# Report of the Pennsylvania State University on the Accessible Technology and Information Initiative

October 2014

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Table of Contents

Executive Summary 3

I. Accessibility Audit 4

Auditing Tools and Processes 4

II. Policy Statements 5

III. Procurement 5

IV. Library Services and Library Websites 6

Communications 6

V. University Websites 7

Communications 8

Triage and Blockers 8

“Top 100” Websites 9

Project Polaris 9

The PDF Problem 9

EPUB Documents 10

Increasing Capability to Provide Equal Access 10

The Future Challenge: Sustaining our Gains 11

VI. Course Management Systems 12

VII. Classrooms 12

VIII. Clickers 12

IX. Bank (ATM and Website Accessibility) 12

Appendix 1: Training 13

Appendix 2: Survey of Students and Staff with Visual Disabilities 13

Appendix 3: Collaborations 14

Appendix 4: Course Accessibility Recommendations 14

Appendix 5: Examples of Unit Efforts 15

## Executive Summary

Penn State is committed to making its information technology resources accessible to all users, and to meeting the requirements of its settlement with the National Federation of the Blind. This document reports on the activities of Penn State from October 15, 2013 to October 15, 2014 to make its websites, applications, online course materials and learning technologies accessible. It should be read by anyone with a stake in making a Penn State education accessible to everyone regardless of disability.

The Accessible Technology and Information initiative combines executive support at the highest administrative levels with a carefully organized grassroots program of training, remediation and testing. A common language among the various communities of practice, as well as a heavily used enterprise social media channel, unifies and strengthens the initiative.

The charge of the Accessible Technology and Information Committee (ATI) is to lead the implement of the plan to meet the terms of the settlement agreed to by Penn State and the National Federation of the Blind. The plan is being implemented through a program of advocacy, training and technical support for remediation of websites, online course materials, and web-based applications. The ATI initiative continues to influence the online and IT presence of every academic, campus, business and administrative unit in the Penn State system.

Information about the initiative, including status, professional development opportunities and best practices are communicated to and from units by an organization called the Web Liaisons. Through the Web Liaisons, the ATI initiative continues to influence the online and IT presence of *every* academic, business, service and administrative unit in the Penn State system.

The ITS Accessibility Team (A-Team) is carrying on its programs of user testing websites and web-based applications on request; testing a selected set of mission-critical websites and applications; providing technical consulting for remediation and quality improvement projects by University organizations; supporting the activities of Purchasing Services by ensuring that new enterprise software systems meet Penn State’s web accessibility policy; and providing support for the assistive technology needs of students.

Penn State’s commitment to improving accessibility of information technology is now an overarching goal within the 2014-2019 strategic plan of the Information Technology Services unit.

Substantial effort throughout Penn State has been committed to remediation and quality improvements of websites, applications and services; funding the A-Team; making classroom technologies accessible; and in assuring that new and purchased software systems meet accessibility standards.

Training efforts this year have focused on building awareness among faculty of accessibility issues of students; creating a checklist of authoring best practices for instructional materials; and face-to-face training modules on creating and remediating accessible Microsoft Word documents and PowerPoint presentations.

Continuing efforts are exploring methods to convert instructional content for science, technology, engineering and math (STEM) to accessible format, with a focus on using MathML standards in HTML and EPUB documents. Members of the ATI initiative are also engaged in discussions with publishers regarding timelines and technologies for providing accessible eTextbooks.

## I. Accessibility Audit

### Auditing Tools and Processes

Website auditing is typically the first step in the remediation processes. Auditing is accomplished using a combination of tools and techniques including automated scanning tools, expert evaluations, and user testing (by people using screen readers, manual keyboard navigation and color/contrast issues).

Automated tools commonly used at Penn State are Compliance Sheriff, an enterprise-scale scanning tool licensed and hosted by Penn State, WebAIM WAVE, and FAE. Care should be taken that they not be relied on too heavily, because automated tools are both limited in coverage of the WCAG standards and frequently report false positives. Because of that, reports generated by Compliance Sheriff require skilled interpretation, a skill that is discussed in training sessions.

HiSoftware Compliance Sheriff website testing software has been in production for almost 3 years. To date, there are 236 accounts issued to web staff at Penn State. Over 4 million scans have been performed in the time we have hosted Compliance Sheriff. ATI member staff hold training sessions for University web staff to collect, manage and interpret audit data.

