SREB

Southern Regional Education Board

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Policy analysis from SREB's 10 Issues in Educational Technology

Expanding Accessibility to Digital Spaces Through Improved Policy and Practice

The Americans with Disabilities Act (ADA) of 1990 called attention to the need for greater accessibility for all Americans — particularly regarding buildings that accommodate the public. This meant ensuring reserved handicap parking was nearby; sidewalk ramps were present; wheelchair aids of all kinds, including door openers, elevators and lifts to all floors and restroom facilities, were available; and braille signage was adequately and strategically placed. The breakthroughs this act created for Americans with disabilities were significant — literally opening spaces to individuals that had been closed before.

But the implications of the act go beyond physical space. Technology advancements have created new opportunities for students with disabilities. The prevalence of online and blended learning and information on websites means that web and software developers — and educators — must address the accessibility of digital spaces. If people with disabilities are to benefit from these digital spaces, there should not be any barriers to them, and their content should be available regardless of students' physical or cognitive abilities.

What Is Digital Accessibility?

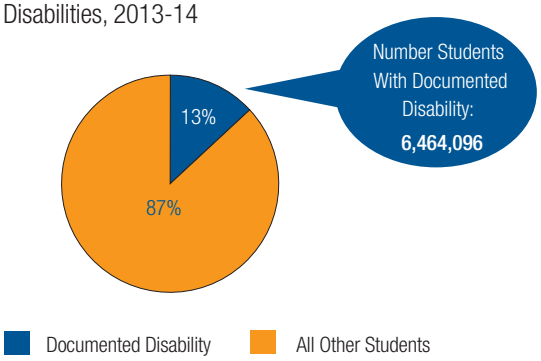
The Americans with Disabilities Act, focused on preventing discrimination against individuals with disabilities, defines a person with a disability as someone who has a physical or mental impairment that substantially limits one or more major life activities. It includes anyone who has a *record* of having such an impairment or one who is *regarded* as having an impairment.

Digital accessibility ensures the ready availability and usability of content, websites and processes on computers and electronic devices for all users, including those with hearing, visual, motor or cognitive impair-

Inside

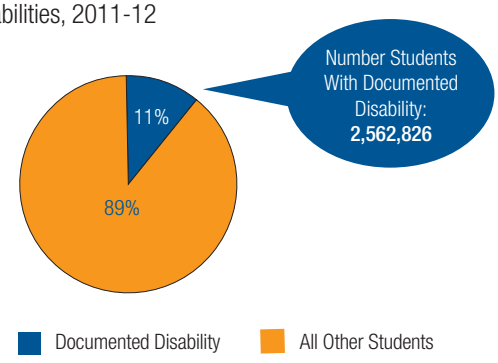
This policy brief is one of several forthcoming briefs on SREB's Educational Technology Cooperative's 10 Issues in Educational Technology. This report covers two issues, Digital Accessibility and Policy. The remaining issues to be featured are: Data Systems, Predictive Analytics, Bandwidth, Emerging Technologies, New Learning Models and Student Digital Literacy.

FIGURE 1: Proportion of K-12 Students With Documented Disabilities, 2013-14



Data Source: U.S. Department of Education

FIGURE 2: Postsecondary Students With Documented Disabilities, 2011-12



Data Source: National Center for Education Statistics

ments. It recognizes that users with disabilities may require assistive technologies to access the content. For example, someone who is blind or visually impaired may need a screen reader to get information from a website; someone with motor-skills impairment may need to navigate a screen with a tab key or arrows or a puffer instead of clicking a mouse; and someone with a hearing impairment may need closed captioning for video content and transcripts for audio-only content.

If digital accessibility for students with disabilities is not addressed in both K-12 and post-secondary education institutions, millions of students could be denied access to an equally engaging educational experience. The U.S. Department of Education estimates that 13 percent of school-age children have one or more disabilities.

For postsecondary education, the number of students with documented disabilities drops to about 11 percent. But some college students choose not to disclose or document their disabilities, so this per centage could be greater if all students reported their disabilities. The reasons for students not disclosing disabilities vary. Some students are not ready to advocate for themselves after high school, even though the Individuals with Disabilities Education Act (IDEA) of 2004 requires that high schools help students plan their transition from high school to careers or postsecondary education. Also, students may not know what to ask for or where to ask for assistance with their disability. Or they may want to avoid the stigma of identifying as a student with a disability.

