

Improving Access for Blind, Visually Impaired and Print-Disabled Students: A Campus Accessibility Partnership Model

Association on Higher Education and Disability (AHEAD)
Annual Conference
July 17, 2025



Research Team and Collaborators

Principal Investigator: Dick Kawooya, Ph.D.,
Associate Professor, School of Information Science,
University of South Carolina.

kawooya@sc.edu

Co-PI: Clayton A. Copeland, Ph.D.,
Faculty and Director, Accessibility Leadership Lab
(ALL),
School of Information Science, University of South
Carolina

copelan2@email.sc.edu

Consultant/Co-PI: Eric P. Robinson, J.D. Ph.D.,
Associate Professor, School of Journalism and Mass
Communications, University of South Carolina
Academic Affiliate, College of Law, University of South
Carolina.

erobinso@sc.edu

Consultant: Jonathan Band, J.D.,
Adjunct Professor, Georgetown University Law
Center,
Legal Advisor, Library Copyright Alliance (LCA)
Consultant, Jonathan Band PLLC.
jband@policybandwidth.com

Graduate Assistant: Courtney Swartzendruber
MLIS candidate,
School of Information Science, University of South
Carolina.

swartzec@email.sc.edu

Collaborator: Allison Reisz
Lead Specialist, Assistive Technology & Alternative
Format
Office of Student Accessibility Services | University
of Southern California

areisz@usc.edu



**College of Information
and Communications**
UNIVERSITY OF SOUTH CAROLINA

Outline

- Introductions - Research team
- Project overview
- Preliminary findings:
 - Literature review - General issues
 - Literature review - Legal issues
 - Preliminary findings:
 - Interviews (BVIPD students, DSOs, and academic librarians)
 - Survey questionnaire (instructors/faculty)
- Interactive Q and A

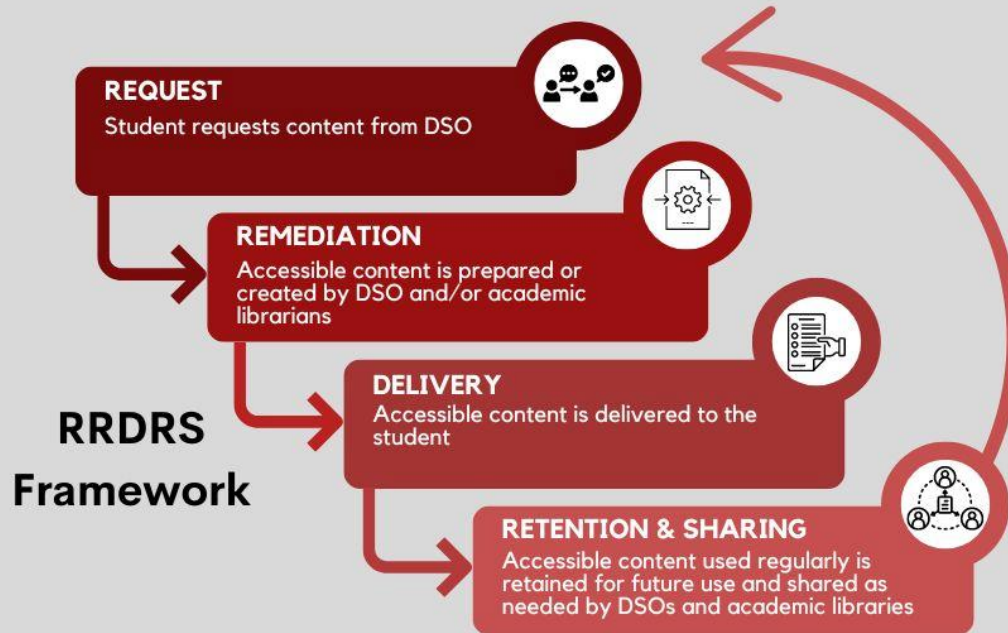


Project Overview: Research Problem

- Lack of timely and equitable access to accessible content, content that is otherwise more readily available to non-BVIPD students.
- Can the problem be solved through a **Campus Accessibility Partnership Model** that specifically addresses:
 - **Request** (student requests content);
 - **Remediation** (accessible content is prepared or created);
 - **Delivery** (accessible content is delivered);
 - **Retention** and **Sharing** (accessible content used regularly is retained for future use and shared as needed)?
- **RRDRS Service Framework** at the core of the Model should maximize services to BVIPD students and improve equity of access (which was identified by Butler, Adler, and Cox, 2019).