The ATI Committee has also held training events on using other tools to evaluate accessibility, such as the W3C standards validator, WebAIM WAVE and FAE, as well as user testing with and without screen readers. Use of screen readers as a testing tool is encouraged, not as a substitute for testing by users who are blind, but for the powerful features built into screen readers that aid in detecting problems.

In the past year, A-Team and ATI staff have provided testing, training and consultation services to over 90 web development, content and service delivery units, including those that develop and maintain the highest priority and mission-critical websites.

## II. Policy Statements

Policy AD69: ACCESSIBILITY OF PENN STATE WEB PAGES was published August 2, 2011, in compliance with the settlement between Penn State University and National Federation of the Blind, and as discussed in the Penn State Report to the National Federation of the Blind (October 2012).

Policy AD69 is posted on a public website at [guru.psu.edu/policies/AD69.html](http://guru.psu.edu/policies/AD69.html). It requires that websites, web-based applications and online content conform to W3C Web Content Accessibility Guidelines version 2.0 (WCAG 2.0), Conformance Level AA, the current international standard for web accessibility.

Penn State continues to maintain a comprehensive information resource for web accessibility at [accessibility.psu.edu](http://accessibility.psu.edu/) and is the central source of information for policy and remediation planning, as well as content and coding best practices.

## III. Procurement

Penn State Purchasing Services has developed standardized language to be inserted into RFPs and contracts. These statements codify Penn State’s commitment “to purchasing or recommending electronic and information technology (EIT) that provides the same programs, benefits and services that they do to individuals without disabilities except when it is technically unfeasible to do so.”

The A-Team provides support to Purchasing Services and stakeholders to evaluate vendor claims about the accessibility of their products through responses to RFPs, evaluation of the Voluntary Product Accessibility Template (VPAT), direct product testing, and during the process of contract negotiations.

Since the A-Team began to support the activities of Purchasing Services, we have engaged 11 vendors in various capacities, including the ones listed in the footnote below[[1]](#footnote-2): explaining Penn State’s accessibility policy AD69, provide results of our user tests, and to consult with the vendor’s technical staff on best coding and design practices. Vendors we have consulted with include enterprise software systems developers, boutique development shops, software development consultants and book publishers.

Other units on campus also work with vendors to improve accessibility of systems that impact their services (See Section IV. Library Services and Library Websites).

## IV. Library Services and Library Websites

The Libraries strive to provide effortless access to the University Libraries’ online resources for students; faculty; staff; visitors; and the general public regardless of disability, and to foster ownership of accessibility across the Libraries web community, building accessibility into the Libraries’ web site and applications. Our ongoing accessibility efforts are outlined below.

### Libraries' Website

The Libraries continues to use HiSoftware Compliance Sheriff for our automated scanning and works with the ITS Assistive Technology Specialist on manual reviews of Libraries web pages, content and applications using JAWs and other screen reading software. The CMS Development Team continues to be responsible for accessible development of the templates and components within the Adobe Content Management System. The team is on a weekly development cycle. All new code development goes through a quality assurance (QA) process, which includes automated and manual accessibility testing.

As of July, 2014, the ITS Assistive Technology Specialist is a formal member of the Libraries QA Testing Team and is responsible for testing weekly code releases. The Libraries Web and Accessibility Specialist is responsible for web content oversight and works with CMS authors and web reps to interpret the results of bi-weekly accessibility scans and ensures that new and existing web content continues to be accessible.

We have continued to focus our efforts on web assets as well, including ongoing training of our authors on best practices in creating accessible documents and multimedia. The ITS Assistive Technology Specialist holds monthly accessibility office hours in the Libraries to assist in ongoing manual testing of web pages, applications and development projects.

### Adaptive/Accessibility Interest Group (A2IG)

The Adaptive/Accessibility Interest Group was formed in 2012 and is made up of faculty and staff from across the Libraries who have an interest in accessibility issues. In 2014, A2IG became an official Libraries Working Group charged by the Head of Access Services as a forum for discussion and questions and a body responsible for making recommendations for programs, policies and processes related to accessibility in the Libraries.

