

A publication of The Center on Online Learning
and Students with Disabilities

The Foundation of Online Learning for Students with Disabilities

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Access for All Students

inside.

What are the major topics that this White Paper includes?

- The Challenges of Accommodations
- Compliance with Existing Federal Law is Weak
- The Statutory Mandates for Accessibility
- Section 508 Standards as the Baseline
- An Industry-sanctioned Sample Voluntary Product Accessibility Template

THE RISE OF DIGITAL DELIVERY

Online learning — education in which instruction, content, knowledge, and skill acquisition are mediated primarily by network technologies such as the Internet — is now a common mode of instruction in nearly all of the nation’s schools. While still most prevalent in secondary and middle school settings, some aspects of online learning; blended or “flipped” classrooms; home/school communication and resource sharing, and basic skill instruction are emerging in elementary settings as well. (Evergreen Education Group, 2011).

The precipitous growth in digital content and online delivery systems holds enormous promise. Whether augmenting or offered in lieu of “traditional” classroom instruction, online learning brings increased flexibility in the way that educational content can be presented, acted upon and engaged with. Further, the digital delivery of curriculum offers the capability of monitoring student progress in ways that

are simply impossible to effect otherwise. Student interactions and achievement can be tracked and reported by online learning systems in real time, providing educators with information on student progress when it matters most: at the point of instruction. These progress indicators can also be used to customize the pace and presentation of instruction on a student-by-student basis, providing schools with the capacity to truly individualize both assessment and instruction (Bienkowski, Feng, & Means, 2012; Teeter, 2012).

THE PROMISE

This amplification of communication, instructional and progress monitoring options holds a particular promise for addressing student variability: those with sensory, physical, learning or cognitive disabilities for whom a flexible learning environment is essential, as well as for those who may simply prefer one approach; one medium; one method, over another.

THE PROBLEM

Unfortunately, as of 2012, few online learning systems and the curriculum materials they deliver are designed with these students in mind. Despite the existence of well-established technological standards that facilitate physical and sensory access, and the decades old civil rights and education statutes that require equal access to educational opportunity, elementary and secondary students with disabilities in today's schools are routinely presented with online learning systems and content that are inappropriate for their use.

THE CHALLENGE OF ACCOMMODATIONS

Many students who require alternate formats, or accessible instructional materials (AIM)—audio, magnified or large print versions of text documents, or more specialized editions in braille or tactile graphics—receive these materials through a combination of national resources and local expertise, with an emphasis on the latter. In a predominantly print-based classroom, most districts and many schools have developed the capacity to retrofit or acquire alternative versions of content that may be unusable for a particular student, or alter an instructional sequence or activity so that students who cannot read, write, speak, gesture or select can be engaged and contribute equitably. Strikingly, few if any of these approaches are effective in online learning

environments, since virtually no elementary or secondary system has the capacity to retrofit digital content for accessibility. As a result, these materials and systems must be designed, from the outset, with these needs and these students in mind.

...Virtually no elementary or secondary system has the capacity to retrofit digital content for accessibility.

COMPLIANCE WITH EXISTING FEDERAL LAW IS WEAK

Requirements for assuring that the curricular goals, methods, materials and assessments be accessible to and appropriate for elementary and secondary students with disabilities permeate both civil rights (the Rehabili-

tation Act; the Americans with Disabilities Act) and Education Law (Individuals with Disabilities Education Act; Elementary and Secondary Education Act), yet compliance with these requirements in many widely-deployed elementary and secondary online learning systems is marginal at best.

A 2010 pilot application of the Grades 6-12 Quality Matters Rubric for establishing quality standards for online instruction indicated that of the nine standards assessed, those the rubric that the sampled

online courses most frequently missed was Adherence to Institutional Accessibility Policy. 75% of the sampled courses were developed and deployed with little or no attention paid to accessibility (Quality Matters Program, 2010).

This finding is not surprising. Very few of the currently deployed elementary or secondary-level Content Management Systems (CMS) or Learning Management Systems (LMS) or the materials they contain provide any publicly available information regarding accessibility. Often their respective company websites are generally non-compliant with accessible design standards and their products not designed with student variability in mind.

On the consumer side, most elementary and secondary purchasing and pro-

CONSIDER THE NUMBERS¹

State Virtual schools or state-led online learning initiatives exist in **40 states**.