Campus Accessibility Partnership Model



Recent Developments - Research Problem

- End of **AccessText (April 2024)**:
 - Database of accessible textbooks (PDFs) primarily used by DSOs/IHEs hosted by Georgia Tech.
 - DSOs could turn PDFs into other formats if needed (audiobook, braille, enlarged text, etc)
 - Partnership between - Association of American Publishers (AAP), participating publishers, Center for Inclusive Design and Innovation (Georgia Tech) and over 3000 post-secondary institutions.
 - AAP “...*assessing how best to expeditiously restore the [AccessText Network] service...*” (AAP, April 2024).



Literature Review - General

- Centers for Disease Control and Prevention (CDC), vision disabilities are among the top ten disabilities for populations 18 years and older (CDC, n.d.).
- BVIPD populations are historically underserved by libraries (Epp, 2006; Copeland, 2011; Copeland, 2012; Copeland, 2023; Kawooya, 2023; Bonnici et al., 2015).
- Hashemi et al. (2017) asserts that a high percentage of people with visual impairments have little access to information, as there are not many books in formats that are useful to them, created what has been termed a "book famine" (as cited in Were et. al, 2021, p.736). Only 5% of published works available in BVIPD accessible formats (National Federation for the Blind, 2019).



Why This Work Matters

- BVIPD populations are more than twice as likely not to graduate high school and less than a third less likely to graduate college (Day & Fleischmann, 2020).
- As cited by Mulliken (2019) 31% of persons aged 21 to 64 years without a disability in the U.S. have an educational attainment of a BA degree or higher while only 15% of students with visual impairments do.
- Even prior to the COVID-19 pandemic, the **unemployment rate for people with disabilities was nearly double** the unemployment rate of people without disabilities, which increases the likelihood of these individuals living below the poverty line. (U.S. Department of Labor, n.d.).



Libraries and Accessibility Needs

- While many libraries address accessibility, few have focused on who provides the services and what drives decisions around support for patrons with disabilities.
- 14-21% of libraries provide services reactively to prevent lawsuits. (Longmeier and Foster, 2025)
- 66-79 percent of libraries are more proactive because equity, diversity, and inclusion align with their professional values or library goals. (Longmeier and Foster, 2025)



Lack of Accessibility in Online and Face-to-Face Classrooms

- An Association on Higher Education and Disability (AHEAD) survey found that amidst course format changes, students with disabilities were having greater overall difficulty adjusting to online learning environments due to inaccessibility of content (Scott & Aquino, 2020).
- The transition to online learning is permanent and has widespread, long-term implications in the learning of BVIPD students (Diep, 2021).



Common Barriers for BVIPD Students

- Inaccessible websites & platforms (Mulliken, 2017; Riley-Ancar, 2022; Sachin, 2017; Bhardwaj & Kumar, 2017)
- Misunderstandings regarding their required accommodations (Croft, 2021)
- Challenges with certain formats (i.e., braille) (Correa-Torres, et al, 2018; Grove, 2020)
- Difficulties obtaining access to materials and excessive wait times for accessible formats (Wood et. al, 2017, Mulliken & Falloon, 2019; Scott & Aquino, 2020; Wudmata, 2022)



Faculty Barriers and Attributes

- Lack of formal processes at college and university levels result in varying levels of accessibility; (Cain & Fanshawe, 2021; Wudmata, 2022)
- Limited disability awareness and training in Universal Design for learning; (Wood et. al, 2017; He, Zha, Watson, & He, 2022; Riley-Ancar, 2022; Anderson, Grave, & Terras, 2023)
- Attitude, communication, and flexibility are key (Catalano, 2014; Riley-Ancar, 2022; Bostic, 2022; Anderson, Grave, & Terras, 2023)