Historical View: Laws, Regulations and Policies

The Rehabilitation Act of 1973 (29 U.S.C.§ 701), which applies to federal agencies or contractors, was the first in a series of laws applying to rights of persons with disabilities. Section 504 of the act specifies that the law applies to many types of entities that receive federal aid, including educational institutions. In 1990, Congress passed the ADA. Its Title II requires state and local governments to comply with the disability law. Title III addresses accessibility of places of public accommodation, which include schools, libraries and

Public Accommodation:

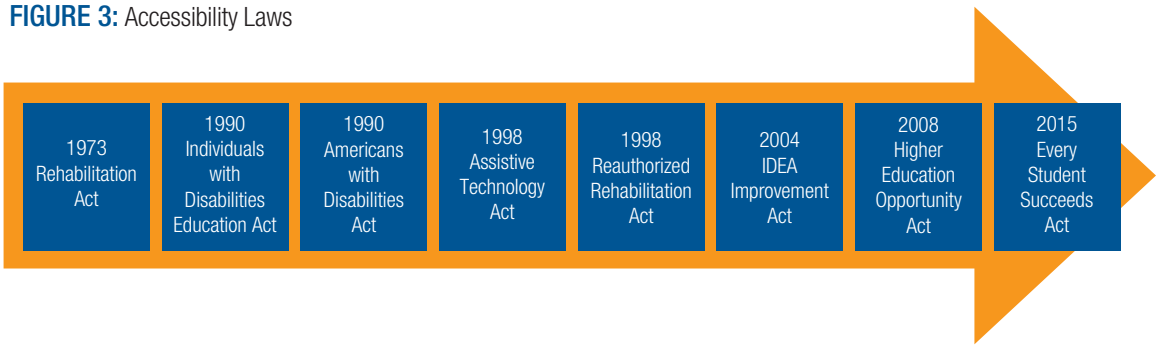
"…Public accommodations include most facilities that individuals with disabilities are likely to want to use, such as supermarkets, restaurants, hotels and doctors' offices. 37 Other facilities, such as warehouses that are not open to the public, are required to be accessible when they are newly built or substantially renovated. 38 However,.. these commercial facilities might have to be modified to become accessible if an employee with a disability needs to access the facility. 39"

The 2012 Netflix case is important because Netflix's streaming video service was determined to be a place of public accommodation. The majority of its videos were not captioned for use by people with hearing impairments.

Source: Drake Law Review, 2015

other public services. (The Drake Law Review (2015) concerning the Netflix case provides a clear explanation of the legal issues related to public accommodation and the requirements incumbent on those who provide access to space that is generally available to the public.) In 1998, the Rehabilitation Act was amended and Section 508 specified requirements for electronic and information technology (29 U.S.C. 794 Section 508).

FIGURE 3: Accessibility Laws



The federal government implemented the initial laws before the web was commonly used by state and local governments to provide information and services. Even so, the U.S. Department of Justice (DOJ) indicated in the preamble to the amendment that the regulations should be interpreted so as to keep pace with developing technologies. To this end, the DOJ issued notices of public rule making, requesting comments about standards for ADA compliance, but several years went by without a definitive ruling on which standard to use. This delay likely led agencies to postpone updating content or websites as they waited for a final determination by the DOJ. Regardless, many of the lawsuits and case resolutions required colleges and school districts to use the World Wide Web Consortium's (W3C) Web Content Accessibility Guidelines 2.0 Level AA (WCAG 2.0 Level AA) standard when updating e-learning content and websites. The government has since adopted WCAG 2.0 Level AA as the official standard for Section 508 of the ADA and published the new ruling in the federal register on January 18, 2017. The new standard becomes effective on January 18, 2018, allowing a year for implementation of the ruling. While 508 applies to federal government agencies, several states adopted the 508 standard in their statutes. Additionally, any agency that receives funds from the Assistive Technology Act must use the new section 508 standard.

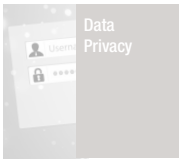
Reliance on voluntary compliance for making websites and online content sufficiently accessible for students with disabilities did not prove adequate, resulting in lawsuits and resolutions. Recent legislation has placed emphasis on the need for all students to have greater access to digital resources. This new emphasis has led to a call for all new digital content to follow Universal Design for Learning or UDL. The guiding principle for UDL is that all online content, from its conception, be developed to meet the needs of all students. UDL not only calls for early consideration of students with disabilities in the design of technology applications, but it also addresses other students' needs as well, including those who benefit from multiple learning styles or those who are English language learners.

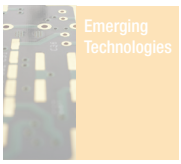
WCAG Guidelines:

The WCAG 2.0 guidelines, including levels A, AA and AAA, were developed by the World Wide Web Consortium (W3C®), the principal international organization that has developed protocols and guidelines for the web.

WCAG 2.0 AA has been adopted as the standard for web accessibility by the International Organization for Standardization, the International Electrotechnical Commission, several nations and many states. Some states adopted earlier versions as a standard, but with the new Section 508 ruling, states may want to consider the new standard. (See references.)

WebAim.org provides an easy-to-use checklist for all levels of WCAG 2.0.





