

# Doing the Right Thing: One University's Approach to Digital Accessibility

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## Abstract

This article describes the approach employed by one university to address a complaint filed by students with disabilities with the Department of Justice (DOJ) regarding the inaccessibility of information and communication technology (ICT). Prior to the DOJ complaint, the university did not have a process in place to address ICT accessibility. Using a project management approach, the university implemented a series of changes to create an infrastructure for digital accessibility. These changes sought not only to remediate the concerns presented in the investigation, but also to establish a process to manage future ICT accessibility concerns. While formal investigation by a federal agency is not something an institution wants to receive, it may be useful in bringing about necessary changes. The response generated by the university can serve as a model to proactively address digital accessibility in higher education.

Keywords: *Digital accessibility, higher education, students with disabilities, Department of Justice*

Effective information and communication technology (ICT) has revolutionized teaching and learning modalities in higher education. Advances in speech-to-text, text-to-speech, voice recognition software, live captioning, and screen reading technologies have removed many barriers to education (Wald, Draffan, & Seale, 2009). Students with disabilities use general and assistive technologies to support their learning, but there are obstacles to using publicly available digital technology. Additionally, there is a lack of software available for students to access information. These barriers can encompass a wide-range of issues from screen reading and website incompatibility, to problems related to the navigation structure of a website, and limited accessibility of audio and video materials (Fichten, et al., 2012). Furthermore, poorly designed websites and difficult to navigate on-screen displays have challenged the independence of students with disabilities (Varney, 2013).

Since 2009, there have been numerous legal complaints and resolutions that affect ICT in higher education, but few regulations have been put into place at the governmental level. In 2010, the Department of Justice (DOJ) and the Department of Education issued a joint Dear Colleague Letter, which insisted that the use of emerging technology be accessible to all students. This

letter became an indication of actions to come. Many of the grievances filed with the DOJ or the Office of Civil rights noted discrimination because of inaccessible ICT. In March of 2011, the National Federation for the Blind filed a complaint against Northwestern University and New York University citing inaccessibility to Google frameworks. The University of Montana, similarly, faced a complaint due to barriers with their web content and services. To date, 30 higher education institutions have faced liability for inaccessible digital technology. While some institutions have adopted broad international web standards others have developed internal processes to address inequities in the system (Carlson, 2016). Until digital accessibility barriers are addressed, educational providers will continue to see complaints and legal action.

## Depiction of the Problem

Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA) has provided mandates that ensure equal access and opportunities to people with disabilities—a civil rights act that applies to educational providers (Gordon & Keiser, 1998). The university in question received a letter of investigation from the DOJ in the spring of 2014

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that outlined concerns with the accessibility of the institution's digital technology platforms. While the inaccessibility of ICT has the potential to impact all users, many of these concerns had a direct correlation with the compatibility of screen readers that resulted in barriers for students with vision impairments. At the time of the investigation, the institution did not have a process in place to manage digital accessibility. The DOJ cited six problematic areas:

1. **Google Apps for Education:** This included the use of email, calendar, spreadsheets, and document processing.
2. **Digital textbooks:** Required textbooks are commonly not known prior to class causing an untimely conversion of alternate formats.
3. **Digital signage:** Visual touchscreen displays that provide information such as activities, emergency alerts, and other notices was not equally available to people with vision impairments.
4. **University portal:** Systems for obtaining scholarship information, paying bills, making appointments with advisors, and registering for courses was not compatible with screen reading software.
5. **Websites for homework and course related content:** Aspects included items such as the University's learning management system (LMS).
6. **Online placement and diagnostic exams:** Components of this citation related to language, math and science assessments that were used to place students in an appropriate level course.

The barriers caused students to fall behind in their academics, rely on the assistance of others for routine tasks and dedicate additional hours attempting to access information through digital technology. In addition, users with vision related disabilities did not have equal access to public information that was available to people without vision impairments (Carlson, 2016). The description below provides information on how the University resolved the cited barriers that were brought to the institution's attention. Organizational infrastructure and cultural shifts regarding the long-term forecast for ICT accessibility is also outlined in the Evaluation of Observed Outcomes section and Implications and Portability section.

