

**Grant Proposal: Assistive Technology Workstations for the Jefferson County Public
Library System**

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LIS 4040: Management of Information Organizations

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March 6, 2022

Abstract

This grant proposal project is the collaborative effort of Jessica Dadisman, Michael Gustin, and Amber Smith, students in the Masters of Library and Information Science at the University of Denver. The goal of this project is to secure funding through the Laura Bush Initiative in order to install Assistive Technology Workstations (ATWs) in each of the Jefferson County Public Library branches in Jefferson County, Colorado. The project was inspired by the successful installation of an ATW at the Belmar Branch. The objective is to expand access to this valuable resource to all library users in the county that have assistive technology needs. The time frame for completion is approximately one year, January 2023 through December 2024. After the one-year time period, the ATWs will be permanent installations in the library. The target audience is community members with disabilities in Jefferson County, Co. According to data from the US Census Bureau, 12.7% of all Americans have a disability. The goal of this project is to help meet the technology needs of this substantial and underserved section of the community. Project activities include purchasing the necessary hardware and software, installing the equipment, training staff how to use the ATWs, conducting evaluations, and publishing an analysis of the qualitative and quantitative data collected. The intended outcome of installing Assistive Technology Workstations in the remaining nine branches of the Jefferson County Public Library System, is removing barriers to access for users with disabilities and increasing useability for all patrons.

Organizational Profile

Jefferson County Public Library (JCPL) serves the population of Jefferson County, Co. The 2020 Census reports the population of Jefferson County, CO as 582,010 people. Jefferson County is located in the Front Range Urban Corridor of Colorado. (Office of Management and Budget, 2013). It encapsulates several suburbs and towns near Denver, including Arvada, Bow Mar, Edgewater, Golden, Lakeside, Lakewood, Littleton, Morrison, Mountain View, Superior, Westminster, and Wheat Ridge, as well as numerous unincorporated communities. (Jefferson County, CO, 2017).

JCPL system consists of ten main branches as well as one bookmobile and four remote hold lockers. In 2019, 9,907,552 items were borrowed from JCPL. There were 2,613,399 total visitors, 49% of households had at least one active (used in the last 12 months) cardholder and 274, 669 people attended programs. The total revenues for JCPL in 2020 were \$46,744,393 JCPL's mission is to "help create an educated and vibrant community by providing equal access to information and opportunities" (Jefferson County, Public Library, 2021).

Their core values are innovation, accountability, and excellence. The library's priorities as discussed in the JCPL strategic plan snapshot include reaching more people, creating libraries for the future, and growing sustainably. The JCPL initiatives include building an inclusive community and embracing innovation and change. (Jefferson County Public Library, 2021)

Full Proposal Narrative

Statement of National Need

As of 2019, there were over 41 million Americans living with at least one disability. (US Census Bureau, 2021). Out of this population, 11.5 million people experience hearing disabilities

or deafness, 7.5 million experience vision difficulties or blindness, 16 million experience cognitive difficulties, and 21 million experience ambulatory difficulties or limitations with mobility. In addition, there are approximately 7 million public school students who have a disability. (Schaeffer, 2020). As the population continues to age, disabilities will continue to increase among the population. 34.6% of Coloradans aged 65 or older have a disability. (CDC, 2020).

Surveys that ask participants questions about accessibility and adaptive technologies consistently show that libraries address the needs of their patrons with disabilities reactively instead of proactively. (Willis, 2012). This constitutes a national need for improved disability services. This is further emphasized in reports from the Colorado Commission for the Deaf Hard of Hearing, and Deafblind. Their reports show that the entire state lacks the auxiliary services required to facilitate effective communication for residents with a disability. (CCDHH, 2021).

This project will help ensure that users with disabilities, an identified underserved community, have equal access to the library's electronic resources for their own self-directed edification. By providing equal access through assistive technology, the JCPL is striving to meet the needs of its community members who have one or more disabilities. Meeting the needs of the community should be the goal for all libraries and can be mirrored in library systems across the country.

Project Design

The project of adding Assistive Technology Workstations to the remaining nine branches in the JCPL system is representative of the commitment to being inclusive of all members of the community, increasing access to information resources, and promoting lifelong learning. These values are directly aligned with IMLS's strategic goals of promoting lifelong learning and increasing public access. The project seeks to meet the IMLS strategic goal of increasing public access by providing the tools to increase access for those community members who are most likely to encounter barriers. By investing in the technology acquisitions and structural modifications needed to remove those barriers to access, the libraries will become more usable for all community members

The primary audience will be users with disabilities in Jefferson County, Colorado. According to the U.S. Census Bureau's 2018 American Community Survey, the percentage of people with disabilities living in Jefferson County is 9.9% (56,105) of the total population. For further analysis, the Jefferson County population by disability type are broken up as such: 3.6% with hearing difficulty, 1.7% with vision difficulty, 3.5% with cognitive difficulty, 4.7% with ambulatory difficulty, 1.7% with self-care difficulty, and 3.9% with independent living difficulty (*Health Departments - Jefferson County, CO (Health & Vital Records)*, 2022).