State virtual schools had about **536,000 course enrollments** in 2010-2011.

30 states plus Washington, D.C. have at least one full-time online school operating statewide.

About 250,000 students attend full-time online schools.

¹ Keeping Pace with K-12 Online Learning 2011. Accessed from <http://kpk12.com/states/>

curement policies at the State education agency (SEA) level or the Local education agency (LEA) level that relate to digital instructional materials and online learning do not require these materials to be accessible (Kinash, Crichton, & Kim-Rupnow, 2004). The agencies charged with making these purchasing decisions may be unaware of existing federal statutes, unfamiliar with technical accessibility standards and not well versed in the needs of the students with disabilities for whom their education system is responsible.

THE STATUTORY MANDATES FOR ACCESSIBILITY

DIGITAL TECHNOLOGIES IN K-12 & POSTSECONDARY EDUCATION: CIVIL RIGHTS LAW

In June of 2010, The Office of Civil Rights of the US Department of Education and the Department of Justice published a joint “Dear Colleague” letter to college and university presidents regarding the use of electronic book readers and other emerging technologies that are inaccessible to students who are blind or have low vision (2010). This communication noted that requiring use of a particular technology for instruction if the technology is inaccessible to individuals with disabilities is discrimination prohibited by the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. To avoid discrimination, postsecondary institutions need to assure that students unable to use the technology would receive accommodations or modifications in order to receive all the educational benefits provided by the technology in an effective, integrated and equitable manner. Institution’s administrations’ were charged with avoiding requiring the use of any electronic book reader (or other similar technology) in an instructional setting as long as the device remains inaccessible to individuals who are blind or have low vision.

Approximately one year later in May, 2011, a “frequently asked questions” (FAQ) document was issued by the Office of Civil Rights (2011). The May, 2011 publication further noted that these civil rights requirements apply not just to postsecondary schools, but to elementary and secondary schools as well. This subsequent publication noted that the principles articulated in the June 2010 Dear Colleague Letter related to all instructional technolo-

gies (not just eBook readers) readers, and that the protected class of students was not limited to those who are blind or low vision, but also to students with other disabilities (dyslexia, as an example) that affect their ability to access materials in a traditional manner. These ADA and Section 504 requirements were noted to apply to all aspects of a school, and all faculty and staff must comply with them.

ACCESSIBILITY IN EDUCATION LAW THE NIMAS INITIATIVE IN IDEA 2004

Section 300.172 of the Individuals with Disabilities Education Act (IDEA 2004) requires that each state education agency (SEA) and local education agency (LEA) provide assurances to the Secretary of Education regarding the timely provision of accessible, alternate format materials for students with identified print disabilities. With the exception of encouraging coordination with the state agency for assistive technology, the obligations for LEAs are identical to those required by states. States are required to adopt the National Instructional Materials Accessibility Standard (NIMAS) as the technical foundation for enhancing the timely delivery of braille, digital text, audio and large print versions of textbooks and related materials, and publishers provide these files to a secure central repository (the National Instructional Materials Access Center) for access by qualified personnel. Each state has a contact responsible for [NIMAS-related activities](#).

A COMMERCIAL PRODUCTS ALTERNATIVE

Congress included in the IDEA 2004 re-authorization a section that indicates that states and local education agencies can, alternatively, meet accessible materials requirements of the law through the purchase of accessible instructional materials directly from publishers. This alternative to accommodation models (NIMAS and AIM) is an important addition because purchasing directly from the market not only successfully meets legal requirements, but also provides additional advantages.

One distinct advantage is that purchasing materials that are accessible from the start allows all students to access the same information at the same time. When this is the case, it is more likely that all students, not just students with disabilities, will have access to responsive and appropriate educational environments. Further, since only

students who are on an Individualized Education Program (IEP) and meet the requirements of copyright law can be provided with NIMAS-derived materials as an accommodation, only those particular students (i.e., students with disabilities as identified by IDEA) benefit from the accessibility those materials offer. However, when accessible materials are purchased as commercial products, all students, including students who struggle or have yet to be identified as having a disability, can benefit from the accessibility features.

Unfortunately, this alternative is not always available. Despite the technological capabilities, many products on the market lack even basic accessibility features such as text-to-speech and do not comply with established accessibility standards (e.g.; Section 508). These products are therefore just as restrictive as traditional print textbooks, and in some cases can be worse than print versions, because retrofitting digital materials that include interactivity, collaborative spaces, and rich media is nearly impossible.

