



Joint Commission on Technology and Science

HB 1246, Accessible Digital Tools and Education Study

2022 Final Report

<http://dls.virginia.gov/commission/jcots.htm>

<https://studies.virginiageneralassembly.gov/studies/179>

The following is the final report on the JCOTS study of HB 1246 (2022 Regular Session), completed during the 2022 interim. This report primarily contains a compilation of information, resources, recommendations, and input received by advocacy groups, agencies, and other individuals, with some notes from staff, where appropriate. The report provides input from various groups and stakeholders, offers insight into the topic of accessibility in digital tools for education in the Commonwealth, and provides considerations to potentially guide and inform future legislation. Some resources are attached as an addendum, for ease of reference. The attached VHEAP report should be considered as information and recommendations given by VHEAP for consideration in this study, and not, by itself, as a definitive finding or formal recommendation of this study. Information on this study can be found below.

Procedural Status of HB 1246

This bill was introduced by Delegate Tran and was initially sent to the House Committee on Education. In its original form, it consisted of new requirements for the procurement of education technology. While there, it was recommended for reporting by the Early Childhood/Innovation subcommittee with a substitute, with a recommendation to have it sent to House Appropriations, and then out of the full committee with that substitute. This substitute required the Department of Education to convene a work group consisting of specified groups and individuals to make recommendations regarding this issue. It was then sent to House Appropriations, in which it was recommended for reporting by the Elementary & Secondary Education subcommittee. House Appropriations reported the bill and the bill passed the House.

The bill was sent to the Senate Committee on Education and Health, which reported the bill. The bill was then referred to Senate Finance and Appropriations, which continued the bill to the 2023 session. At that same meeting, a request was made to send a letter to JCOTS to study the issue. At JCOTS's first meeting, JCOTS moved to study HB 1246. Staff received the letter requesting the JCOTS study on August 23, 2022.



Work Group Convened by Staff

The following is a summary of the information presented at the Work Group's virtual meeting on October 13, 2022, and information sent by those who were unable to attend:

At the direction of the Chair, staff contacted individual members and representatives of Virginia Higher Education Accessibility Partners (VHEAP), National Federation of the Blind of Virginia, The Arc of Virginia, VA Education Association, VA School Boards Association, Apple, and Gloucester County Public Schools, who were selected by the Chair.

On Thursday, October 13, 2022, staff met with the representatives of Virginia Higher Education Accessibility Partners, Virginia Federation of the Blind, VA Education Association, and Apple, and received written comments from other individuals. Staff received information that includes accounts of the experience of students, parents, and teachers with existing technology used for education, both accessible and inaccessible, and a report from Virginia Higher Education Accessibility Partners on digital accessibility in K-12, Higher Ed, and some state agencies. The information received also included recommendations from these groups and their representatives, such as the recommended creation of a set of baseline requirements for the procurement of accessible technology for education, with a focus on websites and apps, and the use of existing guidelines, such as Web Content Accessibility Guidelines (WCAG) and Section 508 standards, for purposes of evaluating such technologies.

The following are some considerations and recommendations given by individuals involved in the work group convened by staff:

- VHEAP provided the attached report, which includes their recommendations
- The VHEAP report generally recommended that K-12 and higher education would have baseline requirements for accessibility, integrating WCAG and Section 508 standards, to be set forth in the Information Technology Access Act (ITAA) (§ 2.2-3500 et seq.), such that those sets of requirements would be standard. Administration of such requirements would be handled by the respective controlling entities
- Many current guidelines, requirements, and laws are specifically tailored to accessibility with regard to sight; other accessibility issues should be considered and accommodated
- Current policies at some institutions and entities do not have the necessary momentum or enforceability (they "lack teeth") to address issues, and are easy to work around or altogether disregard, resulting in inaccessible digital tools being used
- Digital tools do not only affect accessibility in the classroom, but also accessibility for required standardized testing and resources for such testing
- With many current accessibility standards providing accommodations after the fact, teachers, parents, and students may be left to determine ways to make the digital tools work, which may be out of their ability and expertise
- Concerns over expense, often to parents and students, to properly address changes needed for accommodation when such measures are taken after the fact for inaccessible tools
- Pooled purchasing and evaluation of technologies (among institutions or entities) could be used to reduce overall cost, both by sharing the cost of evaluation and by increasing the order size so that unit price may be lower
- Third-party testing of digital tools against guidelines; it was recommended that this should happen as early on in the process of procurement as possible, and to put the onus on vendors so that schools, institutions, and entities do not need to bear that cost



- The low prevalence of designated staffing at most institutions to coordinate accessibility efforts; this would be a potential area for improvement, if possible, particularly to help evaluate digital tools, and coordination between this staff across different institutions to address common issues
- "Leasing" technology is a method by which a technology is used until it needs updating, and is then replaced by the vendor with the newest version as part of the "leasing". This has lower prevalence regionally, where buying and using a technology until it no longer functions, often well past the need for update, may be common. This could help with keeping accessibility up to date and not relying on older tools purchased at larger intervals, and, instead, continuously "leased" and updated as part of that agreement
- Different vendors have different approaches for how to address requirements, particularly when the systems are integrated versus add-on. Some flexibility in how to address the requirements and the underlying issue/goal can be helpful.