Communication with the public on this project will be paramount so that patrons know that this technology will be available. Clarity on the implementation process will be the best course of action so that patrons are made aware of how long the project will take to complete and that they can go to staff with any questions,

A secondary audience is the community as a whole. In 2019, JCPL conducted a community input initiative and found that the community wants, "Equitable access and

educational opportunities, cultural, linguistic, responsive, materials and resources reflective of multiple lenses of diversity” (Jefferson County Public Library, 2019). This shows that the people JCPL serves want to see how their library is providing equitable access for all types of diverse community members. Announcements will be used to keep the community informed and up to date on the project’s progress and what services are being offered through their libraries. Monthly status reports will be made in the form of email blasts and website postings.

Once funding has been obtained, the next step is purchasing the assistive technology hardware and software. The library will purchase and install hardware and software from a prescribed list based on user feedback collected from the Belmar ATW. This hardware includes: a large-print keyboard, 27-inch monitor, trackball mouse, and a motorized adjustable table for wheelchair access. The assistive software includes: screen magnification, text-to-speech, speech recognition, reading assistance, and American Sign Language interpretation. The Belmar ATW also includes software for photo and video editing, slideshow creation, photo scanning, and VHS to DVD conversion.

The next activity is having library staff undergo training. Approximately 18 staff members will undertake 16 hours of training. This is expected to take six weeks, beginning June 15, 2023 and being completed by September 30, 2023. During this time, staff will be expected to learn how to use the ATWs and be competent with troubleshooting. Training will assure that staff have adequate knowledge to be able to assist patrons with their usage and gain proficiency with the new assistive technologies to foster inclusion for the benefit of community members. After training is complete, all branches will begin offering the ATWs as a full-time service for users with disabilities.

Throughout this process, JCPL will be collecting, recording, and evaluating assessment data to provide meaningful and practical feedback for justification of the ATW project, the improvement of staff training, and to identify best practices in the implementation of ATWs. Metrics such as user counts, electronic resource usage data, user interview, focus groups, and surveys will be used to evaluate the success of the project.

Finally, JCPL will publish an analysis of the qualitative and quantitative data collected related to the ATW and provide suggested best practices for the implementation of ATWs in all public libraries. The quantitative data collected will justify the implementation of this project and future implementations of ATWs in public libraries. Qualitative data gathered from users will help guide the creation of best practices related to the selection and implementation of future assistive technologies, staff training, and community outreach.

National Impact

This project will demonstrate the capacity of the library to serve as a catalyst that increases the well-being of the community. Installing ATWs will strengthen community health by promoting digital equity and access. The data collected from the implementation of this project will contribute to the creation of training and informational materials that may be used to benefit the implementation of ATWs in public library systems nationwide. Outcomes and project reports will be published on the library’s website and made available for all library systems to access and apply to their own institutions. This project has the potential to have significant

influence on the services and resources made available for patrons with disabilities, nationwide. The project plan can be utilized and adapted for libraries across the country. The scope can be reduced for libraries that serve fewer people. It can be expanded for libraries that serve larger communities.

We hope that our project of installing Assistive Technology Workstations, becomes the new standard in providing library access for patrons with disabilities. As libraries continue to focus toward serving diverse populations, it is important to remember that disabilities are found amongst people from all demographics and socioeconomic statuses. The Americans with Disabilities Act states that “people with disabilities shall have equal access to employment, public services and accommodations, transportation, and telecommunications services” (ADA, 1992). ATWs are one way that libraries can comply with ADA standards. Just as libraries across the country follow ADA guidelines to make their spaces physically accessible by ensuring spaces are wide enough for wheelchairs and installing ramps or elevators, installing ATWs should become standard practice. They are a useful tool for libraries to guarantee that their patrons with disabilities have equal access to services. Installing Assistive Technology Workstations throughout Jefferson County would proactively meet the needs of a community which can be mirrored across the nation.