For more information on efforts to increase the commercial availability of flexible curriculum materials, visit [the Purchase Accessible Learning Materials \(PALM\) Initiative](#) at the National Center on Accessible Instructional Material.

THE ELEMENTARY AND SECONDARY EDUCATION ACT

Access to the general curriculum has been a hallmark of IDEA since the 1997 reauthorization. This commitment was re-emphasized in the 2001 reauthorization of the Elementary and Secondary Education Act. In particular, the ESEA reauthorization instituted the concept of Adequate Yearly Progress (AYP), which measures, for accountability purposes, the achievement profiles of students receiving public education services, including the extent to which students with disabilities make progress in the general education curriculum.

In addition, this annual progress monitoring that emphasizes the inclusion of students with disabilities quickly caught the attention of school-, district- and state-level education personnel. Between 2001 and 2004 most states had moved towards some form of large-scale assessment in order to gather the achievement data that the AYP process required. Very few of these assess-

ment initiatives adequately addresses the needs of students with disabilities, despite the fact that ESEA is specific in its intent that the majority of enrolled students are expected to participate.

ESEA clearly requires that large-scale assessments be designed, from the outset, to accommodate students with disabilities: 200.2 State responsibilities for assessments:

- (b) The assessment system required under this section must meet the following requirements:
 - (2) Be designed to be valid and accessible for use by the widest possible range of students, including students with disabilities and students with limited English proficiency (State Responsibilities for Assessment, 2008).

For additional detail on the relationship between IDEA and NCLB, see [“Access to the General Curriculum for Students with Disabilities: A Discussion of the Interrelationship between IDEA 2004 and NCLB.”](#)

MOVING FORWARD: THE ESEA BLUEPRINT

The United States Department of Education (2010) released the “ESEA Reauthorization: A Blueprint for Reform”. In particular, the Blueprint noted:

...Our proposal will help ensure that teachers and leaders are better prepared to meet the needs of diverse learners, that assessments more accurately and appropriately measure the performance of students with disabilities, and that more districts and schools implement high-quality, state- and locally-determined curricula and instructional supports that incorporate the principles of universal design for learning to meet all students’ needs.

This commitment to Universal Design for Learning (UDL) re-affirms the importance of providing curricular and instructional supports that are able to be represented, acted upon and engaged with by all students.

THE ACCESSIBILITY OF ONLINE TECHNOLOGIES

In the majority of circumstances, digital media and the CMSs or LMSs that deliver them are not able to be retrofitted for accessibility in an ad hoc manner

at the classroom, school or even district level. The combination of rich media – text, audio, images and video/animations and the multi-faceted sophistication of CMS/LMS platforms easily overwhelms the capacity of schools to modify or even create accommodations for accessibility. The CMS/LMS systems must be designed with accessibility in mind, and they must support the delivery of accessible content.

THE ASSISTIVE TECHNOLOGY ACT OF 1998

All states receive funding from the Assistive Technology Act of 1998 as amended (2004). As a condition of receiving those funds, state must comply with the standards established by the Architectural and Transportation Barriers Compliance Board under Section 508 of the Rehabilitation Act of 1973 (20 U.S.C. 794d). This requirement—now more than a decade old—prompted most states to issue guidance related to Section 508 as a requirement for state-supported websites. Few states have extended these guidelines to instructional materials, and far fewer — approximately a dozen — have codified guidelines into statutes (Alper & Raharinirina, 2006).

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ACCESSIBILITY REQUIREMENTS FROM THE FCC

The Twenty-First Century Communications and Video Accessibility Act (CVAA) was signed into law in the fall of 2010. These federal statutory requirements for accessible digital media and communications were enacted as an explicit acknowledgement of the need for embedded accessible design in emerging technologies. The CVAA addresses two categories of digital technology where accessibility is essential: communications and video programming.

In the communications area, the CVAA requires that all “Advanced Communications” including Voice over Internet Protocol (VoIP); text messaging, video conferencing, email and instant messaging be accessible. In the “Video Programming” category the CVAA requires any video programming captioned for television be similarly captioned for internet use

and restores the year 2000 FCC video description expectations—audio descriptions of a television program’s key visual elements: characters, scene, movement, etc.—that are inserted during pauses in the program’s dialogue—with some further descriptive enhancements phased in across ten years.

