

Title: Accessible Technology Lab Proposal

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Purpose:

The DRC envisions a universally inclusive community where all individuals are seen, valued, and empowered to thrive. We proudly serve over 7,000 students, a number that continues to increase each semester. To further our mission and foster a sense of community, the DRC would like to create an Accessible Technology Lab (ATL). The ATL will serve as a hub for innovation and accessibility within our current office spaces, providing students at the University of Florida with state-of-the-art technology and resources tailored to their diverse needs. From adaptive software to specialized equipment, the ATL will offer a comprehensive range of tools to support students in their academic endeavors and beyond in an accessible setting. Looking ahead, we envision seamlessly transitioning the ATL to our new building scheduled for completion in 2025. The Disability Resource Center is requesting 29,010.14 for the development of ATL. The funds will be distributed in three different categories: independent workstations, accessible accessories, and tools to elevate collaboration and presentations.

The proposed Accessible Technology Lab will feature specialized equipment and software designed to accommodate various disabilities, including but not limited to:

1. Adjustable-height workstations to accommodate users who may be wheelchair users or have mobility impairments.
2. Screen reader software and magnification tools for individuals with visual impairments.
3. Alternative input devices such as joysticks, trackballs, and touchpads for users with limited dexterity.
4. Speech recognition software for individuals with mobility impairments who may have difficulty using a traditional keyboard.
5. Ergonomic furniture and seating options to ensure comfort and accessibility for users with physical disabilities.

Independent workstation items consisting of computers, iPads, magnifiers, and adjustable desks. These items will not only ensure accessibility for all students but also empower the DRC to provide comprehensive support that goes beyond access. To meet access needs, students can use magnifiers to expand print size and read texts aloud. These technologies will assist students with visual impairments and specific learning disabilities. Independent workstation desks will also include technology such as iPads and computers. Such technology includes universal design components that center upon creating equitable experiences for all learners.

Accessible accessories which include accessible keyboards and mice. These are essential components for the technology lab in that they give students autonomy to use equipment regardless of ability. The University of Florida has various study rooms and facilities that allow students to use computers with commonplace accessories. However, students on campus with disabilities have limited access to accessible computer accessories in these spaces. We want to design a space to remove barriers for the student and improve access for completing assignments, engagement, and study.

Access to presentation equipment is essential for students as it facilitates interactive learning experiences and enhances collaboration. With the integration of multimedia tools such Accessible TVs on rolling cart stands, group meetings web camera equipment, and audio systems, students can engage with diverse forms of content, fostering creativity and critical thinking. Furthermore, having such equipment readily available promotes inclusivity by catering to various learning styles and abilities, ensuring all students have equal opportunities to participate.

Impact/Benefit:

When designing a computer lab with universal design in mind, it is important that students feel welcome, are both able to get to the computer lab and get around in it, can access both print and electronic materials, and are able to use the equipment and software (Burgstahler, 2017).

The primary purpose of the ATL is to support educational access for students with disabilities through a variety of technological adaptations. Research of current ATLs include Windows PC and Apple Macintosh computers, scanners, and printers. Available adaptations include speech recognition software, text-to-speech software, screen reading software, screen magnification software, adapted keyboards, Braille output and other assistive technologies for students with physical and cognitive disabilities.

1. **Universally Designed Learning Environment:** A key benefit is the creation of an Universal Designed learning environment where students with disabilities have access to technology and educational resources. This fosters a sense of belonging and promotes diversity within the student body.
2. **Improved Academic Performance:** Access to an accessible computer lab enables students with disabilities to access assistive technologies that support their learning needs. This can lead to improved academic performance, higher grades, and increased retention rates among students who might otherwise struggle to access course materials and complete assignments.
3. **Enhanced Digital Literacy Skills:** Access to technology in a supportive environment helps students develop essential digital literacy skills that are increasingly important in today's workforce. These skills include proficiency in using software applications, navigating the internet, and effectively communicating online.
4. **Research and Innovation:** Accessible computer labs can serve as hubs for research and innovation in accessibility technology and inclusive design. Faculty and students from various disciplines can collaborate on projects aimed at improving accessibility and developing new assistive technologies.
5. **Positive Reputation and Student Satisfaction:** A commitment to accessibility enhances the reputation of the college or university as an inclusive institution that values diversity and prioritizes the needs of all students. This can contribute to higher levels of student satisfaction and attract prospective students who prioritize accessibility and inclusion when choosing a college.

In summary, an Accessible Technology Lab at the University of Florida not only benefits students and faculty with disabilities but also promotes equity, inclusion, and innovation across the institution. By providing the necessary tools, resources, and support, colleges and universities can create an environment where all individuals can thrive academically and professionally.