Disability Services

- Often lack sufficient staff, technology, & funding (Wood et. al, 2017)
- Practices are not standardized throughout higher education; (Grove, 2020; Wudmata, 2022)
- Encounter difficulties with publishers (Wood et. al, 2017)
- Many DSOs are not currently equipped to specialize in maintaining the number of accessible copies created over many years (Wood et. al, 2017)
- Failure to implement **Retention** and **Sharing** results in costly duplication of time, effort, and resources (Wood et. al, 2017)



Assets and Needs of Academic Libraries

- Librarians and other stakeholders encounter inaccessible websites and platforms, many of which are not compatible with screen readers (Mulliken, 2017; Riley-Ancar, 2022);
- Many academic librarians aid BVIPD students with accessibility needs, some formally and others informally (Mulliken & Falloon, 2019).
- Have the capabilities to support Disability Service Offices (DSOs) and students with disabilities through collaboration on digitization, metadata, standards development, and storage (Wood et. al, 2017).
- Need increased training and awareness of the Marrakesh Treaty among all stakeholders (Were, et. al, 2022).



Literature Review - Legal Issues

Legal Issues 1 - General Issues:

- Even prior to the COVID-19 pandemic, Institutions of Higher Learning (IHEs) enjoyed wide legal latitude to make and distribute accessible learning materials.
- It is unclear whether and how most Disability Services Offices (DSOs) are utilizing the existing legal infrastructure to leverage the expertise, resources, and infrastructures in academic libraries in the furtherance of BVIPD students' learning experiences.



Legal Issues 2

Various federal laws require public and private colleges to accommodate BVIPD students:

- Sections 504 and 508 of the Rehabilitation Act
- Americans with Disabilities Act (ADA)
- Higher Education Act / Higher Education Opportunity Act



Legal issues 3

U.S. copyright law allows copying of materials into accessible formats:

- Copyright Act includes specific provisions regarding materials for blind
- “Fair use” allows limited use for educational purposes
- Chafee Amendment: allows “authorized entities” to create accessible copies for use by “eligible persons”
- Digital Rights Management exemption: Librarian of Congress exempts assistive tech from rules against DRM circumvention
- Marrakesh Treaty Implementation Act: expands scope of Chafee Amendment, allows import and export of accessible materials



Legal Issues 4

Remaining legal issues / problems:

- FCC exempts e-readers from accessibility requirements
- Question of whether libraries must own non-accessible version of work to create an accessible version
 - Must there be one non-accessible version for each accessible version created?
- Academic libraries now sign contracts to obtain access to collections of digital materials – contract overrides undermine copyright flexibilities.
- DOJ Rule (ADA) on Web and Mobile App Access for People with Disabilities – April 2024.



Literature Review Implications

- Strong potential for whole-university involvement (Campus Accessibility Partnership Model) as a means of ensuring equity of access for all (universal access).
- Each stakeholder group offers important contributions.



Research Questions



**College of Information
and Communications**
UNIVERSITY OF SOUTH CAROLINA

Research Questions (1)

Research Question 1:

How familiar are Disability Services Offices (DSOs), academic libraries/librarians and instructors with the legal infrastructure to facilitate access for Blind, Visually Impaired and Print Disabled (BVIPD) students?



Research Questions (2)

Research Question 2:

How can DSOs work with academic libraries and instructors to serve BVIPD students to meet the requirements of the **RRDRS service framework**?

- A. Request – Do DSOs have established procedures for BVIPD students to request accessible copies?
- B. Remediation – Do DSOs or academic libraries prepare or create an accessible copy upon request or in anticipation of need (For example: for regularly used materials)?
- C. Delivery – Do DSOs or academic libraries deliver accessible copies to BVIPD students in appropriate formats and how are the accessible copies delivered?
- D. Retention and Sharing – Do DSOs or academic libraries retain and create database(s) of accessible copies for future use by BVIPD students?



Research Questions (3)

Research Question 3:

What are BVIPD students' lived experiences with the current services and how can their lived experiences be improved upon by the implementation of **RRDRS service framework** by DSOs and academic libraries?