SECTION 508 FOR FEDERAL GOVERNMENT PROCUREMENT

Enacted in 1998 as an amendment to the Rehabilitation Act of 1973, Section 508 provide both a mandate for the federal government and its agencies to assure that information technology is accessible, and a series of functional specifications for meeting that mandate. The current draft revision of Section 508 (the Section 508 “refresh”) reconciles its accessibility specifications with the international “Web Content Accessibility Guidelines” developed by the World Wide Web Consortium (W3C, 2008).

As a statute, the law applies only to all Federal agencies; in practice, it has been voluntarily adopted by some states, products developers and educational institutions since it represents a widely-accepted set of national accessibility standards.

The Section 508 access standards cover software, operating

systems, web and internet, telecommunications, video and multimedia, self-contained products and desktop and portable computers. (United States Federal Government, 2010). The Section 508 standards have become the nation’s de facto accessibility specifications for the following reasons:

- Their development was crafted by a broad group of stakeholders and overseen by the independent United States Access Board
- The Section 508 standards were adopted by the United State Department of Justice for enforcement
- Vendors who sell into federal agencies also offer products to the non-federal marketplace; meeting the Section 508 compliance standards supports both market sectors

THE POSTSECONDARY AIM COMMISSION

The passage of the Higher Education Opportunity Act of 2008 established the Advisory Commission on Accessible Instructional Materials in Post-Secondary Education for Students with Disabilities (US Department of Education, 2010). In the fall of 2011 the Commission met to:

- (a) conduct a comprehensive study, which will—(I) Assess the barriers and systemic issues that may affect, and technical solutions available that may improve, the timely delivery and quality of accessible instructional materials for post-secondary students with print disabilities, as well as the effective use of such materials by faculty and staff; and (II) make recommendations related to the development of a comprehensive approach to improve the opportunities for post-secondary students with print disabilities to access instructional materials in specialized formats in a timeframe comparable to the availability of instructional materials for post-secondary non-disabled students.

The Commission's first recommendation to Congress was to authorize the United States Access Board to establish guidelines for accessible instructional materials in government, private and postsecondary settings. The Commission further clarified its intent by noting The Commission believes that the revised and updated Section 508 guidelines (if adopted), while not intended to address the unique aspects of access to instructional materials, will better serve students with disabilities by incorporating instructional requirements. (In 2006 the Access Board directed its staff to revise and update the accessibility standards for E&IT covered under Section 508 and the accessibility guidelines for telecommunications equipment and customer premises equipment covered under Section 255 and to harmonize the updated standards with international accessibility standards.) The direction to base future guidelines for instructional materials on the Section 508 specifications was strongly supported by all Commission members. The Commission further noted that:

Establishing and implementing a single unified set of accessibility performance standards for digital documents and their delivery systems is

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highly desirable. Guidelines developed under the auspices of the Access Board would (a) build upon an already-established set of specifications for electronic and information technology (Section 508), (b) work to assure harmonization with other accepted national and international accessibility specifications (WCAG2, etc.) and (c) provide a technical specification as the foundation for enforceable standards. (United States Department of Education, 2011).

SECTION 508 STANDARDS AS THE BASELINE

SECTION 508 FUNCTIONAL PERFORMANCE CRITERIA

[Section 1194.31 of the Section 508 Standards](#) details the intent of the technical specifications by articulating a set of functional criteria designed to ensure that individuals with sensory and physical disabilities are provided with appropriate, effective and equitable product use:

- (a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for assistive technology used by people who are blind or visually impaired shall be provided.
- (b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for assistive technology used by peo-

ple who are visually impaired shall be provided.

(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for assistive technology used by people who are deaf or hard of hearing shall be provided.

(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.

(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for assistive technology used by people with disabilities shall be provided.

(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.