Other Input

i. VHEAP

Another member of the VHEAP board of directors reiterated the recommendation of revising current code sections, including the ITAA, to make it serve as the baseline law for state agencies, higher education, and K-12, with policies and guidelines appropriately tailored to the needs of each. These comments also included the sharing of information and collaboration when there is overlap in the use of certain digital tools across these different groups.

ii. Constituents

Springfield Resident:

I am writing to share my experiences regarding the lack of accessibility of educational software for students with disabilities.

My daughter is now 10 years old, and her primary eligibilities are Speech-Language Impairment and Other Health Impairment. She has a rare genetic disorder that primarily exhibits as global apraxia - a motor planning disorder. In short, her brain knows what she wants to say and do, but the message gets mixed up on its way to her muscles. This means that fine motor skills, gross motor skills, and speech are all significantly impacted and delayed. She is minimally speaking, meaning that she has a few reliable, consistent phrases that are able to be understood by anyone. Her primary mode of communication is intended to be her augmentative and alternative communication (AAC) device, though her IEP team has never had the proper training and supports to implement the instruction necessary for her to learn the language of her AAC device. This means, at 10 years old, my daughter has very limited expressive communication skills, and yet she has demonstrated - when she has had proper supports and accommodations - that her reading skills are on grade level.

During the pandemic it became increasingly clear that the software she is expected to use at school, along with her general education peers, is not accessible to her. Specifically I am speaking to the programs from the Clever Company - ST Math and Imagine Language. Both programs required significant fine motor skills, and there were no adaptations available that made either of these programs accessible for my child. My



child is able to access touch screen applications, but the interactive graphics of these programs were very small, and she was not able to make her fingers adjust to what the program required in order to access them. There were no options for me to adjust size of the graphics within the app to accommodate this.

In addition, it's not just apps like these, but universal screeners - including those required by VA Law for all students - are inaccessible to students with complex communication needs and fine motor delays. On top of the screeners themselves being inaccessible, the results are also not normed to include students with these disorders, which often makes the test results invalid.

These accessibility issues with software - software that is heavily relied upon in general education classrooms - and screeners are directly impacting the achievement of students with disabilities across Virginia, and that is very evident in the SOL scores for students with disabilities as well as the incredibly low bar that VDOE has set for pass-proficient on the Virginia Alternate Assessment Program (VAAP), where students in most grade levels only need to get 12/30 questions correct (on an already significantly modified and adapted assessment) to be considered pass/proficient.

The expectations for accessibility and achievement for students with disabilities in Virginia must improve if there is any hope of closing the widening achievement gap for these students.

Burke Resident:

I am writing in support of HB1246. I am a constituent from Burke, VA, and I have a 17-year old daughter who is blind and is a senior in high school in Fairfax County Public Schools. As a high-achieving high school student taking multiple AP and DE courses, she has found some challenges when using Google Suite applications. For example, Google Sheets is partially inaccessible and this is a resource often used for charts and tables in her AP Environmental Science class. The Google Sheets web application has the following issues: (1) Some headings do not expose heading semantics. (2) Some lists do not expose list semantics. (3) Some data tables do not identify the column and row headers.

In addition there are issues with the keyboard and accessibility when using Google Sheets, such as: (1) Some tab controls are not switchable using cursor keys. (2) Some buttons are only operable using the ENTER key. (3) Column widths and row heights cannot be changed using the keyboard-alone. (4) Drag and drop to rearrange the apps in the Google Apps disclosure panel cannot be performed using the keyboard-alone.

Formative (formerly GoFormative) is another platform that is commonly used for many Math classes, including my daughter's current class, Probability & Statistics. It is challenging to access using JAWS because of the graphics and interactive pictures that are utilized. In my daughter's case, her teachers have exempted her from completing these activities in the past or have provided her an alternate assignment to show mastery of content.



I agree that there should be legislation in place requiring stakeholders to review technology implemented by school systems and ensure their accessibility to all students before purchasing these platforms and resources and rolling them out to students with vision impairments and other learning differences.

iii. Virginia Department of Education (VDOE) staff

VDOE staff provided the following considerations regarding the initial version of the bill that they had identified at that time. These are not exhaustive and VDOE staff indicated that more information would be needed from VDOE to fully comment on the implications of implementation. Additionally, VDOE staff wished to make explicit that the following is not an official agency comment. Considerations:

- Practicability of such changes due to popular instructional software in schools (like Canvas and Schoology), which may not meet such suggested baseline standards due to some features that are not built in
- Potential for vendors being unable to build-out accessibility functionality, particularly for required universal accessible designs, such that school districts may not be able to procure third-party tools
- Variable fiscal impact on different agencies, organizations, schools, and entities
- Potentially extensive process of agency development of guidelines to administer such changes and new requirements
- Impact on many facets of administration of such digital tools and their use in teaching at the school and district level
- Potential impact on vendors, depending on current funding and familiarity with guidelines, particularly whether they are currently funded and required to follow such guidelines now or will have to comply from scratch

Staff Notes

The study was primarily limited to the issue of setting guidelines for the procurement process. Other potential avenues for addressing aspects of the underlying issues (including consumer protection or strengthening enforcement or efficiency of after the fact tailoring of measures to individual students to allow for accessible use of a given technology) were not within the scope of what this study was able to contemplate.