Research Question 4:

How can instructors work with the Disability Services Offices (DSOs) and academic libraries to serve BVIPD students to meet the requirements of the **RRDRS service framework**?

Research Question 5:

How might the **Campus Accessibility Partnership Model**, built around the **RRDRS Service Framework**, help the effective and efficient delivery of accessible content to BVIPD students?



Research Methodology

- Data from **IHEs**, using **mixed methods** approach.
 - **Qualitative methods:**
 - Interviews -
 - BVIPD students (interview options for accessibility)
 - DSO staff and Academic Librarians
 - Questions delivered via accessible WORD or PDF document or Qualtrics
 - Students record responses to interview questions;
 - Zoom meetings to conduct interviews
 - Physical interviews with students at a location that is accessible to them
 - **Quantitative methods:**
 - Survey-questionnaire - instructors (defined as instructors of semester-long classes with BVIPD students (last 1-3 years).



Research Methodology, continued

- **Sampling:**
 - Self-selected sampling - BVIPD students and instructors (recruited through DSOs)
 - Expert sampling (DSO staff and academic librarians).
- **Ethics clearance:**
 - Secured from USC Office of Research Compliance – November 3rd 2023.



Data Collection

- Assistance with access to participant pool:
 - BVIPD Students
 - Academic Librarians
 - Instructors of BVIPD Students
 - Disability Services Offices (DSOs)

The DSOs make initial communication in research activities among BVIPD students and instructors of BVIPD students.



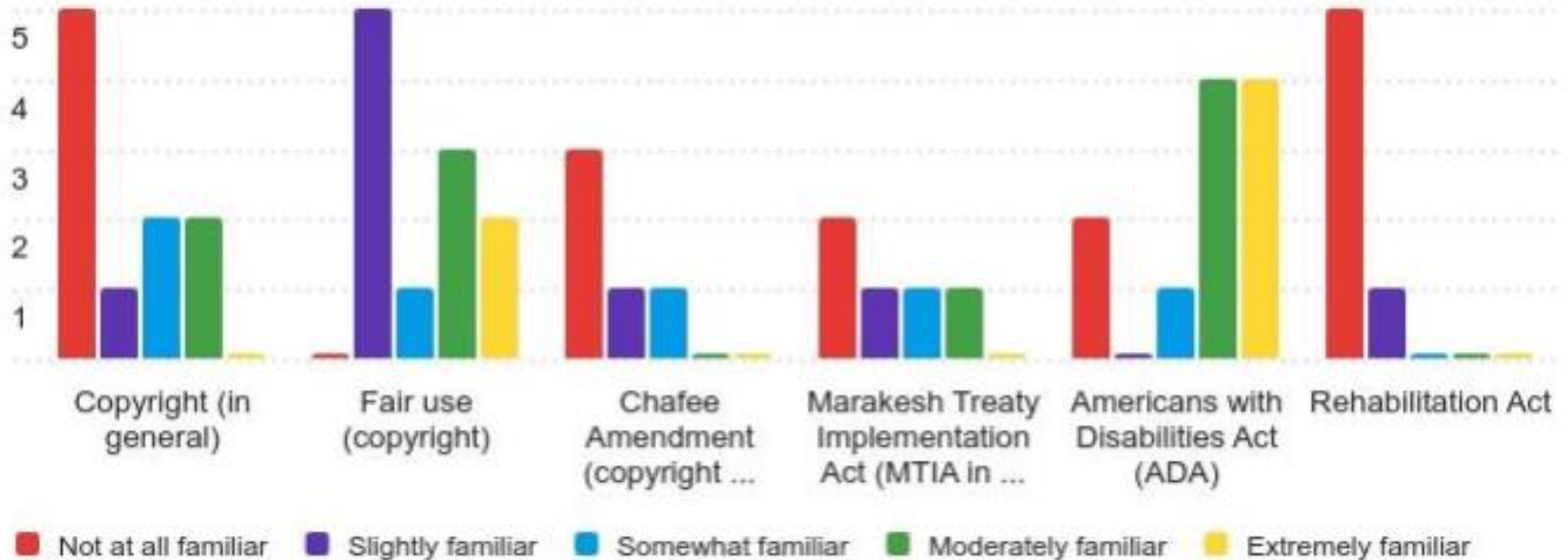
Preliminary Findings

- Based on pilot data paired with national expansion
 - 11 DSOs and 77 librarians interviewed
 - 14 BVIPD students interviewed – color blind, visual impairment, Peters anomaly and undisclosed.
 - 42 survey responses from instructors