For the reasons previously detailed, the Center on Online Learning and Students with Disabilities believes that the Section 508 functional accessibility Standards provide an appropriate and widely-adopted descriptive baseline for detailing the accessibility of digital media and delivery systems available for deployment in the Nation’s K-12 educational system. The Center encourages product developers and consumers alike to employ the Voluntary Product Accessibility Template (VPAT) mechanism for detailing the degree to which a product promoted as appropriate to supporting online learning for elementary and secondary students is accessible to those populations. The benefits of this approach include

- **For Students with Disabilities**—Accurate Section 508 compliance provides baseline-level accessibility supports for students with sensory (vision; hearing) disabilities; those with physical disabilities, and to a degree, students with learning and attentional challenges
- **For Schools**—Requiring accurate Section 508 compliance as a procurement requirement provides schools with a documentable (via VPAT) baseline-level adherence to ex-

isting federal civil rights and education law.

- **For Content Developers/Producers/Providers**—Accurate Section 508 compliance and specification detail (via VPAT) provides content developers with specific detail regarding accessibility features within the context of a widely-used national accessibility standard.

To facilitate the acquisition of digital hardware and software that complies with Section 508, the Government Services Administration has created “[Buy Accessible](#),” a website and associated tools to guide purchasing decision-makers. This resource offers a “Buy Accessible Wizard” and an “Accessibility resource Center” with an alphabetical listing of vendor-created VPATs. [An additional listing of vendor-created VPATs](#) is available online from Even Grounds, Accessibility Consulting.

AN INDUSTRY- SANCTIONED SAMPLE VOLUNTARY PRODUCT ACCESSIBILITY TEMPLATE

In 2009 the Information Technology Industry Council (ITI), an organization of world-wide information technology vendors and developers, published a Voluntary Product Accessibility Template[®] as a means of standardizing the way in which hardware and software developers could detail the compliance of their various products with the Section 508 requirements. [The Template](#), available online, has been approved by the Government Services Administration and provides a standardized format for reporting accessibility conformance. The Summary Table from the ITI VPAT[®] is reproduced in Figure 1.

THE IMPORTANCE OF ACCURATE VPATS

An accurate VPAT provides, via a detailed description of product specifications, the ways in which the Section 508 Functional Performance Criteria are addressed. While VPAT detail—and, in some cases, accuracy-- may vary from vendor to vendor, the fact that the VPAT is designed to reference a standardized set of functional specifications allows a purchaser to determine whether or not the product will meet the need of students with disabilities.

BEST PRACTICES VPAT DETAIL

For example, the first two items in Section 1194-22 Web-based Internet Information and Applications Detail criterion (a) (see Figure 2) requires:

FIGURE 1 Summary Table from the ITT VPAT®

Summary Table		
VPAT™		
Voluntary Product Accessibility Template®		
Criteria	Supporting Features	Remarks and explanations
Section 1194.21 Software Applications and Operating Systems		
Section 1194.22 Web-based Internet Information and Applications		
Section 1194.23 Telecommunications Products		
Section 1194.24 Video and Multi-media Products		
Section 1194.25 Self-Contained, Closed Products		
Section 1194.26 Desktop and Portable Computers		
Section 1194.31 Functional Performance Criteria		
Section 1194.41 Information, Documentation and Support		

FIGURE 2 Web-based Internet Information and Applications Detail criterion

Section 1194.22 Web-based Internet information and applications – Detail		
VPAT™		
Voluntary Product Accessibility Template®		
Criteria	Supporting Features	Remarks and explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).		
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.		

(a) A text equivalent for every non-text element shall be provided (e.g., via “alt”, “longdesc”, or in element content).

This means that every graphic, image, chart, map or other non-text element is provided with accompanying descriptive text—an essential accommodation for non-sighted students who may use a screenreader to navigate the product using spoken audio feedback.

Similarly, criterion (b) requires synchronized equivalents—closed captions for video or other visually-oriented presentations in order to provide a non-sighted student with access that is equivalent to that of a sighted student (and simultaneously implies that simply providing a transcript of a video is not an acceptable equivalent). By providing a complete and accurate VPAT for instructional materials and delivery systems used in online learning a product vendor or developer can significantly aid the informed decision-making of their SEA or LEA-based customers. By requiring a VPAT from a vendor or instructional materials producer, LEA or SEA-based purchasers can document due diligence in their efforts to comply with existing civil rights and education law—a win/win scenario for all involved.