Schedule of Completion



Communication Schedule

- **Monthly:** Status reports via emails and postings to both staff and patrons.
- **January 1, 2023:** Inform patrons of the plan to build and implement the Assistive Technology Workstations and give a general timeline of implementation. Staff involved with the project meet to discuss the plan.
- **January 10, 2023:** Flyers advertising the project created and displayed as well as signage around the areas where ATWs will reside.
- **January 30, 2023:** All technology and materials purchased.
- **February 1, 2023 - April 30, 2023 (depending on when tech arrives):** Installation of technology and materials.
- **May 30, 2023 -** All preliminary testing of technology completed by IT.
- **June 1, 2023:** Meeting with IT and library staff to discuss the technology and introduce training sessions.
- **June 15, 2023:** Staff training begins.
- **September 30, 2023:** Majority of training completed.

- **October 15, 2023:** Any leftover training needed by staff to be completed. Feedback and questions addressed. Prepare for the launch of the ATWs. Patrons notified.
- **October 30, 2023:** Final meeting between staff and IT before launch.
- **November 1, 2023:** Launch of ATWs.
- **November 10, 2023:** Focus group #1 with patrons to discuss the usability of ATWs and any issues encountered.
- **November 15, 2023:** Focus group #2
- **November 20, 2023:** Focus group #3
- **November 30, 2023:** Focus group #4
- **December 1, 2023:** Staff meeting to discuss focus group feedback and steps further.
- **December 7-21, 2023:** Authoring and delivery of feedback data report.
- **January 1, 2024:** First round of maintenance complete and all patron issues resolved.

Budget and Justification

| Assistive Technology Workstation: Supplies, Materials, and Equipment | | |
|---|---|------------|
| Item | Justification | Cost |
| Dell Inspiron 27 7000 All-in-One (Dell, 2022) | Increase accessibility for users with disabilities. | \$1,100.00 |
| Large Print Keyboard (Dell, 2022) | Increase accessibility for users with visual and ambulatory disabilities. | \$20.00 |
| Trackball (Kensington, 2022) | Increase accessibility for users with ambulatory disabilities. | \$110.00 |
| Headphones with microphone and active noise cancelation (Jabra, 2022) | Increase accessibility for users with hearing, visual, cognitive and ambulatory disabilities. | \$350.00 |
| 48" Motorized Adjustable Desk (VersaDesk, 2022) | Increase accessibility for users with visual and ambulatory disabilities. | \$825.00 |
| ZoomText Fusion Professional: <ul style="list-style-type: none"> • Screen Magnification • Screen Enhancements | Increase accessibility for users with hearing, visual, cognitive and ambulatory disabilities. | \$2,250.00 |

| | | |
|---|--|-------------|
| <ul style="list-style-type: none"> • Screen Reader (JAWS) (Freedom Scientific, 2022) | | |
| Dragon Professional Individual <ul style="list-style-type: none"> • Speech to Text (Nuance Communications, 2022) | Increase accessibility for users with visual, cognitive and ambulatory disabilities. | \$500.00 |
| Document Camera (IPEVO, 2022) | Increase accessibility for users with visual and ambulatory disabilities. | \$340.00 |
| Total per workstation: \$5,495.00 | | |
| Total for 9 workstations: \$49,455.00 | | |
| User Focus Groups (Rupert et al., 2017) | Collection of assessment data to provide meaningful and practical feedback for justification of ATW project, the improvement of staff training, and to identify best practices in the implementation of ATWs. <ul style="list-style-type: none"> • \$2576/in-person group • 4 in-person group sessions | \$10,304.00 |
| Promotional Materials | Inform all patrons of the ATW implementation project. <ul style="list-style-type: none"> • \$0.50/ per color copy • 1000 copies | \$500.00 |
| Survey Materials | Collect user feedback. <ul style="list-style-type: none"> • \$0.10/ per black & white copy • 200 copies | \$20.00 |
| Workstation: Supplies, Materials, and Equipment Total Cost: | | \$60,279.00 |

| Assistive Technology Workstation: Subawards and Contracts | | |
|---|---|-------------|
| Item | Justification | Cost |
| Staff Training (Statista, 2022) | Provide training for the library staff to gain proficiency with the new assistive technologies to foster inclusion for the benefit of community members. <ul style="list-style-type: none"> • \$1,896/hour | \$29,904.00 |

| Assistive Technology Workstation: Subawards and Contracts | | |
|---|---|--|
| | <ul style="list-style-type: none"> 16 hours of training for 18 employees | |

| Assistive Technology Workstation: Cost Totals | |
|---|--------------------|
| Item | Cost |
| Supplies, Materials, and Equipment | \$60,279.00 |
| Subawards and Contracts | \$29,904.00 |
| Estimated Total Cost: | \$90,183.00 |