RQ1 (instructors)

Question 27 - How familiar are you with the laws that facilitate access for BVIPD student...



RQ1

- Elaborate on familiarity with the law:
 - *“Have a disabled child so most is through working with him...”*
 - *“The only one I am moderately familiar with is ADA - all others not at all...”*
 - *“... Moderately familiar with copyright and fair use.”*
- Overall, mixed familiarity of laws that facilitate access for BVIPD students. Knowledge is not required or expected of instructors.



Findings – RQ 2 (students on RRDRS)

- RQ2A (Request):
 - Overall students are positive about services by DSOs. Letters to faculty make a difference.

“...Yes, because with the help of the disability center my teachers will be able to know about my problem and any other issues that come along with it...” (emphasis ours).

“...I feel supported by professors and teaching assistants as I have received help in the past with my issues...”

“...definitely has been a big help, um, especially when it comes to like taking tests and everything...”



Findings – RQ 2

- RQ2B (Remediation):
 - Several students unsure or unaware about remediation by DSO or library.
 - However, one student noted the remediation support by DSO.

“Once again, I'm not sure how it is with the technology they provide, but when it comes to the, um, accessible testing materials...you know [I]... alert them [DSO] about a week ahead of time...requesting to take a test ...at the SDRC...I want XY, Z accommodation...can you please have those available? And um, and they tend to have those available as soon as you sign in...”



Findings – RQ 2

- RQ2C (Delivery):
 - Overall students reported no delivery of accessible materials from DSO, but received accessible materials in test taking situations.

“...mostly, um, they tended to hand it to me, um, after I sign in, um, and they go over, you know, the general test procedures and everything...”
 - Generally opportunities exist for DSOs to deliver materials.



Findings – RQ 2

- RQ2D (Retention and Sharing):
 - Need exist for the retention and sharing of accessible materials.
 - Especially because instructors don't always remember to provide accessible materials.
- “...as far as accessible materials in the classroom, like I said, teachers don't always remember to do the 20-point font and so I normally have to to use my modification, um, uh, my magnifiers or modification software...”*



Findings – RQ 4 and RQ 5

- RQ 4 - reports of DSOs delivering accessible materials to instructors (11 DSOs and 77 academic librarians interviewed in total). General recommendation to train instructors on accessible materials is provided by several DSO respondents.
- RQ 5 – feasibility of **Campus Accessibility Partnership Model?**

Faculty in favor:



“...I believe having a form that can be filled out multiple times, whenever accessible materials are needed, would be extremely helpful...”



**College of Information
and Communications**
UNIVERSITY OF SOUTH CAROLINA

Findings – RQ 3 (Lived Experiences)

- Life can be hard:

“...I can't drive and that really affects...getting around to places and everything... can affect like, you know, social and everything, um, because, you know, it's harder to recognize people, um, harder to recognize, um, visual like body language and everything...”

- Coping mechanisms – “work around challenges”:

“...I've had to find ways to work around challenges that arise, particularly in environments where color differentiation is crucial...”

“...This has taught me to be resourceful and proactive in seeking solutions or assistance when needed...”



Campus Accessibility Partnership Model Best Practices

- Framework for collaboration between DSOs, libraries, and faculty
- Student-centered, legally aligned, equity-driven
- Applying the RRDRS framework across student intake, faculty engagement, alt-format production, and execution

Student Intake & Support

“Help me help you” Mindset

- **Ask about:**
 - Past accessibility barriers and successes
 - Familiar assistive technologies and preferred formats
 - What has worked, and what could work better?
- **Provide:**
 - Regular check-ins and open communication
 - Faculty outreach and coordination
 - Resource referrals (testing services, transportation, etc.)