BEST PRACTICES VPAT EXAMPLES

The open-source Canvas learning Management system by Instructure, the commercial LMS Desire2Learn and [BlackBoard 9.1](#) were awarded the nonvisual accessibility web certification by the National Federation of the Blind (NFB NVA certification). This designation focuses on a product’s compatibility with screenreader software commonly used by non-sighted individuals, and emphasizes that certified products allow person who are blind or have low-vision to:

- Access information in narratives, databases, forms, charts, maps, and essential information conveyed via graphical presentations without visual assistance
- Complete transactions that have been identi-

fied as primary to the application such as, but not limited to: buying merchandise, completing forms, registering for activities, downloading information, communicating with others, and participating in online educational programs (National Federation for the Blind, 2012).

Both [Canvas](#) and [Desire2Learn](#) have achieved “Gold” level certification from NFB, and their representative VPATS are available online. These VPATS offer highly-detailed and accurate descriptions of the Section 508 conformance offered by the respective products. This detail is particularly useful in informing potential implementers or purchasers of the extent to which these products may meet the accessibility needs of students with disabilities.

RESOURCES

Statutes & Standards:

The Legal and Technological Foundations

1. Statutes related to accessibility in online instructional environments

- Univ of Washington: <http://www.washington.edu/accessit/webpslegal.html>

2. Standards: Technology & Accessibility

2.1. Standards for Digital Delivery Systems

- Section 508 accessibility standards; VPAT (refresh – aligned with WCAG2)
 - o <http://www.section508.gov/index.cfm?fuseAction=Laws>
 - o <http://www.access-board.gov/sec508/refresh/draft-rule.htm>
 - o <http://www.itic.org/index.php?src=gendocs&ref=vpat&category=resources>
 - o NPRM 2010: http://www.ada.gov/an-prm2010/factsht_web_anrpm_2010.htm
 - Access for All; ISO/IEC Standard 24751, IMS Global/WGBH NCAM
 - o Part 2: “Access for all” personal needs and preferences for digital delivery
- Accessible Portable Item Protocol (APIP)
 - o http://www.imsglobal.org/apip/IMSAssessmentPrimerv1p0.html#_Toc324138059

2.2. Standards for Digital Content

- Access for All; ISO/IEC Standard 24751, IMS Global/WGBH NCAM
 - o Part 3: “Access for all” digital resource description
- Accessible EPUB3 (International Digital Publishing Forum)
 - o <http://shop.oreilly.com/product/0636920025283.do>
- Accessible Publishing --Best Practice Guidelines for Publishers
 - o <http://www.editeur.org/files/Collaborations/Accessibility/WIPO.html>
- DAISY/NISO Z39.98
 - o http://www.daisy.org/zw/Z39.86_Authoring_and_Interchange_Framework_Primer

2.3. Standards for Rendering Technologies: computers, kiosks, tablets, mobile devices

- S. 3304 (111th): Twenty-First Century Communications and Video Accessibility Act of

2010

- o <http://www.govtrack.us/congress/bills/111/s3304>
- Section 508: <http://www.section508.gov/index.cfm?fuseAction=Laws>

Accessibility Resources & How To Guides

- US Access Board: <http://www.access-board.gov/sec508/e-learning.htm>
- Cannext: <http://projectone.cannect.org/>
- WebAIM: <http://webaim.org/standards/508/checklist>
- CSU: <http://www.calstate.edu/accessibility/tutorials/eLearning.shtml>
- UCF: <http://teach.ucf.edu/pedagogy/accessibility/>
- NCDAE: <http://www.ncdae.org/goals/>
- IMS Global: <http://www.imsglobal.org/accessibility/accessiblevers/sec3.html>
- National Center on Disability and Access to Education: Let the Buyer be Aware: [The Importance of Procurement in Accessibility Policy.](http://www.ncdae.org/resources/articles/procurement.php)
<http://www.ncdae.org/resources/articles/procurement.php>
- DIAGRAM Center: <http://diagramcenter.org>
 - o EBook Hardware & Software Accessibility; DTB Hardware & Software Accessibility, EBook Authoring Software Accessibility
- The Center on Accessible Distance Learning: <http://www.washington.edu/doi/Resources/cessdl.html>
- Open Educational Resources (Designing Accessible Materials)
 - o <http://handbook.floeproject.org/index.php/Home>
- Content Management Systems/Learning Management Systems
 - o <http://www.afb.org/section.aspx?SectionID=57&TopicID=167&DocumentID=2757>
 - o <http://www.web2access.org.uk/>

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