### Communications

The Libraries is kept informed of accessibility efforts and the importance of accessibility via the weekly employee newsletter, Libraries-wide emails, presentations at monthly Tech Updates and regular reports.

### Libraries’ Accessibility Activities

The Libraries hosted the following meetings, webinars and presentations:

* Monthly Web Liaisons, broadcast to campuses
* Monthly ATI Committee Meetings
* Accessibility Team Presentations:
  + “Creating Accessible Web Content,” University-wide presentation
  + Accessibility updates at monthly Libraries-wide tech updates - (University Park and broadcast to all campuses)
  + Accessibility updates at CMS author forums - (University Park and broadcast to all campuses)
* Accessibility Training
  + Author Training – 18 sessions for 30 faculty/staff
  + Publisher Training – 10 sessions for 15 faculty/staff
  + Creating Accessible Microsoft Word and Power Points – 2 sessions for 25 faculty/staff
* A2IG Sponsored Programs
  + Summer academy for students who are blind and visually impaired, July, 2014. Three librarians from A2IG gave a library orientation to 20 blind and visually impaired high school students who are transitioning to college.
  + Discovery Day Program & Poster, March, 2014
  + "Turning Darkness into Light", Sight Loss Group of Central PA. Included information on the various stages of sight loss and showcased puppies that are being trained as seeing-eye dog guides. The program also included a digital poster highlighting the Libraries’ services and equipment for people with disabilities.
  + Disability Studies Research Guide created for students in the Disability Studies program at Penn State. http://www.libraries.psu.edu/psul/researchguides/disability.html

## V. University Websites

The vision of the ATI Initiative is to make universal design and accessibility an integral part of the culture of the information technology and marketing organizations at Penn State. Effective coordination of efforts among ATI, Penn State organizations and our communities of practice is crucial to the success of the initiative.

Accessibility of websites, web-based applications and services, and online content is becoming so much a standard consideration for information technology leaders, project managers, web developers, content authors and editors, and instructional designers, that we can rightly claim to be on a path toward achieving our vision (see Increasing Capability to Provide Equal Access, below). In the same way that security and privacy issues and practices have gradually diffused throughout the IT organization, so it is at Penn State that compliance with international accessibility standards and best practices is becoming a mainstream concern.

### Communications

The Accessible Technology and Information initiative combines executive support at the highest administrative levels with a carefully organized grassroots program of training, remediation and testing. A common language among the various communities of practice, as well as a heavily used enterprise social media channel, unifies and strengthens the initiative.

In each of the three years that the settlement with the NFB has been in effect, a letter was sent from the Executive Vice President and Provost to the Executives of the 73 budget units of Penn State giving the initiative strong executive sponsorship. This action established the need to redirect sufficient resources to the ATI initiative.

The re-establishment of the Web Liaisons was key in organizing the effort at the operational level, allowing system-wide training, collaboration, access to shared resources, and communication for all organizations.

### Triage and Blockers

Triage, for purposes of the Accessible Technology and information Initiative, is the process of prioritizing and allocating limited resources for remediation. Principles of our triage process identify those sites that have one or more of the following characteristics:

* are critical to the teaching, research and service missions of Penn State,
* have the highest traffic among all websites,
* required at some time to be visited by all, or a group, of students, staff or faculty in order to transact business or obtain information.

At the heart of our communications and training are a core, shared language among the various communities of practice that create Penn State’s web space. We use the language of risk and triage as tools to prioritize website audits and remediation projects.

Web staff are learning to identify and prioritize instances of the “Blockers”, that is, the most difficult of those barriers to access encountered by users of screen readers. (There is one additional blocker for people who are deaf – lack of captioning for videos). Based on our rules of triage, we exhort our staff to “Fix the Blockers First!” We reinforced this language by developing a custom rule set for Compliance Sheriff to identify blockers in websites.

Early in 2014, after fixing the blockers was generally well in hand, we introduced “Beyond the Blockers”. Beyond the blockers is a set of design and coding problems that affect users with a variety of disabilities – color/contrast issues, keyboard accessibility, blinking and flashing text and images, reading order, and language specification, among others. We also developed a Compliance Sheriff rule set – “Beyond the blockers”.

Details of how we prioritize remediation projects, and the language we use are at <http://accessibility.psu.edu/> under the heading “What to fix”.

