier, or speech recognition software.

4. Accessibility/Universal Design Committee

The purpose of the Accessibility Committee is to collaborate in identifying accessibility issues and solutions in online courses. The Accessibility Committee outlines standards and guidelines for the universal design of digital materials and

Page 3 of 20

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promotes a University culture of inclusion. A campus-wide institutional commitment is essential. Members of the Committee include:

- a. Director of online programs
- b. Students with disabilities
- c. Disability services specialist
- d. Faculty
- e. Instructional designer
- f. Instructional technologist
- g. Course management system specialist
- h. Assistive technology specialist

5. Online Course Design Practices for Accessibility

- a. Course Management System

Courses should be offered in an accessible learning management system (LMS). A statement by the LMS provider certifying accessibility should be readily available as a link within each course.

Supplemental Web-based applications such as conferencing systems and anti-plagiarism software should also be accessible to all students. See Section 8 on Procurement.

- b. Course Web Site Design Guidelines

Online course sites should be inclusively developed and maintained in conformance with the Web Content Accessibility Guidelines – Version 2 (WCAG 2.0) Level A. The WCAG 2.0 was published in December 2008 by the World Wide Web Consortium (W3C), an international community of experts that work together to develop Web standards.



The WCAG 2.0 guidelines are based on the principles that content and controls should be perceivable, operable, understandable, and robust enough to function with a variety of assistive technologies. Each principle includes one or more guidelines for practice. For a brief explanation of each of the guidelines, please refer to the Appendix of this document. For a complete explanation of how to conform to WCAG 2.0, please consult How to Meet WCAG 2.0 on the W3C Web Accessibility Initiative Web site. For an introduction to the guidelines, refer to the W3C's Web Content Accessibility Guidelines (WCAG) Overview. An explanation of the four principles can be found at Introduction to Understanding WCAG 2.0 .

Courses that are in the path of current students who are known to have disabilities are given priority for being brought up to standard. Existing courses are brought up to standard during the next revision cycle (usually 1 – 2 years).

c. Supplemental Web Sites

When links to external Web sites are provided to students within an online course, the portion of those external sites intended for student viewing should be reviewed for conformance with the guidelines listed above.

d. Supplemental Course Documents

Most online courses include multiple documents and files in addition to the HTML content that makes up course Web pages. Examples of such documents include Adobe PDF files and Microsoft Office files (e.g., Word, Excel, PowerPoint). Sometimes referred to as “second generation” documents, these materials should conform, where appropriate, to the guidelines listed above. In addition, documents should also align with the Guidelines for Accessible Distance Education published by the Georgia Tech Research on Accessible Distance Education (GRADE) initiative.



- Documents created by Microsoft Word or PowerPoint should make appropriate use of heading styles to assist a screen reader in presenting material in a logically structured manner. Both Word and PowerPoint 2010 include an Accessibility Checker that identifies and repairs accessibility issues.
- Adobe PDF files should be character readable, i.e., text should be searchable.

For guidelines specific to several common “second generation” applications, refer to the GRADE Guidelines for Accessible Distance Education page at <http://www.catea.gatech.edu/grade/guides/introduction.php>. See also PDF Accessibility (<http://www.washington.edu/accessibility/pdf.html>) from the University of Washington.

e. Roles and Responsibilities

At the University, online courses are developed in a team approach consisting of the instructor, the instructional designer, the course developer, and the instructional technologist.

- Instructor – Provides subject matters expertise.
- Instructional Designer – Provides organizational guidance incorporating accessibility principles into the design of the course and materials; Project manager.
- Course Developer – Builds the course within the course management system applying WCAG 2.0 criteria.
- Instructional Technologist – Contributes to alternative versions of course content and troubleshoots technical problems.
- Disability Services Quality Assurance Assistant – Reviews courses with screen reader and other assistive technologies; Provides recommendations to enhance accessibility.



f. Quality Assurance Process

New courses are developed using WCAG 2.0 Level A guidelines. Every course goes through a comprehensive technical review process prior to being offered to students. Tools that may be used to evaluate accessibility include:

- WAVE is a free Web accessibility evaluation tool provided by WebAIM. The WAVE Firefox toolbar provides accessibility reports directly within Firefox and works within a password protected course environment.
URL: <http://wave.webaim.org/>
- Color Contrast Checker, also from WebAIM, provides a ratio of contrasting between foreground and background colors.
URL: <http://webaim.org/resources/contrastchecker/>
- Colorblind Web Page Filter provides a tool to evaluate Websites for a variety of types of color blindness.
URL: <http://colorfilter.wickline.org/>

6. Disability Services

The disability statement included in the syllabus of all online courses should include a link to the institution's ADA policy/guidelines and information on how to access the University's disability services/support.