Other Resources

https://www.doe.virginia.gov/special_ed/index.shtml

<https://www.section508.gov/manage/laws-and-policies/#508-policy>

<https://law.lis.virginia.gov/vacodefull/title2.2/chapter35/>

<https://lis.virginia.gov/cgi-bin/legp604.exe?ses=221&typ=bil&val=hb1246>

For more information, see the *Joint Commission's website* or contact the Division of Legislative Services staff:

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VHEAP Digital Accessibility Report starts on the following page

“Status of Digital Accessibility Efforts across the Commonwealth of Virginia”

Description

The document highlights our findings on the status of digital accessibility-related supports and services in the k-12 public school systems, higher education institutions, and state agencies throughout the Commonwealth of Virginia. While not comprehensive, it offers a fair assessment of where our institutions are successfully addressing the digital accessibility needs of Virginians with disabilities and where we can make improvements. A more detailed study is necessary to obtain the most accurate picture.

Definitions

To aid respondents with understanding the questions being asked both in the surveys and during the focus group discussions, the VHEAP Board of Directors (BOD) provided the following definition for “*digital accessibility*”:

Digital accessibility includes but is not limited to:

- Adding captions and audio description to post-production video
- Accessible textbooks and related core materials used for teaching and learning
- Ensuring websites and online documentation can be accessed using assistive technology (e.g., screen readers, voice recognition, etc.)
- The ability to navigate a website or software application (e.g., learning management system, institutional communication platforms, grade portals) without using a mouse
- Using sufficient color contrast
- The addition of alternative text for images, graphics, and charts
- And other features that provide greater access to digital content

Sources

The findings were derived from a combination of surveys and focus group discussions conducted during the month of September 2022. Those sources are described below:

Online Survey

The VHEAP Digital Accessibility Survey was sent to hundreds of K-12, higher ed, and state agency professionals in the Commonwealth of Virginia between 9/1 – 9/13 via listservs and direct email solicitation. Respondents were given until 9/16 to complete the survey. A reminder was sent on 9/13.

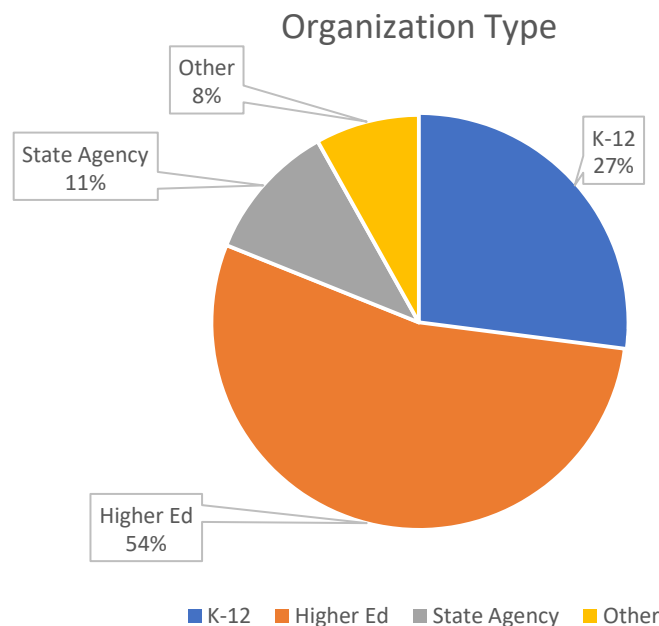
The survey asked respondents to provide basic demographic information like name, position title, place of employment, email address, agency affiliation, and the number of individuals employed at their respective institutions. K-12 and higher ed respondents were also asked to provide estimates of the total number of students served by their respective institutions.

In addition to basic demographic information, respondents were asked to provide estimates of the number of individuals with disabilities supported by their respective institutions (i.e., both internally and externally); how well they perceived their institutions to be addressing the digital accessibility needs of individuals with disabilities; and the perceived level of staffing and time committed to ensuring their institution's digital accessibility responsibilities are being addressed.

Finally, respondents were asked about their willingness to participate in a separate focus group to discuss their institution's digital accessibility efforts. They were also asked to provide additional leads if they were not the individuals tasked with overseeing their institution's digital accessibility efforts.

Findings from Online Survey

As of 9/20, 37 respondents had completed the survey. The breakdown was as follows:



Note: Higher Ed respondents represent only public institutions. Respondents in the "Other" category included individuals and organizations working in the private sector, non-profit, or grant-funded organizations working in partnership with public K-12 and higher ed institutions.