Faculty Outreach & Engagement

Building a Team Mindset

- **Educate on:**
 - Legal responsibilities and inclusive pedagogy
 - Course components that may need adaptation (visuals, exams, current or last-minute material, STEM content)
- **Offer:**
 - Collaboration, consultation, and training
 - Clarify DSO vs. program responsibilities
 - Support roles discussed (TAs, access aides)
- **Strategy:**
 - Stay solution-oriented—even when met with resistance (e.g., “This student can’t take my course”)

Alt-Format & RRDRS Framework

Delivering Meaningful Accessibility

- **What “accessible” means for BVIPD students:**
 - Timely, usable, and complete content
 - Includes alt-text for visuals, complex STEM, etc.
- **Actions:**
 - Identify and gather course readings early
 - Partner with libraries
 - Use AI for alt-text with human content knowledgeable review
 - Promote sharing of accessible content throughout departments

Vendors vs. Student Workers

Strategic Execution for Remediation

- **Vendors:**
 - Convenient but costly
 - Slower turnaround
 - Less flexibility for edits/updates
- **Student Workers:**
 - Cost-effective
 - Easily trained, flexible, responsive
 - Empowered as accessibility advocates
 - Contribute to institutional Universal Design for Learning (UDL) culture

Benefits of the Partnership Model

- Faster delivery of accessible content
- Positive and consistent student experience
- Stronger faculty collaboration
- Sustainable, cost-effective remediation workflows
- Education on UDL principles and Accessibility

Thank you!



Funded by: IMLS Grant # RE-254873-OLS-23

BVIPD Project Website:

https://sc.edu/study/colleges_schools/cic/research/sponsored_awards/bvip



University of South Carolina (USC):

- Office of Vice President for Research - Grant # 80005355
- College of Information and Communications - Grant # 80003405



**College of Information
and Communications**
UNIVERSITY OF SOUTH CAROLINA

Appreciation to Our Partners

Able SC - Able SC is a disability-led organization seeking transformational changes in systems, communities, and individuals.

Digital Research Services - DRS supports data analysis and research data management plan.

EMMA - EMMA is a project where several universities and large repositories are collaborating to create a service for sharing Educational Materials Made Accessible (EMMA) for those with print disabilities.

LAA – The Library Accessibility Alliance (LAA) advocates for accessible library e-resource.



**College of Information
and Communications**
UNIVERSITY OF SOUTH CAROLINA

References (1)

Anderson, S., Grave, S. & Terras, K. (2023). The student voice recommendations for supporting the success of graduate students with disabilities in online courses.

The American Journal of distance education, ahead-of-print(ahead-of-print),
1–21. <https://doi.org/10.1080/08923647.2022.2142027>

Bhardwaj, R. & Kumar, S. (2017). A comprehensive digital environment for visually impaired students: User's perspectives. Library hi tech, 35(4), p.542-557.

Bonnici, L. J., Maatta, S. L., Brodski, J., & Steele, J. E. (2015). Second national accessibility survey: Librarians, patrons, and disabilities. New Library World, 116(9/10), 503-516. <http://dx.doi.org/10.1108/NLW-03-2015-0021>

Bostic, G. (2022). Lost in the cloud: The experiences of college students with visual impairments in an Online environment. ProQuest Dissertation Publishing.



References (2)

Cain, M. & Fanshawe, M. (2021). Expectations for success: Auditing opportunities for students with print disabilities to fully engage in online learning environments in higher education. *Australasian Journal of Educational Technology*, 37(3), p.137-151.

Centers for Disease Control and Prevention. (2020, June 9). Fast facts about vision Loss. <https://www.cdc.gov/visionhealth/basics/ced/fastfacts.htm>

Copeland, C. A. (2011). Library and information center accessibility: The differently-able patron's perspective. *Technical Services Quarterly*, 28(2), 223-241. <https://doi.org/10.1080/07317131.2011.546281>

Copeland, C. A. (Ed.). (2023). *Disabilities and the library: Fostering equity for patrons and staff with differing abilities*. Libraries Unlimited.