### “Top 100” Websites

The “Top 100” websites are a select list of sites that are critical to the teaching, research and service missions of Penn State, and not surprisingly, are generally the highest-traffic sites in the psu.edu domain. Both selection criteria are consistent with our overarching triage strategy.

The Top 100 sites include informational sites, online forms and applications, and are selected by applying the rules of triage to Penn State’s websites. The A-Team tests the sites using a combination of automated testing, user testing and expert evaluation to detect accessibility issues, with special emphasis no the blockers. If issues are discovered, we communicate those issues with the website owners, and optionally, provide consulting on best coding and content practices.

### Project Polaris

In 2012 Penn State initiated Project Polaris, an effort to modernize its home and news websites (both sites are included in the Top 100). A-Team staff were involved in the planning and testing of the sites from the start of the project, and we continue to test them for accessibility.

Recently, the second phase of Project Polaris was initiated, and has as a goal to update the 23 Commonwealth Campuses of Penn State. Again, A-Team staff are involved at the start of the project, leading an accessibility team of 4 people representing the campuses. Phase 2 uses the same web platform as used in the home and news sites.

### The PDF Problem

PDF formatted documents in practice are rarely accessible, and their widespread use for online content is a major barrier to users with disabilities.

ATI has, in the past, tried to discourage use of PDF format for business and online course documents, and recommended reformatting to HTML and MS Word formats. That effort has been largely unsuccessful, especially with faculty-generated documents.

Instead, a popular strategy has emerged to provide links to both PDF and alternative formats – either accessible Word documents used to create the PDFs, or HTML versions of the documents. This approach requires that the author/editor have the skills to produce accessible Word documents. Training in creating accessible Word (and PowerPoint) documents is a regular offering through Penn State’s IT Training Services.

### EPUB Documents

Adoption of EPUB as a publishing format is beginning to get traction in our business and scholarly publishing units. The A-Team has been vigorously promoting the new publishing standard because of its wide adoption by book readers; its growing, if somewhat grudging, adoption by publishing companies; and by the promotional and consulting efforts of the A-Team.

Our Strategic Communications unit will publish their first EPUB documents this year, and another business publishing unit is outsourcing final EPUB versions while staff are trained and workflows established.

The Penn State University Press now provides EPUB versions for every book published with digital rights. The ebooks are currently offered through amazon.com, and soon through the iBookstore.

Through our collaborations with commercial publishers, we are adding our voice to the general din from colleges and universities seeking relief from the difficult situation of being legally responsible, while absorbing the costs, for transforming inaccessible textbooks and learning materials into accessible formats. Progress is slow to transfer responsibility and costs back to publishing houses where it rightly belongs; that is, to effect a transition to an accessible, “born digital” workflow that uses EPUB, or EPUB-derivative XML formats, as a flexible and universal archival format.

### Increasing Capability to Provide Equal Access

Periodically, we ask Web Liaisons to complete a survey in order to measure progress towards completing the terms of the settlement with the NFB. Part of what we measure is the degree to which organizations in the Penn State system have integrated best practices into their web content authoring workflow.

We use a variation of the Capability Maturity Model as a measurement tool. The score is presented on a scale of 0 to 10; 0 means integration of a specific practice has not started, 5 means the effort to integrate the practice has started but is not yet complete, and 10 means all organizations have fully integrated the practice.

The statement “**Our unit has established a process to ensure that new websites and web applications are accessible”** had a score of 7.6, up from the previous score of 7.1, and 5.1 before that.

Responses to the statement “**Our unit requires web designers, developers, instructional designers, content providers and editors to be trained in web accessibility”** had an average score of 7.1 compared to 5.4 and 3.0 in previous surveys.

Responses to the statement “**Our unit has assigned responsibility to a person or organization for assuring compliance with web accessibility policy”** scored 8.6 compared to 8.2 and 7.6.

Responses to the statement **“All unit web pages have a statement of accessibility and/or a link to a responsible person”** scored 9.5, compared to 8.7 and XX.

Responses to the statement **“Our unit has established a triaged plan to remediate all websites under our management”** scored an impressive 9.0, compared to 5.3 in the previous survey.

Finally, responses to the statement **“Our unit has established a procedure to caption videos”** scored 7.9 compared to previous scores of 5.0 and 4.3.