Breakdown of Organizational Representation

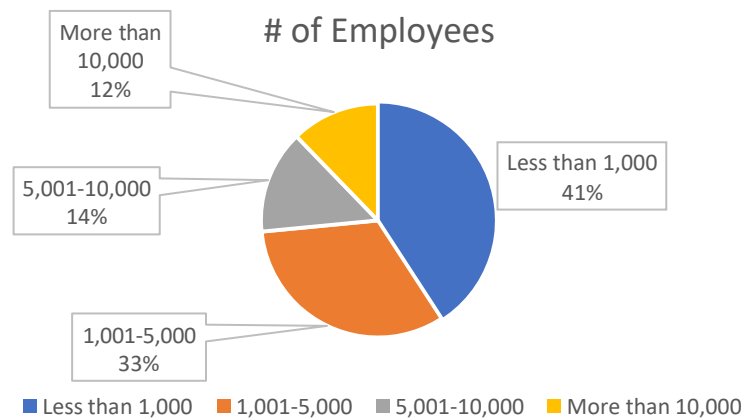
The following data highlights the relative size and scope of the organizations identified in this survey:

- **K-12**

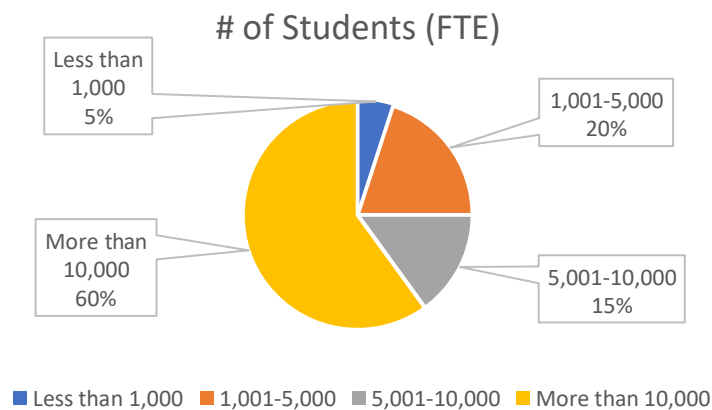
- Approximately 85% of the schools represented have more than 125 employees.
- Approximately 71% of the schools represented have more than 1500 employees in the school district.
- Approximately 71% of the schools represented have more than 500 students in the school.
- Approximately 71% of the schools represented have more than 5000 students in the school district.

- **Higher Ed**

- *Employees*



- *Students*



Respondents were asked to estimate the number of individuals with disabilities (i.e., employees; students, if applicable) in their respective organizations:

- **K-12**
 - Respondents estimate between 10%-30% of all students and employees have a disability.
 - **Higher Ed**
 - Respondents estimate between 10%-30% of all students and employees have a disability.
 - **State Agency¹**
 - Respondents estimate that more than half of all employees have a disability. Approximately 8 in 10 students supported by the agency have a disability.
-

Focus Group Discussions

The BOD conducted focus group discussions between 9/22 and 9/29 with the following groups:

- **K-12², 9/27, 9/29**
- **Higher Ed³, 9/22**
- **State Agency, 9/27**
- **Representatives from U.S. Department of Education's Office for Civil Rights (OCR) & U.S. Access Board, 9/29**

The following questions were used to inform our discussions:

1. What policies and procedures are in place to ensure that your institution's digital resources are accessible to individuals with disabilities?
2. Data is always helpful to provide direction or explain need. What types of data do you collect that reflect the accessibility needs of your students, faculty, staff, and guests to the Univ.? Who requests this data? Are there other depts that also collect data pertaining to accessibility/disability?
3. How is your institution being held accountable for ensuring that your materials are accessible to individuals with disabilities? Who is responsible for this accountability? What happens if you fall short?

¹ This perspective is reflected by agencies under the *Disability Services Agencies* umbrella.

² Findings were gathered from 3 school divisions (*Loudoun, Stafford, Arlington*).

³ Findings were gathered from 8 higher education institutions (*ODU, JMU, UMW, VT, GMU, UVA, NVCC, Longwood*).

4. Thinking broadly, what resources/guidance at the local level could assist you with ensuring digital resources are accessible to individuals with disabilities? What at the state level would help?

Summary of findings from Focus Group Discussions

K-12

Participants

The first focus group was facilitated by Mark Nichols and included representatives from Stafford County Public Schools and Arlington County Public Schools. A second focus group was facilitated by Mark Nichols and Korey Singleton and included representatives from Loudoun County Public Schools. These three divisions have dedicated assistive technology staff who are passionate advocates for digital accessibility across their institution. However, many school divisions across Virginia lack full-time staff who specifically support the assistive technology/digital accessibility needs of students with disabilities.

Existing Policies and Procedures

In general, no school division had written policies or procedures to ensure that all digital resources are accessible to individuals with disabilities. One school division identified the use of Blackboard's built-in content management system (CMS) accessibility features and a full-time webmaster as existing strategies to help ensure basic compliance; however, this approach is not error-free as one individual cited that videos are often uploaded without any closed captioning.

Another school division leverages their assistive technology (AT) specialist to participate in the onboarding process for any technology considerations planned for classroom use. The AT specialist serves as the digital accessibility subject matter expert (SME) and provides feedback on the accessibility of certain tools prior to acquisition. However, it was mentioned that no tools have been denied acquisition due to inaccessibility and generally are marked as "accepted with reservation". This means that additional individualized accommodations would be needed for certain students with disabilities to successfully utilize the technology or resource (which requires more work for special education teachers and IEP teams).