### **Participant Demographics and Institutional Partners/Resources**

The university in focus is a large, residential, public four-year institution that is located in the mountain west region of the United States. It has a student population of 32,000 and is classified as a doctoral research institution with a high undergraduate profile (Indiana University Center for Postsecondary Research, n.d.). In total, the University has 2,100 students registered with the Disability Services (DS) office.

In order to resolve the investigation and build an infrastructure supportive of the ongoing accessibility of ICT, the executive level administration assembled faculty and staff from a variety of departments including: Office of Information and Technology (OIT), DS office, ADA office, General Counsel, University System, Procurement Services, Undergraduate Education, the College of Arts and Sciences, and University Communications. Each of these departments have a role in ICT service delivery or accessibility. The inclusion of these departments was necessary in responding to the DOJ, the overall remediation efforts, and the creation of a system to manage future digital accessibility needs. Additional resources included an external consultant with expertise in digital accessibility and five peer institutions that are leaders in the ICT accessibility field or who have undergone similar investigations.

### **Description of Practice**

At the time of the investigation, the University lacked policies, resources, and staff dedicated to the accessibility of digital technology. When university affiliates brought forth barriers they were accommodated for on a case-by-case basis through OIT, DS, or the ADA office. Like many institutions, ICT accessibility was on the campus' radar, but without a system in place to manage it, there was not a centralized department that was accountable and the barriers were not formally documented.

Upon receipt of the investigation, executive level administration gathered leading staff from OIT, DS and the ADA office to brainstorm approaches to the citations outlined in the DOJ letter. Early discussions of these working members led to an accessibility gap analysis of the cited services to gain insight into the scope of digital accessibility problems. The gap analysis led to a firm commitment from the executive administration for internal and external accessibility audits of the technology cited in the DOJ letter, remediation of the campus' digital technology, changes to the organizational structure, and accessibility funding.

This analysis was crucial as it revealed further ICT barriers and provided working members with direction on how to address the investigation.

Strategies most often fail because they are not executed well . . . [project management] assists with the early work of initiating a project, the ongoing planning of project work, the control and management of tasks, and the project closure and knowledge capture. (Clark, 2008, p. 3)

With the additional ICT deficits uncovered in the gap analysis, it became clear that a project management approach would be the most efficient way to ensure barrier removal in a timely way. A project manager was appointed from the OIT department to aide in the creation of project charters and was also responsible for facilitating communication between working members, holding people accountable for deadlines and assisting the working members in narrowing the scope of the project. The scope of the project resulted in three objectives: address the issues cited in the DOJ letter, create an infrastructure to appropriately manage digital accessibility and foster a culture of accessibility and inclusivity for students with disabilities.

In order to address the issues outlined in the DOJ letter, the University created a project structure that resulted in three levels of teams: the Executive Team, the Steering Team, and four Working Group Teams (see Appendix A). The Executive Team included the University's top-level administration and was accountable for financial resources, decision-making regarding the recommendations of the Steering Team, and the overall implementation of the project. This team also gave the working members a voice. The Steering Team delivered quarterly updates and recommendations to the Executive Team, and consisted of project co-leaders from the Working Group Teams in addition to other key staff. This team also communicated across all Working Group Teams to ensure that ideas and concerns were acted upon so groups could move forward with their work. The four Working Group Teams were directed by two co-leaders from three different offices: OIT, DS, and the ADA office. This guaranteed that accountability was cross-departmental and multiple perspectives were taken into consideration for the project. The four working groups were tasked with the following:

1. Support Services Team: Developing ICT accessibility support and consultation for campus affiliates.
2. Policy Team: Creating an ICT Accessibility Policy and Standards document that provides

- guidelines on how to comply with the policy.
3. Remediation Team: Correcting the digital technology outlined in the DOJ letter.
4. Communication and Documentation Team: Designing, distributing, and managing campus communications about the project's progress and the resources available for ICT accessibility.