The Higher Education Opportunity Act (HEOA) of 2008 defined UDL as follows.

"Universal Design for Learning (UDL) means a scientifically valid framework for guiding educational practice that — (a.) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and (b.) reduces barriers in instruction, provides appropriate accommodations, supports and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English-proficient."

The Every Student Succeeds Act (ESSA) of 2015 endorses UDL and uses the same definition as the HEOA. ESSA, which takes effect in schools in 2017-18, references UDL in several sections, one of which is quite significant:

- Section 4104, State Use of Funds, stipulates that funds shall be used to support "local education agencies in … providing technical assistance to local educational agencies to improve the ability of local educational agencies to **use technology, consistent with the principles of universal design for learning, to support the learning needs of all students, including children with disabilities and English learners.**"

Universal Design and UDL:

"Universal design" was coined by architect Ronald Mace of North Carolina State University regarding physical accommodations for the disabled, such as sidewalk ramps. The Universal Design for Learning framework, which uses flexible learning environments to accommodate different learning styles, was created in the 1990s by David Rose, lecturer at Harvard Graduate School of Education and co-founder of the Center for Applied Special Technology (CAST).

Section 4104 is important for schools because funds to support awareness, training and technical assistance for digital accessibility are critical for successful implementation of ESSA's accessibility requirements, as well as complying with the federal accessibility laws.

The U.S. Department of Education's 2016 National Educational Technology Plan and the 2017 update summarize the importance of UDL and stress that digital content should be "born accessible" so that it can meet comprehensive standards of learning from the outset — and not require adaptation or "work-arounds" to serve special populations.

"Education stakeholders should develop a born accessible standard of learning resource design to help educators select and evaluate learning resources for accessibility and equity of learning experience. Using the principles and research-base of …UDL, this standard would serve as a commonly accepted framework and language around design for accessibility and offer guidance to vendors and third-party technology developers in interactions with states, districts and institutions of higher education."

Recent legislation re-iterates the intent of the original legislation, which not only aimed at removing barriers to physical spaces but also at taking advantage of advancing technologies. Both older and more recent accessibility laws aimed at education spell out that K-12 and postsecondary institutions have a responsibility to ensure digital accessibility.

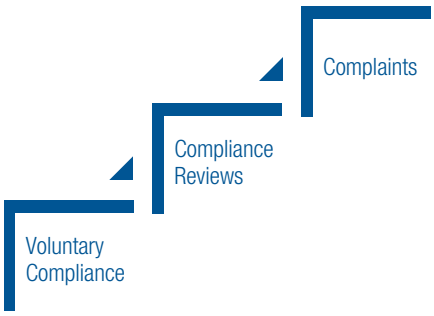
Who Enforces the Laws?

The DOJ, Office of Civil Rights, enforces Titles I, II and III of the Americans with Disabilities Act. Other agencies may become involved in disability cases, including the U.S. Department of Labor and the Equal Employment Opportunity Commission, depending on the type of discrimination alleged. The DOJ can file lawsuits in federal court and obtain court orders for compensatory damages on behalf of individuals or groups.

The Office for Civil Rights (OCR) at the U.S. Department of Education enforces Title II of the ADA and Section 504 of the Rehabilitation Act of 1973 (as amended), including "programs, services and regulatory activities relating to the operation of elementary and secondary education systems and institutions, institutions of higher education and vocational education (other than schools of medicine, dentistry, nursing and other health-related schools) and libraries." (§35.190 Designated agencies)

OCR works with institutions and educational agencies to achieve voluntary compliance. It also initiates cases, referred to as compliance reviews, during which it assesses the institution's compliance with federal ADA laws. OCR also responds to complaints filed by citizens or organizations that support people with disabilities, such as the National Federation for the Blind or the National Association of the Deaf. It is not necessary for the person or organization filing the complaint to be the aggrieved. In fact, one individual filed more than 500 complaints for noncompliance of school websites.

FIGURE 4: Types of OCR Reviews



Consequences of Non-Compliance

Schools and colleges that have found themselves in non-compliance with ADA regulations have faced significant consequences.

Juneau School District received a response from the Office of Civil Rights on July 29, 2016, concerning a complaint filed in February 2016 about several district websites. OCR determined the sites did not meet requirements for alternative text descriptions for images, navigation options and color contrast. The district agreed to a voluntary resolution of the complaint before the investigation was fully underway. The district agreed to complete a number of tasks to OCR's satisfaction, including those listed below, before the complaint closes:

- Make its new website and all website content and functionality accessible to people with disabilities;
- Post a notice to persons with disabilities about how to request access to online information or functionality that is inaccessible; and
- Provide website accessibility training to all appropriate personnel.

The 2016 resolution to a complaint against **Miami University, Oxford, Ohio**, is particularly important because it makes clear what the DOJ expects from postsecondary institutions in meeting their responsibility to students with disabilities.