Data Collection and Reporting

For the most part, no data is collected around digital accessibility. One school division uses Blackboard Ally within their learning management system (LMS) to analyze the accessibility of materials used for instruction. The [December 1 SPED report](#) that all K12 divisions submit to VDOE provides a district level snapshot of services for students with disabilities but does not include digital accessibility data. SPED directors can access the data of students that are receiving materials from [AIM-VA](#), but that data only accounts for a fraction of the materials that may be used for instruction.

While all 3 school divisions utilize the Synergy digital IEP management system, case managers and related service staff across the institutions lack a common vernacular for identifying the digital accessibility needs of students. Therefore, data analysis around accommodations for digital tools and accessible educational materials is difficult. One school division mentioned that data is being collected on how many students receive assistive technology and/or assistive technology services as a drop-down within Synergy. Additionally, the same division utilizes Synergy to identify students that require accessible instructional materials through [AIM-VA](#).

Successes

All school divisions have successfully deployed various digital technologies to remediate certain barriers with inaccessible digital content (e.g., [Snap&Read](#), [Read&Write](#), [ReachDeck](#), [Grackle](#)). However, all divisions indicated that while initial product training was provided to teachers, ongoing training (especially for new teachers) is not consistent and competes with a multitude of trainings for which teachers are required to participate.

One school division has a textbook adoption committee that reviews digital materials for both content alignment and accessibility/usability. Some resources have been removed from purchasing consideration due to the user experience design (which included inaccessibility). It can be argued, however, that the success of this committee is attributed to the library media specialist for textbooks and digital resources who brings years of prior work experience in assistive technology service delivery and the creation of accessible educational materials.

Challenges

Division-level accountability for ensuring classroom materials be accessible to individuals with disabilities is absent across the school systems. Oftentimes, the Instructional Technology Resource Teachers (iTRTs) and Instructional Technology Facilitators (ITFs) find or create materials for teachers to integrate into lessons. These materials are typically inaccessible. Teachers then lack the time and/or training to remediate those materials prior to classroom use. Additionally, case managers responsible for IEP implementation are often focused on the compliance needs of an IEP, not necessarily the level of digital accessibility compliance for content used to support instruction.

Teachers also have a high level of autonomy to add content within the LMS without verification of accessibility. A common misperception among teachers and district content offices is that VDOE-approved textbooks and supplementary educational materials available in digital format are accessible.

One school division reported that web accessibility is a major issue as the LMS does not have a built-in accessibility checker. Another division reported that while Blackboard Ally is used to help teachers understand the scope of inaccessible content within the LMS, a consolidated effort is lacking to provide accountability and teacher training in creating accessible educational materials from the onset (before content reaches the LMS).

The following were suggested supports to ensure digital resources are accessible to all audiences:

- Support from VDOE for ensuring instructional content is accessible (creation and procurement) prior to use in school districts.
- Increasing awareness at the local and state level around digital accessibility as many teachers lack knowledge for how to create accessible instructional content.
- Expectation from VDOE (governed or shared) that when students create materials, those materials are accessible. This increases generational awareness for digital accessibility.
- Ongoing training and support are needed at both the local and state level. Several school divisions often start off strong with training, but with teacher attrition and competing district initiatives, priorities shift to meet pressing needs and often new employees do not receive the same type or level of training.
- Focus on Universal Design for Learning (UDL) at the state level to align digital accessibility with UDL framework implementation.
- Involve district superintendents in annual division reporting on digital accessibility (and progress toward established goals) to VDOE or other state entity.
- Guidance and support to ensure the accessibility of assessments (MAP testing, etc.).
- School divisions need funding to hire dedicated staff to provide training, monitoring, and support to ensure instructional content is accessible to students, teachers and staff, parents and guardians, and members of the school community.

Higher Education

Participants

Representatives from the following institutions participated in our focus group:

- Longwood University
- Virginia Tech
- George Mason University
- University of Mary Washington
- University of Virginia
- Old Dominion University
- James Madison University
- Northern Virginia Community College

Existing Policies and Procedures

Three of the represented institutions have implemented some level of process as it relates to reviewing the accessibility of digital solutions as they go through the procurement process. These processes, however, are primarily focused on enterprise applications (e.g., LMS, CMS, HR, etc.). Most of the institutions participating in this focus group have very little in place when it comes to ensuring newly acquired enterprise solutions are accessible to individuals with disabilities. When it comes to more commonly used applications and services like productivity tools (e.g., Microsoft 365, Google Suite), browser plug-ins, blogs, e-portfolio tools, email clients, etc., it is common for these tools to not be

checked for accessibility. This allows employees (i.e., faculty and staff) to install whatever they feel will be beneficial for their class or work environment.

Those institutions with accessibility reviews in place have a central accessibility office with a team of SMEs. These teams, oftentimes, exist separate from the Disability Services (i.e., student accommodations) or ADA (i.e., employee accommodations) offices at their respective institutions. Those without review procedures typically have one person or a very small team that addresses digital accessibility as a small part of their core responsibilities (e.g., Disability Services, ADA, Webmaster, IT Support, Library Services, etc.). In this respect, there is a lack of time or resources to implement adequate digital accessibility supports and services.