At the midpoint of the working group projects, the Steering Team hosted a two-day symposium with five peer institutions. At the symposium, the four working groups presented their completed tasks to date. The institutions provided feedback that resulted in revisions for each team.

In addition to the work that each aforementioned team was completing, the Chancellor of the University asked the working members to engage an external consultant. The hiring of the external consultant was invaluable as an unaffiliated party was providing the University with an outside perspective about its current state of digital technology accessibility. The consultant provided a formal report to the Executive Team that addressed opportunities, challenges, and detailed recommendations for long-term change to improve the overall culture of accessibility on campus.

### **Evaluation of Observed Outcomes**

The tasks that the working members completed resulted in significant changes to the daily operations of the University and organizational adjustments to OIT and DS. These changes resulted in positive accessibility outcomes for all ICT users. In addition to the document that the external consultant provided to the institution, each working group completed their project charter and scope of responsibilities that resulted in the following.

#### **Support Services Team**

Per the recommendation of the Support Services Team and the external consultant, the creation of new ICT accessibility positions were implemented. A Chief Digital Accessibility Officer (CDAO) was appointed within OIT with the intent of full oversight and accountability of digital accessibility. To ensure that executive administration is up-to-date on digital technology accessibility and that ICT remains at the forefront, the CDAO position sits under the Deputy Chief Information Officer. An ICT Accessibility Program Manager and a Universal Design Coordinator were also hired to filter all digital accessibility tasks, conduct outreach to the University, and serve as a

resource for the campus. These positions were funded by the Chief Financial Officer. This team also created a survey to analyze ICT accessibility gaps that will be distributed annually.

### **Policy Team**

A draft policy was vetted to the University community and was approved in the fall of 2015 (see Appendix B). This marks the institution's first policy to address ICT accessibility. As a result of the feedback that the Policy Team received at the hosted symposium, the final policy was reduced from approximately seven pages to three pages. The intent of reducing the content was to make it readable, direct, and to give it relevance over time. It emphasizes the University's legal, moral, and ethical obligation to provide accessible digital technology to maximize the potential for all users. The policy also outlines the position (CDAO) that is responsible for holding ICT creators accountable for digital accessibility and designates a review board that oversees the accompanying Standards document. While exceptions to digital accessibility are highly discouraged and rarely granted as described by the policy, this same review board determines the appropriateness of exception requests. With direct correlation to the citations listed in the DOJ letter, the Standards document addressed textbooks and digital signage—both resulting in assigned accountability and separate established processes for compliance.

### **Remediation Team**

The majority of the homegrown systems have been remediated to meet the accessibility standards outlined by the institution's ICT policy. Some systems referred to in the DOJ letter were decommissioned with the primary functions being parceled out among other accessible resources. For external systems that the University has used, the remediation team worked with vendors to test for accessibility. The accessibility tests led to complete remediation of products, vendor repairs, deactivation of services, implementation of already available accessible versions, and formal roadmaps and timelines for full accessibility remediation for vendors and campus entities. With the amount of auditing that was brought forth by this team and the anticipated need for future audits, OIT created a permanent Accessibility and Usability Testing Lab. This lab is staffed by one full time staff member and four student staff—the majority of those students being screen reader users.

### **Communication and Documentation Team**

To encourage transparency, frequent communications were released to the University community. These communications included publications on the institution's commitment to accessibility, the importance of a cultural shift in how disability accessibility is viewed and planned for, updates on the work in progress, hiring of external consultants, hiring of ICT accessibility staff, and resources for ICT accessibility barriers among other things. Upon the closing of the project charter, this team created an ICT accessibility website that houses the policy, standards, resources, and thorough details on how users and creators of ICT can obtain assistance.