Relevant Case Resolutions

Harvard and MIT
http://nad.org/news/2015/2/nad-sues-harvard-and-mit-discrimination-public-online-content

Higley Unified School District
http://www2.ed.gov/about/offices/list/ocr/docs/investigations/more/08141259-b.pdf

Louisiana Tech University
http://www.justice.gov/opa/pr/2013/July/13-crt-831.html

Miami University (Ohio)
http://www.justice.gov/opa/pr/justice-department-moves-intervene-disability-discrimination-lawsuit-alleging-miami

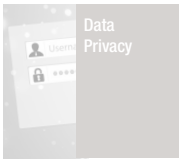
South Carolina Public Charter School District
http://www2.ed.gov/documents/press-releases/south-carolina-charter-school-agreement.doc

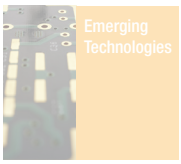
South Carolina Technical College System
http://www.ed.gov/news/press-releases/civil-rights-agreement-reached-south-carolina-technical-college-system-accessibi

University of Phoenix
http://www2.ed.gov/about/offices/list/ocr/docs/investigations/more/08152040-b.pdf

U.S. Department of Education
https://nfb.org/national-federation-blind-reaches-agreement-department-education

Other suits and settlements:
http://www.karlgroves.com/2011/11/15/list-of-web-accessibility-related-litigation-and-settlements/





Box A
Miami University of Ohio: Precedent-Setting Resolution, 2016

Miami University received a consent decree on October 30, 2016, which required the university to make changes to policies, processes and procedures for accessibility.

- The DOJ gave the university six months to bring all new and redeveloped websites to the WCAG 2.0 Level AA accessibility guidelines.
- The DOJ gave the university 18 months to make other websites compliant.
- All content, sites or applications (for example, transcript requests, parking, housing, registration), including ones developed by third-party vendors, had to conform to WCAG standards or "provide equally effective alternate access."
- All website videos with important or critical information had to be captioned.
- The university had to provide a web form for site visitors to offer feedback on how to improve accessibility.

The decree provided two months for the university to designate a web accessibility coordinator, with specified job duties, who reports to the vice president for information technology. The university is also to establish positions for an accessible technology specialist and an accessible technology coordinator. The decree also called for a review of the staffing levels within its disability services area.

Miami was required to make its learning management system (LMS) accessible before the end of the 2016-17 fiscal year. When purchasing any LMS or standalone support system, Miami is now required to undertake the following analysis.

"Evaluate any available product accessibility information, such as a Voluntary Product Accessibility Template ("VPAT"), third-party product accessibility evaluations, publicly available accessibility evaluations, and automated testing reports. Miami's IT services staff will obtain log-in credentials from the vendor to independently test the LMS or instructional support application through automated, expert and user testing — using in-house staff or third-party consultants — and will assess the claims of the VPAT and any available accessibility evaluation to determine the product's conformance with WCAG 2.0 AA and its ability to be used by students with disabilities."

The resolution specifically addressed textbooks, course content, web content, technology systems, purchasing, staffing, committees, technology plans, communication, policies and procedures. It addressed when and how frequently the disability services office must contact students with disabilities, required communications among the student, faculty, and disability services prior to the start of a course, provision of accessibility procedures and an accessible technology policy (within three months of decree), provision of training to web or course staff (within three months of the fall semester), and creation of a University Accessibility Committee (within two months of the decree) with required departmental representatives for the committee. The decree also required the creation of an Accessible Educational Resources Portal to communicate with students, parents, employees and contractors.

The DOJ awarded compensatory damages of almost $650,000 to the complainant student, including tuition, books, room and board at a state institution, where the student transferred to complete her undergraduate degree. "Miami will cover expenses of tuition, books, room and board at [the alternate] university toward a four-year undergraduate degree… ." Additionally, Miami must pay $25,000 each to a specific list of individuals that was provided to the university by the DOJ, but the number of people and names were not disclosed.

The resolution required the university to rewrite courseware, redesign websites, hire or redeploy staff members, caption videos, and pay fines (See Box A). The comprehensive resolution makes a strong statement to education leaders and policymakers about the proactive work they need to undertake to make public spaces, including digital ones, accessible to everyone.

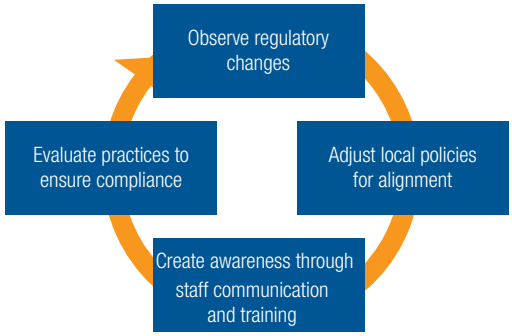
As a result of the Miami of Ohio resolution, faculty and staff training is a critical component of accessibility policies. Schools and colleges should require a minimum number of professional development training hours on their accessibility policies, connect performance pay to compliance training, include specific language in employee contracts and job descriptions, write new instructions in procedure manuals, or require employees to sign compliance statements. The human resources component of policy compliance cannot be understated.