For example:

If you have a disability for which you may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Services, 100 Student Union, info@ods.edu or (555) 555-1234 or (555) 555-9876 (TTY), as early as possible, but no later than the 2nd week of the term. The Office of Disability Services (<http://www.ods.edu>) will verify your disability and determine reasonable accommodations for this course.

7. Accommodations



Students with disabilities are not required to self-identify unless they are requesting an academic accommodation. The proactive design of online courses is expected to minimize the need for student accommodations. Each course should have a link to the University Office of Disability Services Website. Accommodation policies and procedures are available for online courses. Students requesting an accommodation are required to submit documentation of their disability to the Office of Disability Services. The process of determining reasonable accommodations is collaborative among the student, the disability specialist, the professional providing the diagnosis, and the course instructor or program director if necessary.

8. Procurement

The accessibility of technology tools, software, and licensing agreements used in an online course should be considered prior to purchasing. Questions to ask a sales representative might include:

- If the product is software, does it work without the mouse? You may ask the sales representative to detach his/her mouse and demonstrate the product using only the keyboard.
- Have students with disabilities tested this product? If so, what disability groups?
- What are the accessibility criteria for testing the product? Can we have a copy of the criteria?
- Can you share the last accessibility report on your product with us?
- Do you provide accessibility training to the campus IT staff to handle accessibility issues locally?
- What is the system used to report and address accessibility problems to the company?

The Voluntary Product Accessibility Template® (VPAT) is a tool used to assess a product's compliance with the accessibility standards under Section 508 of the



Rehabilitation Act. The purpose of the VPAT is to assist federal officials and other technology buyers in making decisions regarding the accessibility of commercial products. Vendors are responsible for documenting the accessibility of their products.

URL: <http://www.itic.org/index.php?src=gendocs&ref=vpatt#1194.21> or

<http://www.state.gov/documents/organization/126552.pdf>

9. Budget

The budget required for producing accessible course materials is developed on a course-by-course basis. Estimated costs are included in the white paper from MPR Associates, Inc. A Needs Assessment of the Accessibility of Distance Education in the California Community College System Part II: Costs and Promising Practices Associated with Making Distance Education Courses Accessible (2009).

URL: <http://www.mprinc.com/products/search.aspx?pubID=475> or

http://extranet.cccco.edu/Portals/1/SSSP/DSPS/Research/mpr_reportforcccfinal8_22_08.pdf

10. Additional Information

Adobe: Adobe is an industry leader in accessibility. Its accessibility Web site contains product information, case studies, examples, tutorials, and other resources on accessibility. Adobe has several products to address Web accessibility, including Adobe® Acrobat Professional, Soundbooth, Premiere Pro, Flash, and more.

URL: <http://www.adobe.com/accessibility/index.html>

American with Disabilities Act (ADA): prohibits discrimination on the basis of disability in employment, state and local government, public building, commercial facilities, transportation, and telecommunications. ADA does not deal directly with accessibility of the Internet. For more information, see Guide to Disability Rights Laws.

URL: <http://www.ada.gov/cguide.htm>.



American Foundation for the Blind (AFB): This organization is committed to assisting the visually impaired. The AFB Web site contains many resources regarding accessibility and assistive technologies.

URL: <http://www.afb.org/>

Assistive Technology Industry Association (ATIA): This organization serves as the collective voice of the assistive technology industry so that the best products and services are delivered to people with disabilities. The ATIA holds conferences on accessibility and assistive technologies.

URL: <http://www.atia.org/>

DO-IT (Disabilities, Opportunities, Internetworking, and Technology) from the University of Washington: The DO-IT Center promotes the success of individuals with disabilities in postsecondary education and careers. Search the extensive DO-IT Knowledge Base.

URL: <http://www.washington.edu/doit/>

Equal Access to Software and Information (EASI): This organization is a provider of online training on accessible information technology for persons with disabilities. The EASI Web site contains informational resources, Webinars, and other learning opportunities.

URL: <http://www.easi.cc/>

Georgia Tech Research on Accessible Distance Education (GRADE): GRADE is a research project at the Georgia Tech Center for Assistive Technology and Environmental Access (CATEA). Through GRADE, the Access E-Learning online tutorial was developed on accessibility. It includes 10 modules with tips and assistance to faculty members seeking to make Word, Excel, Flash, and other file types accessible to people with disabilities.