### **Closing of the Investigation**

After multiple updates to the DOJ from the University's General Counsel, the University received notice from the DOJ in the spring of 2015 that they were closing the investigation. The closing of the investigation was unexpected as it was predicted that a closing letter would not be received for two-three years. The University took this as a commitment to the work that had been done but the institution's goal remained the same. With continued remediation and the implementation of the new policy and resources, the ongoing goal is to foster a cultural shift in how disability and accessibility is viewed on campus. As such, the University has transitioned the project into an Accessibility Initiative. Using universal design principles, the Accessibility Initiative, while still in its beginning stages, will focus on outreach, programming, support and education surrounding inclusivity and ICT accessibility on campus.

### **Implications and Portability**

One takeaway for other campuses to consider is to be proactive. The institution discussed in this article did not have a system or dedicated staff in place to address ICT accessibility and this made the university susceptible to a formal complaint. The policy (see Appendix B) and ICT staff positions that were created provided an overall infrastructure that outlines accountability and new resources to manage future digital accessibility barriers—all components that others may want to consider implementing as it applies to their school.

Two years prior to this investigation, a university committee submitted a report and recommendations to senior level administration regarding digital accessibility. One reason, among many, that the recommendations did not persist was due to the fact that there was not an executive level staff member championing the cause. When the University received the letter of

investigation it was imperative that the institution had executive level buy-in and participation from the start. This project required the involved departments to work together towards a common goal—thus bringing the issue of departmental silos to light that many campuses experience. One of the ways that the silos were eliminated and collaboration was able to flourish was by issuing cross-departmental co-leaders for the working groups. The involved departments also had middle and senior level staff members who were dedicated to this project and it should be noted that the amount of work that this project took resulted in significant time away from traditional operating processes. The amount of time spent away from the working members' daily job functions should be planned for from the beginning.

After the initial gap analysis during the infancy of the investigation, it became clear that there were more accessibility issues than originally anticipated. Other institutions should keep in mind that once remediation begins, the solution for one accessibility issue may result in another barrier that needs to be fixed. This caused difficulty regarding the priorities of what needed to be accomplished. To narrow the scope of the work and to identify timelines and accountability, it is recommended that institutions consider using a project management approach. In addition, at the initial stages of gathering working members for the project, key departments were initially overlooked (Library, Campus Bookstore). Other institutions should think broadly about other departments that may be able to assist with digital accessibility and include those people in the conversation from the beginning.

While this investigation is specific to this institution, other schools may want to consider using this case as an example of what could happen when there is not a system in place to handle ICT accessibility. The case provides a solid argument for why it is imperative for campuses to be proactive. If institutions are strategically planning for ICT accessibility up front, they will most likely spend less money remediating and building their infrastructure. The biggest implication to note is that a formal investigation is not necessarily a bad thing. It has led to a cultural shift in how accessibility is viewed on campus and has brought universal design principles to the forefront. There were specific issues that needed to be remediated from a legal standpoint, but the working members and executive level administration emphasized that this project was not about compliance; the project would persist because it was the right thing to do. This standpoint made the ongoing Accessibility Initiative possible post-investigation and has resulted in a system that encourages inclusivity and a level playing field for students with disabilities.

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## About the Authors

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## **Appendix A**

### **ICT Services and Applications Accessibility Project Organization Chart**

[Note: The original document was a flow chart, and has been converted to a nested outline for usability. Turn on identification of tabs and bullets in your screen reader for best results. Titles of members may have been altered for anonymity and readability.]