Role of Local Policies

While federal and state laws and regulations promote accessibility — particularly to education — local policy plays a significant role in ensuring implementation and compliance. Local education agencies, districts, and postsecondary institutions need strong policies that acknowledge the requirements of federal and state legislation. Oftentimes, teachers, college faculty and staff are not aware of federal or state legislation that affects their practices — and do not keep up with changes. Local administrators need to keep up with regulatory changes to ensure that local policies are — and remain — aligned with them. Regular communication and training about change is necessary. Local practice should include evaluation of staff to ensure they adhere to policy.

Enforcing Local Policy

FIGURE 5: Local Policy Cycle



The University of California at Berkeley (Berkeley) was also recently the subject of a complaint from two hearing-impaired individuals and the National Federation for the Deaf. They charged that the university's online content was largely inaccessible. The two complainants, who were potential applicants to Berkeley's graduate school, were a professor from Gallaudet University and a staff member from Gallaudet's Laurent Clerc National Deaf Education Center. Both individuals were interested in enrolling in graduate online communications courses and had reviewed relevant course materials on Berkeley's website. The DOJ determined that Berkeley's online content on its web platform, UC BerkeleyX, as well as its YouTube channel and its iTunes U platform were not accessible to individuals with hearing, vision or manual disabilities. Further, the DOJ reviewed 16 MOOCs (massive open online courses) on Berkeley's edX platform and found that none were fully accessible.

The investigation showed that the videos were not captioned in either the new or archived courses, text was displayed with poor color contrast, information was conveyed with color only (without accompanying text explanation), table headings were formatted improperly and math equations were incomprehensible to visually impaired students. Faculty who develop MOOCs at Berkeley could have used the Berkeley Resource Center for Online Education (BRCOE) to ensure a fully accessible course for students with disabilities, but they were also permitted to make them accessible using a self-service model without the help of BRCOE. Berkeley has a services unit for staff and faculty that provides closed captioning and transcripts for UC Berkeley's online content that can be used for YouTube and iTunes U.

Yet the department found that many of the videos designed for this use were not captioned and those that were captioned, were mostly inaccurate or incomplete. Of the 99 lectures the DOJ reviewed, none of them were captioned and none contained an alternative means of access for students with disabilities, such as transcription.

Berkeley is required to abide by the University of California accessibility policy, which adopted the WCAG 2.0 Level AA standards. The investigation concluded that Berkeley did not enforce the policies and the faculty and staff were not required to use the services available.

The DOJ's letter of findings requires Berkeley to:

- Develop a system to monitor compliance with the technical standards adopted in the University of California's Information Technology Accessibility Policy, WCAG 2.0 AA;
- Develop and implement procedures to ensure that courses and content on UC BerkeleyX, YouTube and iTunes U platforms comply with WCAG 2.0 AA technical standards;
- Develop mechanisms to receive and respond to feedback about accessibility; and
- Pay compensatory damages to the individuals in the lawsuit.

This case demonstrates that having good policies are not enough to ensure accessibility under the law. Schools and institutions need to enforce the policies and continuously review the practices of their faculty and staff to ensure their websites and digital content comply with federal and state laws and regulations. As the U.S. Department of Education says: "inspect what we expect to accept."

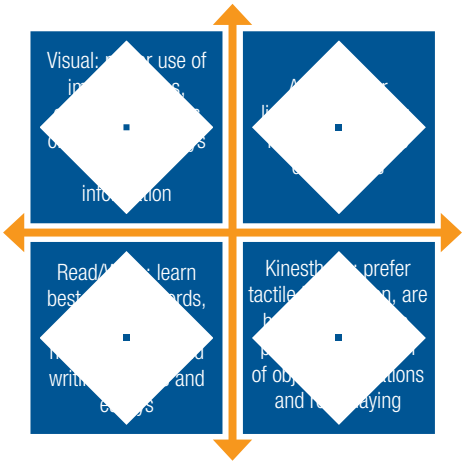
Best Practices and Benefits

Although making web content and learning materials accessible for students with disabilities is a challenge, the rewards benefit more students. Students who have limited English proficiency benefit from the closed captions and transcripts that aid visually impaired students. Captions also help to improve reading ability, word recognition, vocabulary and comprehension in both early readers and adults, thereby supporting general literacy. Assistive technologies that were initially developed to assist students with disabilities have found a wide variety of uses for other students and the general population. Speech recognition for hands-free phone usage or virtual assistants, like Siri, Cortana and Google Assistant, have become mainstream computer usage. Likewise, as technologies have advanced, the adaptation of various applications to the needs of students with disabilities has improved their use of digital devices.