IMLS Budget Form

IMLS BUDGET FORM

a. Legal name (5a from SF-424S):

b. Requested Grant Period From: (MM/DD/YYYY) Through: (MM/DD/YYYY)

c. If this is a revised budget, indicate application/grant number:

1. Salaries and Wages

| Name/Title or Position | Year 1 | | Year 2 | | Year 3 | | Total | | |
|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| Subtotal | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

2. Fringe Benefits

| Rate and Base | Year 1 | | Year 2 | | Year 3 | | Total | | |
|-----------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| Subtotal | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

IMLS BUDGET FORM

a. Legal name (5a from SF-424S): Jefferson County Public Library System

3. Travel

| From/To and Purpose | Year 1 | | Year 2 | | Year 3 | | Total | | |
|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| Subtotal | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

4. Supplies, Materials, and Equipment

| Item | Year 1 | | Year 2 | | Year 3 | | Total | | |
|------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| Dell Inspiron 27 7000 Qty. 9 | \$9,900 | | | | | | \$9,900 | \$0 | \$9,900 |
| Large Print Keyboard Qty. 9 | \$180 | | | | | | \$180 | \$0 | \$180 |
| Trackball Qty. 9 | \$990 | | | | | | \$990 | \$0 | \$990 |
| Headset Qty. 9 | \$3,150 | | | | | | \$3,150 | \$0 | \$3,150 |
| Adjustable Desk Qty. 9 | \$7,425 | | | | | | \$7,425 | \$0 | \$7,425 |
| ZoomText Software Qty. 9 | \$20,250 | | | | | | \$20,250 | \$0 | \$20,250 |
| Dragon Sotware Qty. 9 | \$4,500 | | | | | | \$4,500 | \$0 | \$4,500 |
| Document Camera Qty. 9 | \$3,060 | | | | | | \$3,060 | \$0 | \$3,060 |
| Subtotal | \$49,455 | \$0 | \$0 | \$0 | \$0 | \$0 | \$49,455 | \$0 | \$49,455 |

5. Contracts and Subawards

| Item | Year 1 | | Year 2 | | Year 3 | | Total | | |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| Staff Training Contract | \$29,904 | \$0 | | | | | \$29,904 | \$0 | \$29,904 |
| Contract | | | | | | | \$0 | \$0 | \$0 |
| Contract | | | | | | | \$0 | \$0 | \$0 |
| Subaward | | | | | | | \$0 | \$0 | \$0 |
| Subaward | | | | | | | \$0 | \$0 | \$0 |
| Subaward | | | | | | | \$0 | \$0 | \$0 |
| Subaward | | | | | | | \$0 | \$0 | \$0 |
| Subtotal | \$29,904 | \$0 | \$0 | \$0 | \$0 | \$0 | \$29,904 | \$0 | \$29,904 |

IMLS BUDGET FORM

a. Legal name (5a from SF-424S): Jefferson County Public Library System

6. Student Support

| Item | Year 1 | | Year 2 | | Year 3 | | Total | | |
|----------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| Subtotal | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

7. Other Costs

| Item | Year 1 | | Year 2 | | Year 3 | | Total | | |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| User Focus Groups | \$10,304 | | | | | | \$10,304 | \$0 | \$10,304 |
| Promotional Material | \$500 | | | | | | \$500 | \$0 | \$500 |
| Survey Materials | \$20 | | | | | | \$20 | \$0 | \$20 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| Subtotal | \$10,824 | \$0 | \$0 | \$0 | \$0 | \$0 | \$10,824 | \$0 | \$10,824 |

8. Total Direct Costs

| | Year 1 | | Year 2 | | Year 3 | | Total | | |
|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| Subtotals (Items 1-7) | \$90,183 | \$0 | \$0 | \$0 | \$0 | \$0 | \$90,183 | \$0 | \$90,183 |

IMLS BUDGET FORMa. Legal name (5a from SF-424S): **9. Indirect Costs (Read the instructions about Indirect Costs before completing this section.)**

- ☐ Current indirect cost rate(s) have been negotiated with a federal agency. Name of Agency: Expiration Date:
- ☐ Indirect cost proposal has been submitted to a federal agency but not yet finalized. Name of Agency: Proposal Date:
- ☒ Applicant chooses a rate not to exceed 10% of modified total direct costs, and declares it is eligible for the 10% rate.
- ☐ Applicant chooses not to include indirect costs.

| Rate and Base | Year 1 | | Year 2 | | Year 3 | | Total | | |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| | | | | | | | \$0 | \$0 | \$0 |
| Indirect Costs Subtotal | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