URL: <http://www.accesslearning.net/>



Microsoft Corporation Accessibility Resources: The Microsoft Corporation has developed many products with accessibility in mind. Its accessibility Web pages include accessibility information about its products as well as other resources on accessibility.

URL: <http://www.microsoft.com/enable/default.aspx>

National Federation of the Blind (NFB): The National Federation of the Blind is the largest and most influential membership organization of blind people in the United States. They promote advocacy, education, research, technology, and programs to improve the lives of individuals who are blind.

URL: <http://nfb.org>

National Center for Accessible Media (NCAM): This organization is dedicated to achieving media access equality for people with disabilities. NCAM has created the MAGpie (Media Access Generator) tool for adding captions to multimedia content. You can download the software for free from the Web site.

URL: <http://ncam.wgbh.org/>

Office of Civil Rights: The United States Department of Education's Office of Civil Rights emphasizes that students with disabilities should be given the opportunity and assistance to reach their potential on an equal basis to those students who do not have a disability.

URL: <http://www.hhs.gov/ocr/>

Section 504 of the Rehabilitation Act: became a civil rights law that prohibits discrimination on the basis of physical or mental disability by a school that receives federal funds (includes state colleges and universities).

URL: <http://www.dol.gov/oasam/programs/crc/sec504.htm>

Universal Design: The Universal Design organization provides information on accessibility, universal design, and Americans with Disabilities Act (ADA)



standards. It has publications on various topics and sponsors national and international conferences and events.

URL: <http://www.universaldesign.com/>

University of Washington IT Accessibility Policies in Higher Education: This site contains links to educational institutions' policies regarding Web accessibility.

URL: <http://www.washington.edu/accessibility>

University of Wisconsin – Madison: The Division of Information Technology (DoIT) at the University of Wisconsin-Madison has developed resources for learning about accessibility and applying tools and techniques to content on the Web. There are also videos describing the experiences of persons with disabilities. In one video, a blind individual discusses how he uses a screen reader to access Web content.

URL: <http://www.doit.wisc.edu/accessibility/>

Virtual508.com: The Virtual508 Web site has an Accessible Web Publishing Wizard for Office 2007. This wizard is not free, but you can download a trial version. There is also a best practices section for creating accessible Word and PowerPoint documents.

URL: <http://www.virtual508.com>

Web Accessibility In Mind (WebAIM): WebAIM is an initiative from Utah State University. This organization's Web site has great information about Web accessibility, including a tutorial. Also, this is the organization that created WAVE (Web Accessibility Evaluation tool). You can use this Web-based tool to determine whether your Web site is accessible.

URL: <http://www.webaim.org/>

Workforce Investment Act: This legislation updated Section 508 of the Rehabilitation Act (from 1973). Section 508 had been enacted to eliminate barriers



in information technology such as computers, fax machines, telephones, and any other pieces of equipment for transmitting or receiving information. Section 508 provided the first U.S. federal accessibility guidelines for the Internet. It applies to federal and state government agencies, and any organizations that deal with the government. The Department of Education enforces Section 508.

URL: <http://www.section508.gov/>

World Health Organization (WHO): The World Report on Disability provides information and recommendations on health, rehabilitation, assistance and support, enabling environments, education, and employment to improve the lives of individuals with disabilities.

URL: http://www.who.int/disabilities/world_report/2011/report/en/

World Wide Web Consortium (W3C): This is an international organization that leads the development of Web standards. The World Wide Web Consortium (W3C) Web Accessibility Initiative (WAI) was launched to promote Web functionality for people with disabilities.

URL: <http://www.w3.org/>

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Page 13 of 20

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1. Terrill Thompson

Technology Accessibility Specialist

DO-IT, Accessible Technology

UW Information Technology

University of Washington

2. Robin Bartoletti

Senior Instructor and Instructional Designer

Accessibility Coordinator for Dallas County Community Colleges

Dallas, TX

3. Patricia J. Clark, Esq.

Pittsburgh, PA

4. Stevie Rocco

Assistant Director for Learning Design

John A. Dutton e-Education Institute

College of Earth and Mineral Sciences

Penn State University



5. Leigh Culley

Coordinator of Services and Disability Specialist

Disability Resources and Services

University of Pittsburgh

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6. Gabriel McMorland
Accessibility Assistant and Graduate Student
Pitt Online
University of Pittsburgh
7. Beth Stinson
Senior Instructional Designer
Blackboard Inc.