To gauge progress in ensuring equity of access to digital learning for students with disabilities compared with other students, education leaders and policymakers need clear standards. The standard used in the DOJ and DOE resolutions and decrees and the standards mentioned in federal notices are the WCAG 2.0 Level AA.

Going beyond a standard, schools and institutions should be using the principles of UDL, which serve more than disabled students. UDL calls on developers to consider presenting the content by drawing on different senses and using multiple learning styles, thereby giving all students multiple ways to access the information and demonstrate their understanding

FIGURE 6: : Learning Styles and Preferences



of the content. Neil Fleming's VARK model (Visual, Auditory, Read/Write, Kinesthetic) describes four different learning styles that are most commonly used in high-quality UDL applications; it is a good example of the types of learning activities that meet a variety of learning styles.

The term born accessible is mentioned in several regulations and guidelines. Whether referring to websites, webinars, videos, learning activities, tests, graphics, courses or other digital learning materials, they should be created from the outset to meet the standards of accessibility and universal design for learning principles. When schools and institutions purchase — rather than create — digital materials, the contracts should require that the materials already meet the adopted accessibility standards.

Whether a website is created and maintained in house or by a vendor, several tools exist for institutions to check accessibility. WebAIM.org provides a tool, WAVE, to check a URL for accessibility (wave.webaim.org). Users simply type in the URL address and press enter to see an instant list of errors, alerts and features that should be addressed to make the site accessible. Other web-based checkers include AChecker, Accessibility Valet and Cynthia Says, and browser-based options include the Firefox Accessibility Evaluation Toolbar or the Web Accessibility Toolbar for Internet Explorer and Opera, which are both plugins for only those specific browsers.

The Center on Technology and Disability provides a K-12 technology purchasing checklist to help schools purchase accessible technology. The checklist "identifies key considerations when deciding how to align curriculum goals that foster student access to course text through sensory, physical, visual, cognitive and developmental supports." For example, it suggests using technology to access texts of different complexity and reading levels for students who are not reading at grade level. The checklist also includes purchasing considerations, such as curriculum, funding, use of existing technology, implementation and Individuals with Disability Education Act (IDEA) standards.

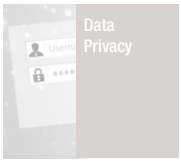
Universities use websites and portals for many services, including college applications, financial aid, tutoring, course registration, parking services, book store services, tuition and fee management, transcript request and many other business and social functions. Federal regulations require that all of these online services be as accessible to students with disabilities as they are to all other students. Whether colleges purchase their software applications from third-party vendors or build the web services and content in house, the result must be accessible to all students. An attorney from the Office for Civil Rights reports that she uses the "pajama rule" to determine if a college's services give all students the same level of independence. They do in her opinion if they give all students — disabled or not — the same type of access to courses and supportive services at home in pajamas at night as if they were on campus during the day.

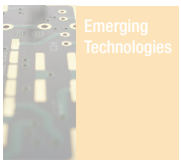
Equally Effective and Integrated Content:

"…An accommodation or modification that is only available at certain times (such as an aide to read to the student) will not be considered "equally effective and equally integrated" where other students have access to the same information at any time and any location…".

Source: Office of Civil Rights Dear Colleague Letter

The Miami University of Ohio resolution reveals best practices for purchasing technology for postsecondary institutions. It addresses textbooks, courses, course materials, web content, web forms, technology systems and third-party applications. In addition to making all of its websites and subdomains accessible – regardless of who creates or supports the websites – it must make legacy and archived pages available (subject to standard records retention rules) if a disabled student requests access. The resolution also requires the university to make a web form available so that individuals with disabilities can provide feedback on improving accessibility. The resolution also requires the university to regularly monitor suggestions. The university must test its websites and third-party developed websites for accessibility at least every three months, and any nonconformance of sites must be corrected within one month of testing.





When purchasing any learning management system or other standalone systems, the university must:

- Evaluate the VPAT, third-party accessibility evaluations, and publicly available accessibility evaluations
- Evaluate automated testing reports
- Obtain login credentials to independently test the system through:
  - automated,
  - expert, and
  - in-house or third-party consultants
- Assess conformance to WCAG 2.0 Level AA standards.

Purchases of new web content or applications must adhere to the WCAG 2.0 AA standard. If products meet some but not all of the requirements, they must purchase the one that best meets the standards and should make contractual vendor commitments to make the product accessible. *They may not use the products for students until it meets the standards.* Requests for Proposals (RFPs) or competitive bids must contain language about meeting the required accessibility guidelines. If the vendor product does not meet the standards, it must be made to conform to the standard or the vendor must support the university in providing an equally effective alternate means.