10. Total Project Costs

| | Year 1 | | Year 2 | | Year 3 | | Total | | |
|---|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grant Fund | Cost Share | Grand Total |
| Total Direct & Indirect Costs | \$90,183 | \$0 | \$0 | \$0 | \$0 | \$0 | \$90,183 | \$0 | \$90,183 |
| Total Costs (excluding student support) | \$90,183 | \$0 | \$0 | \$0 | \$0 | \$0 | \$90,183 | \$0 | \$90,183 |

List of Key Project Staff and Consultants

- Jessica Dadisman - Lead Project Manager
- Michael Gustin - Lead Project Manager
- Amber Smith - Lead Project Manager
- Assistants to Project Leads (2)
- Donna Walker - JCPL Executive Director
- Julianne Rist - JCPL Director of Public Services
- Bernadette Berger - JCPL Director of Technology and Innovation
- Kim McGrigg - JCPL Director of Communications and Engagement
- JCPL Director of Budget and Finance
- JCPL IT department (by branch)
- JCPL staff (by branch)

Supplemental Documents

Group Member Contribution

Jessica Dadisman - Schedule of Completion, Communication Schedule, List of Key Project Staff and Consultants

Michael Gustin - Technology Research, Budget Justification, IMLS Budget form, Assessment and Evaluation

Amber Smith - Abstract, Organizational Profile, Statement of National Need, Project Design, National Impact

Assessment (Adapted from the Accessible Usability Scale)

1. I would like to use this Assistive Technology Workstation frequently, if I had a reason to.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1
2. I found the Assistive Technology Workstation unnecessarily complex.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1
3. I thought the Assistive Technology Workstation was easy to use.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1
4. I think that I would need the support of another person to use all of the features of this Assistive Technology Workstation.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1
5. I found the various functions of the Assistive Technology Workstation made sense and were compatible with my technology and needs.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1
6. I thought there was too much inconsistency in how this Assistive Technology Workstation worked.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1
7. I would imagine that most people with my needs would learn to use this Assistive Technology Workstation quickly.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1

8. I found the Assistive Technology Workstation very cumbersome or awkward to use.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1
9. I felt very confident using the Assistive Technology Workstation.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1
10. I needed to familiarize myself with the Assistive Technology Workstation before I could use it effectively.
Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1

How is the score calculated?

The first step in quantifying a perceived usability with AUS is to assign a scale position for each possible response.

For the positively worded statements (questions 1, 3, 5, 7, and 9), the score contribution is identified by taking the scale position and subtracting 1. Then, multiplying the resulting number by 2.5.

For the negatively worded statements (questions 2, 4, 6, 8, and 10), the score contribution is 5 minus the scale position. Then, multiplying the resulting number by 2.5.

Example score:

| # | Statement | Scale Position | Calculation |
|-------|--|-----------------------|--------------------------|
| 1 | I would use this website frequently, if I had a reason to. | Agree – 4 | $(4-1) \times 2.5 = 7.5$ |
| 2 | I found the website unnecessarily complex. | Strongly disagree – 1 | $(5-1) \times 2.5 = 10$ |
| 3 | I thought the website was easy to use. | Strongly agree – 5 | $(5-1) \times 2.5 = 10$ |
| 4 | I think that I would need the support of another person to use all of the features of this website. | Neutral – 3 | $(5-3) \times 2.5 = 5$ |
| 5 | I found the various functions of the website made sense and were compatible with my technology. | Agree – 4 | $(4-1) \times 2.5 = 7.5$ |
| 6 | I thought there was too much inconsistency in how this website worked. | Strongly disagree – 1 | $(5-1) \times 2.5 = 10$ |
| 7 | I would imagine that most people with my assistive technology would learn to use this website quickly. | Agree – 4 | $(4-1) \times 2.5 = 7.5$ |
| 8 | I found the website very cumbersome or awkward to use. | Strongly disagree – 1 | $(5-1) \times 2.5 = 10$ |
| 9 | I felt very confident using the website. | Strongly agree – 5 | $(5-1) \times 2.5 = 10$ |
| 10 | I needed to familiarize myself with the website before I could use it effectively. | Disagree – 2 | $(5-2) \times 2.5 = 7.5$ |
| Score | | | 85 |

(<https://makeitfable.com/accessible-usability-scale/>)

References

ADA. (2021, August 10). *ADA Standards for Accessible Design*.). Information and technical assistance on the americans with disabilities act. ADA. Retrieved January 20, 2022, from <https://www.ada.gov/>

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