13. Policy Authors/Principal Investigators

The following authors were awarded a Quality Matters Research Grant to develop this accessibility policy:

1. Barbara A. Frey, D.Ed.
Senior Instructional Designer
Center for Instructional Development & Distance Education
University of Pittsburgh
2. Lorna R. Kearns
Instructional Designer
Center for Instructional Development & Distance Education
University of Pittsburgh
3. Denise R. King
Instructor
Carlow University
Pittsburgh, PA

14. Appendix: Brief Description of WCAG 2.0 Guidelines

The WCAG 2.0 guidelines are based on four principles outlined below. Each principle includes one or more guidelines for practice. Each guideline applies to Web-based content as well as supplemental content such as PDF files. For each



guideline listed below, an example or two has been provided to assist the reader in understanding the guideline. These brief examples are not intended to be comprehensive or exhaustive. For a complete explanation of how to conform to WCAG 2.0, please consult How to Meet WCAG 2.0 on the W3C Web Accessibility Initiative Web site.

1. Content must be perceivable.

1.1 Text Alternatives: Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, Braille, speech, symbols or simpler language. *Non-text content can include images, charts, graphs, video, and audio. In the case of images, charts, and graphs, the standard alternative is a text-based tag that describes the non-text material. For example, all non-decorative images should be tagged with an alternative describing the image. In the case of video and audio, the standard alternative is a text-based transcript.*

1.2 Time-based Media: Provide alternatives for time-based media. *Time-based media refer to pre-recorded audio and video. In such cases, closed captioning or a transcript should be provided.*

1.3 Adaptable: Create content that can be presented in different ways (for example simpler layout) without losing information or structure. *Content should be presented in such a way that an assistive technology like a screen reader is able to preserve the intended meaning and sequence of the content. For example, a page of text may be created with sidebars and callouts. These should be designed so that a screen reader reads them in their intended order.*

1.4 Distinguishable: Make it easier for users to see and hear content including separating foreground from background. *Visually based content should use color schemes that facilitate the differentiation of foreground and background. Fonts and background should be designed in high contrast colors. Backgrounds should be kept simple. Use clear fonts designed for on-screen viewing (e.g.,*



Verdana or Georgia). Audio content should be created so that foreground sounds are able to be adequately differentiated from background sounds.

2. Interface components in the content must be operable.

2.1 Keyboard Accessible: Make all functionality available from a keyboard. *Web pages should be navigable using individual key strokes. This enables people with limited motor control to use the site and ensures that assistive technology can navigate the pages.*

2.2 Enough Time: Provide users enough time to read and use content. *This guideline pertains to content such as narrated PowerPoint in which slides automatically advance. In this case, compliance with this guideline could be ensured by providing students with the ability to pause the action.*

2.3 Seizures: Do not design content in a way that is known to cause seizures. *Flashing and blinking Web page elements may cause seizures in people who have a photosensitive seizure disorder. Although it is acceptable to display an element that flashes less than two times per second, the best practice is to avoid flashing and blinking altogether.*

2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are. *Compliance with this guideline may be met by designing an organization structure of Web links that is logical and not redundant. It should be made obvious to users where they are in a network of Web pages and how to move forward or backwards to another page. When naming hyperlinks, descriptive text should be used for the link name instead of a phrase like "Click here."*

3. Content and controls must be understandable.

3.1 Readable: Make text content readable and understandable. *This guideline covers many aspects of text-based content. At its most basic, the guideline*

Page 19 of 20

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directs the designer to create text that is clear and readable without unnecessary wordiness, abbreviations, idioms, or foreign terms. It suggests limiting the use of italics and centered text and avoiding the overuse of multiple text styles. Tables represent a special case of text-based material. Since screen readers read from left to right and top to bottom, tables should be designed as simply as possible with no split cells. Column and row headings should be clearly labeled. In addition, tables should be used to display data and not for formatting Web pages.

3.2 Predictable: Make Web pages appear and operate in predictable ways.

Because screen readers and screen magnifiers do not easily convey the overall contents of a Web page, design consistency using landmarks or headers in Web pages is important to help users using such technologies to locate material from one Web page to another.

3.3 Input Assistance: Help users avoid and correct mistakes. *Web-based forms should contain clear instructions for use and be designed so as to minimize misinterpretation of fields that require user input.*

4. Content should be robust enough to work with current and future user agents (including assistive technologies).

4.1 Compatible: Maximize compatibility with current and future user agents, including assistive technologies. *This culminating guideline specifies that content should be created so as to be accurately interpreted by any and all assistive technologies. All content should be usable by both PC and MAC platforms as well as common mobile devices.*