Many schools and universities use open educational resources (OERs) or other free content on the internet. Using these resources poses a problem because the university generally has no contractual agreement with a third party to ensure the content is accessible. Local policy is critical in this instance. It should address free or open content that teachers or professors use in their courses and make the faculty member responsible for ensuring that the free/open content be accessible. If the material cannot be made accessible, the faculty members should be precluded from using it.

Many digital repositories of learning materials use the **Dublin Core** metadata standard to help educators determine whether learning materials are accessible for their students. OER Commons, which provides a comprehensive infrastructure for sharing, adapting, evaluating and using open educational resources, also includes advanced search criteria which shows whether resources are accessible. Schools or colleges that create their own accessible resources should consider sharing them fully labeled within open registries or digital repositories, such as these, to help other educators find and use accessible learning materials.

What is the Dublin Core Standard?

It's the standard for the types of descriptive information (metadata) that should be included about a resource in content repositories so that educators have all the information they need to assess the usefulness of the content for their purposes. Among the descriptors for resources, it stipulates the kind of information to include about the contents' accessibility for disabled students.

Source: Dublin Core Metadata Initiative

Many of the best practices and tasks for making websites and learning content accessible are simple fixes, but they require explanation and training. Too often, well-meaning people do not know some of the easiest ways to make available resources accessible for students with disabilities. For example:

- Most office applications for word processing, spreadsheets or slide-based presentations have built-in accessibility features. When faculty and developers use the accessibility features, all students benefit. Instead of manually formatting headings for size, font, color or emphasis, they can format using the "styles ribbon" in Microsoft Word® to facilitate page navigation for screen readers.

- The "format image" function can be used to add alternative text for images so that graphics and pictures can be read by screen readers to visually impaired students to enhance their understanding of the text.
- Tables should contain headers plus row and column identifiers to facilitate navigation and interpretation.
- Blank fields on forms should have appropriate labels so screen readers can read them; users should be able to navigate through a form with the tab key, arrow keys or puffer device, as well as a mouse, so those with hand dysfunction have viable alternatives.

Mathematical symbols, equations, maps, charts, graphs and other visual aids are some of the more difficult content to make accessible. To help educators with this difficult task, the Diagram Center was created in 2010 through funding from the Office for Special Education Programs. The Diagram Center provides free archived webinars for making these types of educational materials accessible. Also, the National Center for Accessible Media has as its mission to overcome difficult accessibility barriers: it is "dedicated to addressing barriers to media and emerging technologies for people with disabilities in their homes, schools, workplaces and communities."

The work to make websites and online learning accessible is time consuming, resource intensive and never completely done. Strong policies that address commitment to the ongoing process and designate resources for the work to be done are critical.

Policy Recommendations

Accessibility to learning in public higher education is a state responsibility as well as an institutional one. Good policy establishes the framework for successful institutional implementation of programs that meet the learning needs of all students.

Issue #9 – **Digital Accessibility:** Promote awareness, training and best practices to make digital content and sites more accessible to students with disabilities, in compliance with the Americans with Disabilities Act and other regulatory requirements.

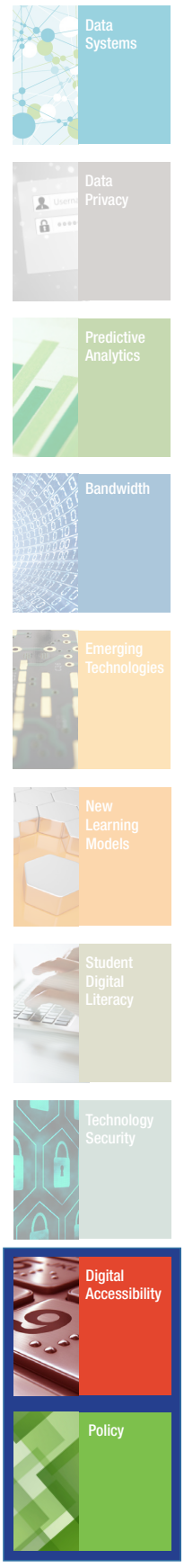
State policies should be aligned with federal laws and should incorporate precedent-setting case resolutions. States should establish an accessibility standard for state and local government entities. State statutes and guidelines should address the purchasing of digital materials and services through competitive bids or state contracts, ensuring that vendors provide product accessibility statements (VPATs) and that they verify accessibility prior to purchase.

Agency and institutional policies play an important role in education and should be aligned with state and federal regulations. Education agencies should monitor legislation and case law that affect the practices of their schools and institutions, such as accessibility requirements for individuals with disabilities. It is not enough to have policies in place. Agencies should incorporate a process for enforcement of critical policies and consequences of non-compliance.