Even when policies and procedures are in place, informing people of their importance and the reason they should be followed is very challenging. One institution follows the Quality Matters matrix which includes a section on accessibility to at least ensure there is some emphasis on ensuring the content used in their online courses is accessible to individuals with disabilities.

Data Collection and Reporting

Collectively, participants felt that data collection and the eventual sharing of that data is important for creating accessible and inclusive campus environments. Many times, the information goes “up” the hierarchy, but not “out” to departments that can use it. For example, data that would be helpful when providing digital accessibility services could include such things as the number of documents remediated, the number of videos accurately captioned, the number of accessibility errors found on university websites, etc. Other data from the built environment could include where accessible doorways are located, where accessible restrooms are in each building, which facilities have elevators, the number of instructor stations with microphones, etc. Publicly sharing this information raises awareness about accessibility, especially digital accessibility, and the institution’s efforts to ensure equivalent access to individuals with disabilities.

Some participants mentioned having centralized solutions in place like Blackboard Ally or automatic web crawlers that help in providing information that directs support services and justify the need for additional accessibility efforts. However, even with these centralized policies, procedures, and tools in place which could provide needed data, these solutions are not always leveraged effectively. Some departments can choose their own path or opt out of using or reporting on these processes altogether, thus keeping that information siloed to specific units or departments on campus. It was suggested that an executive-level mandate could help to ensure all academic and non-academic units participate in these types of data collection efforts.

Another challenge to data collection efforts involves access to information about the number of individuals with disabilities (i.e., students, staff, and faculty) on campuses and the types of accommodations in place to support these individuals. Research shows that the number of students

with disabilities attending higher education institutions is oftentimes underreported.⁴ Students and employees with disabilities must self-identify to receive accommodations and this information is not shared publicly for obvious reasons (i.e., privacy laws like FERPA, HIPPA, etc.). With employees, for example, self-identification can be very challenging, often for fear of retaliation, lack of acceptance, or because procedures and resources are hard to understand or implement.

Accountability and Reporting

Feedback from focus group participants suggests that procedures for addressing digital accessibility-related issues (e.g., making websites, videos, and documents accessible) are inconsistent from one institution to the next. As mentioned earlier, some of the larger, better resourced institutions have a team to monitor and oversee these efforts. They have established procedures for addressing digital accessibility, provide training, report on digital accessibility, and have varying degrees of senior-level administrative support (e.g., VP, CIO, etc.).

The smaller institutions, in most instances, lack that type of infrastructure. Their efforts are largely focused on addressing individual accommodations (e.g., when an individual discloses that they have a disability) as opposed to broader digital accessibility-related issues. For example, some institutions have automatic web crawlers (e.g., [Siteimprove](#), [DubBOT](#), etc.) to assist with reporting web accessibility errors; however, it is up to each department or unit at the institution to address the issues that are reported. With limited oversight and little to no staff with expertise to provide guidance on how to correct these issues, the problems are oftentimes unaddressed. In addition to limited oversight at the department level, participants also commented that there is little to no support in place from senior-level administration.

Successes

One notable program that was highlighted has been in place for a few years at Virginia Tech. They implemented a certification training program to prepare tech professionals in higher education to take [digital accessibility certification exams](#) (i.e., CPAAC, WAS) offered through the International Association of Accessibility Professionals ([IAAP](#)). This is offered to Tech employees through a grant program. The goal of this effort is to improve awareness of digital accessibility within the Virginia Tech community and empower strategic partners to independently address digital accessibility issues in their respective units. In recent years, VT has offered this training to others in the higher education community who would like to take the training course.

⁴ Gould, R., & Parker Harris, S. (2019). Higher education and the ADA: An ADA Knowledge Translation Center research brief (p. 9). University of Illinois at Chicago.

https://adata.org/sites/adata.org/files/files/ADA%20Research%20Brief_Higher%20Education%20and%20the%20ADA_FINAL.pdf

Challenges/Opportunities

Based upon feedback from the participants, funding and staffing are the overriding challenges. Accessibility, although required by federal law, is not seen as a priority in most institutions.

Several of our participants mentioned that having a centralized position that is an advocate for digital accessibility would help. This position would place greater awareness on the need to ensure equivalent access to digital resources and could play a larger role in coordinating institutional efforts. For example, in addition to coordinating enterprise-wide digital accessibility monitoring and reporting efforts, this position could also focus on training initiatives to improve the capacity of individuals working in the tech positions to independently identify and correct digital accessibility-related issues.