#### **Executive Team**

- Provost
- Vice Chancellor, Diversity, Equity, and Community Engagement
- Chancellor's Chief of Staff
- Senior Assistant University Counsel
- Senior Vice Chancellor and Chief Financial Officer
- Associate Vice Chancellor for OIT and Chief Information Officer
- Chief Digital Accessibility Officer (CDAO)

#### **Steering Team**

- Vice Chancellor, Diversity, Equity, and Community Engagement
- CDAO
- Director of Disability Services
- Associate Vice Chancellor for OIT and Chief Information Officer
- Senior Assistant University Counsel
- Associate Director of Academic Technology
- Assistant Directors of Disability Services
- Program Manager of Disability Services
- ADA Coordinator of ADA office
- Director of Enterprise Services
- Director of Academic and Campus Technology Communications and Support
- Interim Deputy Director of Communications and Support
- Director of OIT Human Resources
- Project Manager from OIT

#### **Working Group**

- Associate Vice Chancellor for OIT and Chief Information Officer (co-leader)
- Director of Disability Services (co-leader)
- Program Manager of Disability Services
- Assistant Directors of Disability Services
- ADA Coordinator of ADA office
- Director of Enterprise Services
- Director of Academic and Campus Technology Communications and Support
- Director of OIT Human Resources Assistant
- Director of Communication, Web and Documentation
- Associate Director of Academic Technology Strategy and Support
- Assistant Director of Teaching and Learning Applications
- Associate Director of Learning Spaces and Technology
- Program Manager of Messaging and Collaboration
- Assistant Director of Communication, Web and Documentation
- Service Managers from OIT
- Assistant to the Executive Director of OIT
- Project Manager from OIT
- ICT Accessibility Consultant
- Project Manager from OIT

**Working Group, Policy Team**

- ADA Coordinator of ADA office (co-leader)
- Director of Academic and Campus Technology Communications and Support (co-leader)
- Assistant Directors of Disability Services
- Senior Assistant University Counsel
- Faculty
- Vice Provost and Associate Vice Chancellor for Undergraduate Education
- Director of Procurement Services

**Working Group, Remediation Team**

- Program Manager of Disability Services
- OIT Supervisor
- Program Manager of Teaching & Learning Applications
- Associate Director of Academic Technology
- Assistant Director of Student Services, Quality Assurance and Support
- Labs Services Manager
- Audiovisual Engineer
- Program Manager of Email Collaboration
- Senior Associate Director of Support
- Associate Director of Academic Technology

**Working Group, Support Services Team**

- Assistant Director of Disability Services (co-leader)
- Associate Director of Academic Technology Research (co-leader)
- Associate Director of Academic Technology
- Director of Academic and Campus Technology Communications and Support
- Director of Web Communications
- Arts and Sciences Creative Director

**Working Group, Communications and Documentation Team**

- Assistant Director of Disability Services (co-leader)
- Assistant Director of Communication, Web and Documentation (co-leader)
- Assistant Director for Campus Communications and Engagement
- Public Relations and Communications Manager
- User Experience Specialist
- Information Design Manager
- Campus Communications and Engagement
- Communications Professional
- ICT Accessibility Coordinator

## Appendix B

### Accessibility of Information and Communication Technology Policy

#### A. Purpose

The Americans with Disabilities Act of 1990 (ADA), as amended, and Section 504 of the Rehabilitation Act of 1973 require, that higher education institutions afford all qualified individuals with equal access to programs, services and activities, and effectively communicate with individuals with disabilities.

In addition to complying with the law, [REDACTED] is morally and ethically committed to communicating information to all individuals in a manner that enables them to achieve their academic and professional goals and aspirations. To maximize [REDACTED] potential to achieve its legal, moral, and ethical commitments in the digital environment, the university has established the following policy to complement its information and communication technology accessibility program.

Implementation Period: The ICT Accessibility Review Board shall establish a prioritization schedule defining when different programs, services and activities must be compliant with this policy.