**College of Information
and Communications**
UNIVERSITY OF SOUTH CAROLINA

References (3)

- Copeland, C. A. (2012). Equity of access to information: A comparative exploration of library accessibility and information access from differently-able patrons' perspectives [Doctoral dissertation, University of South Carolina]. Scholar Commons.
- Croft, E. (2021). "Everyone thought my library assistant was my mum." Visually impaired and blind students' experiences of interactions with support and other staff in higher education. *Journal of Disability Studies in Education*, 2(2), P.136-157.
- Correa-Torres, S., Conroy, P., Rundle-Kahn, A. & Brown-Ogilvie, T. (2018). Experiences of students who are visually impaired receiving services by disabilities support services (DSS) offices in higher education institutions. *Journal of Blindness Innovation and Research*, 8(2).



References (4)

- Day, J. R., & Fleischmann, K. R. (2020). Serving the needs of students with disabilities: How academic librarians can collaborate with publishers and disability services offices. *Proceedings of the Association for Information Science and Technology*, 57(1), e334. <https://doi.org/10.1002/pra2.334>
- Epp, M. (2006). Closing the 95 percent gap: Library resource training for people with print disabilities. *Library Trends*, 54(3), 411-429.
<https://doi.org/10.1353/lib.2006.0025>
- Grove, J. (2020) A qualitative discourse on the lived experiences of blind and visually impaired college students. ProQuest Dissertations Publishing.
- He, Zha, S., Watson, S., & He, Y. (2022). Promoting inclusive online learning for students with disabilities in information systems courses. *Journal of Information Systems Education*, 33(1), 7–.



References (5)

- Kawooya, D. (2023). Marrakesh Treaty and access for blind and visually impaired information professionals. In Copeland, C. A. (Ed.). (2023). *Disabilities and the library: Fostering equity for patrons and staff with differing abilities* (pp.239-255). Libraries Unlimited.
- Longmeier, M. M., & Foster, A. K. (2022). Accessibility and Disability Services for Libraries: A Survey of Large, Research-Intensive Institutions. *Portal* (Baltimore, Md.), 22(4), 823–853. <https://doi.org/10.1353/pla.2022.0044>
- Mulliken, A. (2019). Eighteen Blind Library Users' Experiences with Library Websites and Search Tools in U.S. Academic Libraries: A Qualitative Study. *College & Research Libraries*, 80(2), 152–158. <https://doi.org/10.5860/crl.80.2.152>



References (6)

Mulliken, A. & Falloon, K. (2019). Blind academic library users' experiences with obtaining full text and accessible full text of books and articles in the USA: A qualitative study. Library Hi Tech, 37(3), 456-479.
<https://doi.org/10.1108/LHT-08-2017-0177>

National Federation of the Blind. (2019, January). Blindness Statistics.
<https://nfb.org/resources/blindness-statistics>

Riley-Ancar, H. (2022) Accessibility challenges of online learning affecting successful degree completion among visually impaired undergraduate/graduate students: An exploratory case study. ProQuest Dissertation Publishing.

Sachin, P. (2017) Expert consensus on barriers to college and university online education for students with blindness and low vision. ProQuest.



References (7)

Were, S. M., Otike, J. N., & Bosire, E. K. (2022). Framework for the provision of information to the visually impaired in academic libraries in compliance with the Marrakesh Treaty. *IFLA Journal*, 48(4), 727–741.

<https://doi.org/10.1177/03400352211046018>

Wood, L. C., Axelrod, J., Downey, J. S., Furlough, M., Unsworth, J., & Wedaman, D. (n.d.). *PDF | Libraries: Take AIM! : Accessible instructional materials and higher education*. | ID: fn1079946 | Tufts Digital Library.

<https://dl.tufts.edu/concern/pdfs/fn1079946oo>

Wudmata, D. (2022). Undated souls: The experiences of blind students at Bahir Dar University. *International Journal of Disability, Development, and Education*, 69(6), 2108-2135.