The data indicate a clear trend towards increasing adoption of accessibility best practices in our workflows to create digital content.

### The Future Challenge: Sustaining our Gains

The ATI will continue to organize the effort in making IT resources accessible. Challenges that still require further development are:

* Publishing content for STEM materials
* Digital badges for staff development
* Resources for faculty development
* Building central resources for PDF file remediation and video captioning
* Bringing access topics into web design and communications curricula

The A-Team will also continue operations, providing user testing, technical consultations, student assistive technology support, and decision support to Penn State Purchasing Services.

It is natural to expect after such a long and sustained initiative that some reduction in intensity will happen as some resources are redeployed to other projects. ATI and the A-Team are very aware that the greatest challenges we face will be to sustain our gains; continuing support for technology, teaching, research and service organizations that embrace the principles and practices of universal design and user testing; one that proactively identifies and removes barriers to access.

## VI. Course Management Systems

Penn State continues to use the ANGEL LMS while we continue with our plans to pilot Blackboard Learn, the successor to ANGEL. Accessibility testing by A-Team staff will be an integral part of the pilot. And Penn State will be an active partner with Blackboard in testing Learn updates for accessibility issues. [Awaiting an update].

Remediation efforts continue on ANGEL. In the current major release, there were 14 priority 1 accessibility issues; 13 have been resolved.

## VII. Classrooms

As noted in the previous year's report, Penn State has modified the podium design to allow for instructors to access the podium without the need to unlock. This new style of podium was put into place in approximately 60 of our classrooms and will be phased in to other locations as rooms are updated or added. In addition, Braille identification is being added to the touch panel functions buttons.

We have made programming changes to our Crestron podium control systems that will allow a user to bypass the touch screen log-in procedure. Programming has been completed (and tested by a visually impaired staff member) to allow voice confirmation when a particular function is selected on the Crestron control system. This programming will be activated in rooms on an as-requested basis.

## VIII. Clickers

The i>clicker ([www.iclicker.com](http://www.iclicker.com/" \t "_blank)) product remains our standard student response system that is supported by Information Technology Services (ITS).  All i>clicker products are ADA compliant.

## IX. Bank (ATM and Website Accessibility)

This issue has been addressed and reported on in our 2012 report.

## Appendix 1: Training

The ITS organization taught, sponsored, or co-sponsored over 40 accessibility training events, including webinars broadcast to multiple campus locations.  This number does not include the variety of targeted training and consultation sessions held with departments and campuses.   
  
Highlights of the year include a two-day ARIA workshop taught by Jon Gunderson,  two “Accessibility Fairs” for faculty outside of University Park (Lehigh Valley in Fall 2013 and New Kensington in Spring 2014) and a mini-symposium on STEM accessibility which covered MathML, tactile and 3D printing and real life use cases.  The ATI committee expanded its accessibility “clinic” series to encourage members of the Penn State community to bring their accessibility issues and challenges to the Penn State accessibility community.

For web developers and multimedia specialists, an accessibility track was featured at the annual Penn State Web Conference (2 days, with 500 attendees) where topics included testing, ARIA and PDF accessibility. Featured speakers included Elle Waters, Patrick Dunphy (CBC Radio Canada), Tony Olivero (Humana, Inc), Denis Boudreau (Deque Systems), and Jeff Singleton (HiSoftware).

The ATI Committee has also sponsored training events on different topics, particularly PDF accessibility, accessibility within the ANGEL learning management system and designing accessible documents. In October 2014, ITS will present sessions on MathML, EPUB, accessibility of complex graphics, accessible educational games.  
A project to award badges in accessibility will begin soon on the Penn State badges platform.  Badges are a way to recognize and verify the skills and competencies of the holder. The pilot at Penn State will award badges to those who create and remediate different types of accessible digital content and media.

Accessibility User support networks have been created via the company social network for those doing the work to share knowledge and ask questions in the community. A monthly training and discussion group is held for content creation groups ranging in topics around accessibility, tools, and universal design.

## Appendix 2: Survey of Students and Staff with Visual Disabilities

Students, staff and faculty that have visual impairments were surveyed again in 2004 to determine their preferences in their technology usage.