State Agency

Brief Description of the DSA Structure/Hierarchy

This meeting was facilitated by Korey Singleton, Lori Kressin, and Mark Nichols and included a representative from the Virginia Department for Aging and Rehabilitative Services (DARS). DARS is part of a group of organizations collectively called the Disability Services Agencies (DSA). This includes the following agencies:

- Department for Aging and Rehabilitative Services (DARS)
- Woodrow Wilson Rehabilitation Center (WWRC)
- Department for the Blind and Vision Impaired (DBVI)
- Virginia Rehabilitation Center for the Blind and Vision Impaired (VRCBVI)
- Virginia Board for People with Disabilities, and (VBPD)
- Assistive Technology Loan Fund Authority (ATLFA)

It was mentioned that DARS has MOUs with the other agencies to share IT supports and services (i.e., web maintenance, development, accessibility, etc.). The Agency Information Technology Resource (AITR) oversees these services and essentially acts as the liaison between these agencies and VITA. There is one AITR per agency throughout the Executive Branch. It was estimated there are between 50-100 agencies under the Executive Branch.

Existing Policies and Procedures

It was reported that VITA is tasked with providing IT governance for all the state agencies, including the DSAs. VITA's governance includes but is not limited to IT procurement, security, operational hardware, etc. VITA's IT Procurement Policies (i.e., [Chapter 10](#)) and [IT Accessibility and Website Standards](#) are prominently displayed on their website and [Section 508](#) appears to be tightly integrated into this process.

On a broad level, VITA was described as very engaged with respect to ensuring digital accessibility is integrated into the IT purchasing and procurement process. The AITR for DARS shares a unique perspective in that this individual is the liaison for agencies that, relative to others, both hire and serve a

large number of Virginians with disabilities. For that reason, any RFPs that are initiated by those agencies or any IT solutions coming from VITA that will directly impact those individuals are vetted to ensure they are as accessible as possible. It was unclear how much digital accessibility was being considered outside of the DSA. The AITR for DARS does receive calls on occasion from other AITRs when there is a question about supporting an individual with a disability. However, it was suggested this appears to have more to do with handling a specific/immediate accommodation requests as opposed to broadly integrating digital accessibility-related policies or procedures at those respective agencies.

Internally, the DSAs are described as having a webmaster (*full-time*) and a part-time backup to assist with ongoing development and maintenance of DSA websites. Each website references WCAG Standards, <https://www.dars.virginia.gov/webpolicy.htm#Accessibility&gsc.tab=0> and they take great care to ensure that the resources hosted on those sites are accessible. They have also taken steps to internally create accessibility guides that assist agency staff with how to create accessible instructional materials (document accessibility). Staff members can request to have content uploaded to the website, but it is the responsibility of the staff member to ensure the resources are accessible. The webmaster and support staff will point out accessibility issues on occasion, but they are not responsible for making sure the content is accessible upfront. It was unclear how accessible the content being shared internally amongst staff is.

Data Collection and Reporting

From what we could gather, data on the implementation and maintenance of web standards (*including accessibility*) is collected and shared with VITA on an annual basis. However, that information does not appear to be shared publicly.

It was suggested that there is no real penalty when digital accessibility-related information is not reported. In the long run, each agency is responsible for their websites and the content they host on those websites. If they fall out of compliance, they increase their risk for a lawsuit or a complaint due to denying an individual with a disability equivalent access.

Successes

DSA was described as meeting or exceeding VITA Web Standards. In this respect, the DSAs are doing a great job ensuring that content hosted on DSA websites are accessible to individuals with disabilities. They are also doing a good job integrating IT accessibility and users with disabilities into the purchasing and procurement process when it comes to the products and services procured, developed, or maintained by the DSAs. It was unclear how well the state agencies outside of the DSAs are handling this.

Challenges

It was suggested improvements could be made with respect to the integration of accessibility into the IT purchasing and procurement process for enterprise applications. IT requests or solutions that do not originate from within the DSAs or that are not designed with the DSAs in mind appear to lack the same

emphasis on accessibility considerations. Modeling the DSAs commitment to include accessibility considerations and users with disabilities into VITA's IT purchasing and procurement process could broadly improve the accessibility of IT solutions across the state.

Additionally, it was suggested that more support was needed to ensure content hosted on public-facing web resources (i.e., documents, applications, trainings, etc.) is accessible to individuals with disabilities. At the present date, agency staff are not required to undergo training on how to create accessible content. It was mentioned that there is an annual Lunch & Learn, but it appears to be voluntary. Implementing more training on digital accessibility would improve general awareness about these types of issues and help to mitigate some of the existing issues in the long run.

Challenges/Issues with Virginia's Existing Information Technology Access Act

- References "*Covered Entity*", which includes all state agencies, public institutions of higher education, and political subdivisions of the Commonwealth. However, K-12 school systems are excluded.
- References "*Exclusions of Technology Access Clause*", which is determined by head of the covered entity and is allowed if total costs increase by 5%. This exclusion is being granted by individuals without consultation with ADA Coordinators or other accessibility SMEs.
- If technology is not being used by individuals who are blind or visually impaired, then accessible technology is not required. This disregards the needs of individuals with other types of disabilities (e.g., deaf, cognitive/learning disabilities, physical limitations, etc.).
- Lack of accountability or reporting requirements.
- Lack of adequate funding/staffing to support digital accessibility efforts across the Commonwealth:
 - **K-12** - Like higher ed, it appears larger districts can dedicate some staff toward addressing this effort. This is handled in a part-time capacity as opposed to having a position fully staffed. There appears to be a reliance on VDOE to "vet" products for accessibility, but that is not being done at the VDOE level. Across most school districts, digital accessibility issues are handled as accommodations (whether it be in the classroom or by that admin for parent/visitor-related needs).
 - **Higher Ed** – IT accessibility-related policies and procedures are left up to each respective institution; in most schools, the responsibility is likely seeded to the DS/ADA Office in some way. Larger institutions have some staffing but varies from one institution to the next. Most institutions are not addressing these concerns unless there is an accommodation need. The problem with this strategy is that many digital accessibility issues must be addressed during the implementation or development lifecycle of the solution, not after it has been implemented.