#### B. Policy and Procedure

1. [REDACTED] commits to ensuring that the information and communication technology (ICT) that it creates or provides in conducting its programs, services, and activities is accessible to people with disabilities, in accordance with applicable law and our moral and ethical commitments described in section A.
2. To facilitate faculty and staff meeting the responsibilities described in section B.3, [REDACTED] shall make training and resources readily available to faculty and staff, including a campus website devoted to providing information regarding accessible ICT. The training and resources shall include specific information for faculty and staff who are responsible for creating, selecting, or maintaining ICT in any university program, service or activity. The training and resources shall also include how to make ICT accessible, how to both manually check and use automated tools to ensure the accessibility of content therein, and how to get assistance.
3. Drawing on resources described in section B.2, faculty and staff who use, create, purchase, or maintain ICT for university programs, services, and activities in the scope of their employment are responsible for making it accessible in accordance with this Policy and the accompanying ICT Accessibility Standards referenced below. Faculty and staff should consult with the Chief Digital Accessibility Officer (CDAO) for more information regarding responsibilities and advice on best practices.
4. [REDACTED] shall appoint and maintain a Chief Digital Accessibility Officer (CDAO) who is responsible for:
  - creating, revising, and publishing campus ICT accessibility standards (ICT Accessibility Standards), best practices, and resource information, in collaboration with the ICT Accessibility Review Board, as a supplement to this Policy;
  - in collaboration with University Counsel monitor for regulatory changes and coordinate with regulatory agencies as appropriate;
  - providing guidance regarding implementation of ICT accessibility standards;
  - reviewing and reporting on program effectiveness as appropriate to the Chancellor, Vice Chancellor for Diversity, Equity, and Community Engagement, the Associate Vice Chancellor for Information Technology and the ICT Accessibility Review Board (as described in section 5);
  - day-to-day management for the ICT accessibility program;
  - maintaining ICT accessibility training content;
  - executing any other related responsibilities as assigned by the Associate Vice Chancellor for Information Technology or designee.
5. [REDACTED] will establish and maintain an ICT Accessibility Review Board. Members of the board shall include a cross-representation of faculty, staff, students, and administrators. The Vice Chancellor for Diversity, Equity, and Community Engagement and the Associate Vice Chancellor for Information Technology, or their designees, shall appoint board members. The board, in collaboration with the CDAO,

shall advise the Chancellor, Vice Chancellor for Diversity, Equity, and Community Engagement and the Associate Vice Chancellor for Information Technology, of the status of the ICT accessibility program and required program changes. These duties include:

- approval of campus ICT accessibility standards, best practices, and resource information proposed by the CDAO;
  - that members of the board, as delegated, review and grant any exceptions to this Policy or the ICT Accessibility Standards;
  - determine the content and frequency of trainings, as required by Section B.2. of this Policy;
  - periodically review and update this Policy and the ICT Accessibility Standards.
6. Exceptions may be granted by the ICT Accessibility Review Board (as defined in B.4) under certain circumstances including, but not limited to, fundamental alteration, as defined below, or undue burden to ██████████ Exceptions should be narrowly tailored, limited in duration, and should describe the method through which equally effective alternative access will be provided.

### **C. Definitions**

**Accessibility:** means a person with a disability is afforded the opportunity to acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally inclusive manner, with substantially equivalent ease of use. The person with a disability, using auxiliary aids if necessary, must be able to obtain the information as fully, equally and independently as a person without a disability. Although this protocol might not result in identical ease of use compared to that of persons without disabilities, and the means of acquiring information may differ, the protocol still must ensure equal opportunity to the educational benefits and opportunities afforded by the technology.

**Information and Communication Technology:** means any electronic system or equipment, and content contained therein, used to create, convert, communicate, or duplicate data or information. The intent of this definition is to capture an inclusive spectrum of current and emerging technology.

**Fundamental Alteration:** means alteration of the essential purpose of the program or service, or any of its components.

**Undue Financial and Administrative Burden:** means significant difficulty or expense. Because an institution must consider all resources available at the university level when reviewing claims of undue financial and administrative burdens, the decisions to invoke undue financial and administrative burdens must be carefully weighed and sufficiently documented.

### **Effective Date**

Wednesday, September 16, 2015