We asked six questions, and we follow each question by a summary of responses:

1. Which devices and software do you use for your class work, on-campus employment, or for normal activities?

90% of respondents use computers with installed accessibility enhancements. 60% use mobile and landline phones with built-in or installed accessibility features (e.g., VoiceOver). 60% use Penn State’s web-based applications (e.g., ANGEL, eLion).

1. Do you use your own computer on campus?

Out of 7 responses, 5 respondents always or occasionally use their own computers on campus; 2 respondents use computers provided by Penn State.

1. Are there devices available to students or employees on campus that you do not use because they are not accessible?

Most respondents avoid specific computers and software because they are inaccessible. This is probably because not all machines have screen reader and magnification software installed. However, all computer labs do have a number of machines equipped with current versions of screen reader and magnification software. Most do not use printers.

1. Do you use Penn State mobile apps on your phone?

The response rate on this question was low – only 2 out of 9 responded. However, both use the m.psu.edu portal. Other apps in use are the new Penn State sports app and the dining halls app Dining@PSU.

1. What is your greatest frustration with technology in your life right now?

The responses to this question were rich in detail:

1. Inconsistancy with products and programs, wichch for the blind user means everything.
2. It's price, learning to use it, and the amount of it I have to have in order to be successful.
3. Most of the time the screen is to bright and the contrast is sometimes too sharp and will give me headaches.
4. Inaccessibility of a couple of software, PSU webpages, and CATA application
5. zoom text does not read all penn state mayerial
6. Not independently being able to complete some of the employee training modules. Also, it is always unclear how to go about acquiring updated accessibility software from the university.
7. My greatest frustration with technology in my life right now is that some web pages, forms, devices, etc. are still not accessible. Plus, changes are made and it's difficult to keep up with all of that.
8. Overall, I am satisfied with the options. I just don't have enough time to keep abreast of all the new ways that technology can provide me with further assistance. Thanks for the opportunity to complete this survey.
9. at the moment, I'm still able to manage reading with large font, but I'm concerned about text-to-speech support for math. i'm still comfortable traveling to familiar places to attend conferences, but new visiting new places is becoming difficult esp. if english speakers are not common - i might periodically ask for support in the form of accompanying grad students to conferences I attend (which I understand some colleges routinely support)

## Appendix 3: Collaborations

The A-Team staff participated in the planning and hosting of the Summer Academy at Penn State. The Bureau of Blind and Visual Services in the Pennsylvania Department of Labor and Industry runs the Summer Academy for high school students who are blind or visually impaired. The goal of the Summer Academy is to increase students’ independence and self-advocacy, increasing their chance of success in higher education and their careers.

A-Team staff participated by arranging for learning technology, screen reader and other assistive software, and computer labs. Additionally, an A-Team staff member was a participant of the Academy residential staff.

Penn State continues to collaborate with the Committee on Institutional Collaboration (CIC) through their IT Accessibility Group (ITAG). Projects include: Vendor Development; Captioning; Open Web Accessibility Alliance and Training Materials; and Media Player. The Media Player and Open Web Accessibility Alliance and Training Materials are receiving material support from the CIOs of the CIC member institutions.

The ITAG collaboration has been very successful. The ITAG group is planning to expand their scope to include overall strategies regarding institutional compliance with ADA regulations.

A-Team staff also works with colleagues in the EDUCAUSE Accessibility Constituent Group to promote accessibility to the IT communities of universities and colleges throughout in the U.S. and the world. An important product of that collaboration is the informational document "7 Things You Should Know About IT Accessibility".

ATI and the A-Team have provided user testing and technical consulting to 11 vendors including IT and HR service management systems, social media companies, a hotel booking service, and major textbook publishers.

## Appendix 4: Course Accessibility Recommendations

As part of the effort to encourage pro-active creation of accessible course content, the Faculty Support for Accessibility subcommittee has developed a draft of recommended accessibility guidelines for instructors at Penn State (**URL TBA**). The ATI committee has presented this list to the Administrative Council on Undergraduate Education (ACUE) body. Based on recent developments and discussion, the council plans to propose centrally supported accessibility resources.  
  