- **State Agencies** – AITRs and webmasters appear to be "*standing in the accessibility gap*" for state agencies; we could not, however, determine if this effort is prioritized outside of the DSAs beyond the need for an accommodation. The process appears to reflect how many K-12 public school systems and higher education institutions are operating.
- Agencies/Institutions/Organizations are duplicating efforts with respect to addressing IT accessibility-related concerns during the IT purchasing and procurement process.
 - In our discussions with colleagues across the Commonwealth, we find that many public-school systems and higher education institutions are using similar technologies (e.g., learning management systems, content management systems, etc.). While one school system/institution may require vendors follow a specific IT accessibility-related protocol (e.g., provision of VPATs, demo of accessibility product features, requiring of timeline for IT accessibility compliance, etc.), others do not. This results in an uneven provision of services from one public school system or higher education institution to the next. This ultimately hurts those students who are enrolled in school systems or higher education institutions who do not have access to those same types of support resources.

Proposed Recommendations

Based upon the findings from the online surveys, focus group discussions, and our own internal deliberations, the BOD proposes the following recommendations to Virginia's [Information Technology Access Act \(ITAA\)](#) (§2.2-3500 - §2.2-3504):

- **Integrate WCAG and Section 508 as Baseline Technical Standards**
 - WCAG 2.1 A and AA, automatically take into consideration other types of disabilities (e.g., low vision, cognitive disabilities). WCAG 2.1 also takes into consideration the need for mobile access. Define WCAG 2.1 A and AA as what you are "striving for" (i.e., the baseline). Agencies can always exceed it if they choose but this is the baseline for what is required for websites, online content, and non-web documents.
 - As an international standard ([ISO/IEC 40500:2012](#)), WCAG is the linchpin between other international laws (e.g., Canada, European Union, etc.)
 - [Section 508](#) is broader than WCAG. It takes into consideration software applications, kiosks, desktop computers, printers, telecom, etc.
- **Suggested Plan of Action for Institutions/Organizations to Follow (Implementation Strategy)**
 - Build on VITA's IT Governance structure
 - [VITA's General IT Procurement Policies, Chapter 10](#)
 - Section 508 is integrated policy

- [VITA's IT Accessibility and Web Standards](#)
- Institutions/Organizations should be required to do the following:
 - Establish/Update IT Accessibility Policies and Procedures, including accessibility reviews during the procurement process
 - Hire/Assign staffing to oversee institution/organization's digital accessibility efforts
 - Define roles and responsibilities for each institution/organization (e.g., who owns governance)
 - Establish/Define grievance procedures
 - Establish/Update IT procurement policies and procedures referencing Section 508 and WCAG 2.1 A and AA
 - Require annual training on IT accessibility for all institution/organization staff
 - Establish central website/repository for IT accessibility-related supports and resources
 - Establish procedures for ongoing monitoring of IT accessibility-related issues.
- **Accountability (Reporting Mechanisms)**
 - Establish procedures for reporting IT accessibility-related issues and efforts.
 - Like VITA, this process raises awareness about need for IT accessibility without being punitive.
 - Standardize reporting documentation to ensure consistency from one institution/organization to the next.
 - Designate point of contact for each institution/organization to handle reporting.
 - Establish designated reporting schedule.
 - Designate who should store/compile collected reports (e.g., Institution/Organization Heads -- University President, CIO, etc.).

Summation

As stated previously, the information presented in this report is not comprehensive. It is fair overview of where public-school systems, higher education institutions, and state agencies in the Commonwealth of Virginia are with respect to supporting the digital accessibility needs of Virginians with disabilities. In addition to highlighting the issues, we presented recommendations which are consistent with the guidance and consultation offered by our federal partners in the U.S. Dept. of Education's Office for Civil Rights and the U.S. Access Board.

Since 2016, [OCR has signed resolution agreements](#) with 14 public school systems, 2 colleges, and 1 public library in the Commonwealth of Virginia. All these agreements reference issues impacting the equivalent access to digital resources by Virginians with disabilities (e.g., images without alternative text descriptions, inadequate support for keyboard-only access, hyperlinks without meaningful labels, etc.).

The above-mentioned recommendations lay the groundwork for the ITAA to act as the foundational law that all IT accessibility policies and directives in the Commonwealth of Virginia are built upon. They also keep the ITAA under the General Administration umbrella and bring K-12 public school systems into the fold. Additionally, this common ground approach toward greater digital accessibility across the Commonwealth not only benefits those working in the accessibility arena, but more importantly provides a welcoming and accessible environment for Virginians of all abilities to seek employment, participate in education, and engage with the broader community.

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