Issue #10 – **Policy:** Maintain regular state-level review of technology-related legislation and policies on education standards, access and infrastructure to ensure these policies are adequate, aligned, necessary and integrated.

Best practices for state education agency accessibility policies include the following.

- Create long-term accessibility plan.
- Adopt standards, such as WCAG 2.0 Level AA, and the universal design for learning that follows the concept of born accessible.
- Align with federal and state regulations.



- Require a monitoring and evaluation process for websites, learning content and technology systems for the state's education agency and its institutions/schools.
- Incorporate language for purchasing contracts and competitive bids that designate the accessibility standard and requirement of VPAT statements.
- Require user acceptance testing for accessibility prior to purchase or use of systems or content.

Recent case law makes clear that policy alone is not sufficient to ensure compliance with accessibility. The roles of various actors concerning the implementation of accessibility policy within institutions should be clearly articulated.

- Administrative, academic and IT departments are all important in enforcing institutional accessibility policies. Administrators should create an accessibility committee that is cross-functional (including administrative, academic, student affairs, and technology representatives) and include at least one person with a disability.
- Human resources departments play a critical role and policies should incorporate accessibility expectations in applicable job descriptions, performance evaluations, policy and procedures manuals, and compliance statements (such as computer acceptable use policy statements). HR should also make consideration for sufficient staffing of disability services departments or other areas that support digital accessibility (such as instructional designers, educational technology specialists, library and media positions). A requirement for accessibility training should be a part of HR policy, including awareness of the laws and regulations, as well as the hands-on approach to making websites and digital content accessible.
- **Academic and student affairs** departments are responsible for ensuring that learning content and resources — whether created in house by faculty or staff, purchased from a third party, acquired from OER or used from the public domain — are compliant with the standards adopted by the organization and/or the state or federal regulations.
- **Student development and disability services** leaders should play a role in ensuring agency and institutional websites contain an accessibility policy statement and provide a link to resources for students with disabilities. They should also contain a web form for feedback and suggestions for improving accessibility. Student services leaders are not only responsible for onsite services but also for the online services for students. Agencies, schools and institutions should monitor websites and student portals periodically for ADA compliance (at least quarterly), as well as any third-party links, such as application forms, financial aid, bookstores, parking, payment, auxiliary associations or social clubs. Free website URL checkers make this easy and sustainable but require staff to do the review and make or recommend changes.
- **Chief technology officers** or CIOs should ensure the technology systems, whether created in house by computer programmers or vendor systems on location or in the cloud (such as LMS, ERP, or SIS), meet accessibility standards. When purchasing new systems, schools and colleges should require a VPAT statement and verify the vendor's claims of accessibility to ensure conformance with the standards. Vendors can usually provide a temporary login for user acceptance testing (UAT). Schools and colleges should consider using a person with a disability on the UAT team, whether for testing new systems to be purchased or testing current systems that have applied new releases, updates or patches.

Incorporating members across these functional areas into the accessibility committee will result in more comprehensive buy-in and better policy enforcement. Student representation on the committee is also important. Students with disabilities can be an invaluable resource for monitoring compliance and for guiding the institution toward a more favorable environment for students with disabilities.

In Summary

Becoming compliant with the federal and state accessibility laws is not easy, but it is the law. Not only do schools and colleges need resources to become compliant, but they also need resources to remain in compliance. States need resources to conduct periodic review of their agencies and institutions to ensure their policies are followed. Achieving and maintaining compliance is resource intensive, requiring people, funding and time. Without additional resources websites, e-learning content and technology systems for many schools and institutions will remain inaccessible for the millions of students with physical or cognitive disabilities. Advances in assistive technology make accessibility possible and benefit all students, especially those with poor literacy skills and those who are English language learners. Stakeholder commitment to accessibility is needed in order to remove barriers to digital spaces and improve opportunities for all students to succeed.

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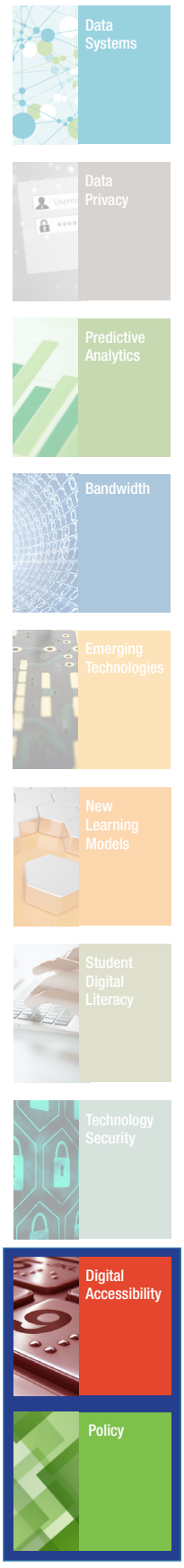

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