To provide instructor awareness of accessibility, the World Campus continues to  offer an online, free faculty development training module on  accessibility. OL 1800 - Accessibility - familiarizes faculty with how  to address six common accessibility issues they may encounter while  teaching an online course. From July 1, 2013, through June 30, 2014, 269  individuals successfully completed OL 1800.

## Appendix 5: Examples of Unit Efforts

All organizations at Penn State have participated in the effort to make the web presence accessible. Here are 2 examples of progress as reported by members of the ATI:

#### College of Science

“The College of Science has made huge strides in the past three years with website accessibility. The scans show that there is very little HTML content that is not accessible on the public-facing departmental sites. PDFs remain a big issue as many sites have a lot of content in that format. A tremendous amount of time and energy has gone into this effort. While no official record of time spent exists, a conservative estimate would put this number at or over 1,000 person hours.”

#### College of Liberal Arts

“The College of the Liberal Arts, like comparable colleges with robust e-learning development units, has a process for captioning all video content that is included in online courses. But when resident instructors are contacted by the Office of Disability Services about a student enrolled in a course with a hearing impairment, each college has a different way to support instructors to meet student needs. In Liberal Arts, the Office of Digital Pedagogy and Scholarship, housed within Undergraduate Education, provides captioning for resident courses as needed. We partner with the Office of Disability Services to support the instructors and establish a workflow to caption the video content instructors will show in class. This is a challenging process, since the video content shown in a resident course varies significantly from the type of video content that is included in an online course. The Office of Digital Pedagogy and Scholarship works to provide support to instructors so that they can use the material they want to in their classes, and shares lessons learned from the process in order to encourage efficiencies and more robust central support for the resident instruction side.”

#### World Campus

World Campus Learning Design efforts have been to template all course work to control as much of the content creation process as possible. With those controls in place, accessibility is at the core of course development. Staff training and professional development is offered in all cases where we are unable to systematically control the accessibility.

The use of MathML has been integrated into all math content creation. A full support group is embedded in the shop for review and remediation of all course content. Reviews are a part of the course creation process as well as a part of the accommodation reviews that occur every semester.

## Appendix 6: Summary- Status of the NFB Settlement

This section is organized in the order of the terms of the settlement between Penn State and the National Federation of the Blind.

1. **Audits.** Responsibility for conducting and interpreting website audits are with the budget units. We have a license for an automated testing tool, HiSoftware Compliance Sheriff. (We also provide user testing by people using screen readers).
2. **Policy Statement.** We have a policy (AD69) that is consistent with current international standards.
3. **Procurement.** We have standard language for RFPs and contracts. I support the procurement process by reviewing VPATs (standard, vendor-supplied data on ADA compliance), testing products, and consulting with vendors on best coding practices. Purchasing agents have delayed (and are willing to change) purchasing decisions based on accessibility concerns. **We are in compliance.**
4. **Library Services.** Websites are accessible; videos with significant traffic are being captioned; and vendors of databases, software and services are cooperating with library staff. User testing is provided by by IT Accessibility Team staff.
5. **Websites.** (Discussed above)  
   From the beginning of this initiative, the IT Accessibility Team has used a process of triage to focus on websites and web-based applications that have one or more of these characteristics:
6. are mission critical to the goals of the university
7. are **required** to be visited **at least once** by students or staff. (e.g., HR website and applications, eLion, ANGEL)
8. have a high volume of traffic (PSU home page)

Website remediation efforts will continue as we discover new problems.  
  
An extensive training program has been provided for developers, content authors, instructional designers and project managers. Resources for course content accessibility and faculty development are available, and more are on the way.

1. **Course Management System (ANGEL).** The majority of accessibility bugs have been fixed by the vendor. There are less than 10 bugs remaining, and none are identified as highest priority.
2. **Classrooms.** 60 classrooms have podiums that are accessible. Providing accessible classrooms is now a simple scheduling problem. Remaining classrooms will be upgraded as they are remodeled.
3. **Clickers.**The clickers we now use are available with braille-embossed controls on request.
4. **Bank ATM and website.** The on-campus ATM has been replaced with an accessible model. The bank website is not accessible, but neither is it under our control.

1. Vendors include RideShare, HR PMS, A&BS Room Booking, ServiceNow, Elsevier, Pearson, Phase 2 Tech, Microsoft, VoiceThread, Box.com, and Adobe. [↑](#footnote-ref-2)