Our accessible workstations in the ATL will promote independence and autonomy. The lab welcomes all students interested in working with various tools, such as adjustable furniture, Apple products, digital magnifiers/readers and much more. The City University of New York's (CUNY) computer labs have accessible workspaces that provide stations with desks that have adjustable height and enough space including depth and width for chair users (CATS CUNY, 2024). CUNY's computer labs' have accessible workspaces that provide desks with adjustable heights and enough depth and width underneath desks for chair users (CATS CUNY, 2024). For example, the adjustable furniture allows students to stand, sit, use a wheelchair, or even change the angle of the workstation to complete work. The changing of desks heights and angles will both help students with physical disabilities, but also better focus for students with different learning styles. Additionally, Apple products have built in accessibility features. These features are particularly beneficial for students as they embark on assignments and projects, offering them confidence and ease of use. Whether they're using Mac or Windows systems, Apple's accessibility features provide a seamless experience, allowing students to navigate their tasks effectively. From screen readers to magnification options, voice control, and more, these features cater to a diverse range of needs, ensuring that every student can access and engage with coursework comfortably. The Surface Studio computer provides a touchscreen interface which can provide a more accessible experience for students who may struggle to use a mouse or keyboard. The

tools Pearl and Ruby provide access for students with visual impairments, promoting efficient and productive work sessions. Pearl can easily connect with a computer to convert print material into auditory content. Similarly, Ruby is a lightweight portable magnifier that allows students to view content in larger fonts. A refreshable braille display provides the option for students to read braille using a computer. This option is important for students who use braille, especially when text-to-speech may not be an effective solution. By providing students with accessible tools they need to access educational materials effectively, we empower them to succeed academically and thrive in their learning journey.

The accessories we are requesting will improve access to the main technologies proposed in this grant. Our aim is to cater to the diverse needs of our student body by offering a wide range of accessories in our accessibility computer lab. The Washinton University’s DO-IT Lab’s guidelines stress the importance of having specialized equipment for disabilities on hand such as large-print keyboards, scanners to enlarge print, accessible mice with trackballs, and hearing protection (Burgstahler, 2017). Items like the Freedom Scientific Accessible keyboard, accessible mouse, joystick, and trackball switch will help create an inclusive environment by providing access to students who need these accessories, such as students who have low dexterity or low vision. Additionally, we would need accessories that would interface different technologies together. Students using both Windows and Apple technologies needing to collaborate would benefit from the USB, USB-C, USB adaptors and HDMI cables listed in our grant, ensuring greater access and presentation capabilities. This proposal will also encompass charging stations and power strips for students to be able to conveniently charge their personal devices. This will enable students to have continuous access to their devices while working on projects or presentations in the ATL lab.

The Disability Resource Center must model access for individual students and group learning through presentations that meet accessibility standards. Having a large display on wheels allows students to move the screen to increase its visibility. The height adjustment option on the cart makes the screen more accessible for students whether they need to stand or a wheelchair user. The 55” inch screen allows for increased font sizes and images. The display mobility allows the screen to be moved closer to individuals who need that level of access. Often in video conference settings volume can be an issue making it difficult to hear, but also hard to use captions. Using an OWL along with the microphone extension will allow for better word accuracy and hearing in a virtual setting. A large display screen on a cart and an Owl with a microphone extension pack would enhance these presentation and group learning environments for students by making them more accessible.

Sustainability:

The Disability Resource Center supports this proposal, will maintain the equipment as needed, and will absorb the maintenance cost.

Budget & Budget Narrative:

Technology	Quantity	Price
Ruby 10-Freedom Scientific eStore	2	\$3,280.00
Pearl	1	\$325.50
Flatbed Projector	1	\$419.99
iPad Pro	3	\$3,897.00
Surface Studio 2+	1	\$4,499.99
iMacs	3	\$4,197.00
Dell OptiPlex	3	\$3,001.47
Dell 27-inch monitor P2722H	3	\$629.97
Vision Table	2	\$8,316.00

Adjustable Desk	4	\$799.96
iPad Stylus/Pen	3	\$357.00
Sony Noise Canceling Wired On-Ear Headphones	10	\$499.90
Freedom Scientific Accessible keyboard	2	\$324.00
Focus 40 Blue Braille Display	1	\$3,570.00
Adaptive Mouse	2	\$89.98
Adaptive Mouse Tail and Thumb Support	2	\$28.98
Trackball Switch	2	\$170.00
n-ABLER Pro Joystick	1	\$440.00
USB C- to USB adaptor	2	\$33.98
Power Strip Tower for charging	2	\$67.98
Standing Charging Stations	2	\$575.90
iPad Stand	2	\$618.44
USB C Headphone Jack Adapter	5	\$45.00
Hisense 55" Class U6 Series	1	\$449.99
Owl with expansion mic	1	\$1198.00
Mobile Rolling TV Stand	1	\$229.00
	Total	\$29,010.14

Timeline:

Timeline	Action	Responsible Parties
Summer 2024	Gather quotes and preliminary planning	Project Team
	Funds AWARDED	Fiscal Services and Grant Manager
September 2024	Equipment Purchased	Project Team and Fiscal Services
November 2024	UF IT for UF Risk Assessment review of equipment items	Project Team & UFIT
December 2024	Cataloging and tagging of equipment items	Project Team Lead
January 2025	Equipment testing & Staff Training	Project Team
March 2025	Advertising New Accessibility Options	Project Team & DRC Marketing Team
April 2025	Updating DRC website, including marketing of equipment use	DRC Website Committee
Summer 2025	Assessment of usage	Project Team

Resources:

(Burgstahler, 2017). <https://www.washington.edu/doit/programs/accesscollege/student-services-conference-room/accommodations/computer-labs>

(CATS CUNY, 2024) <http://cats.cuny.edu/cuny-assistive-technology-services/computer-lab-accessibility-guidelines/>

Resource: www.ccsf.edu/student-services/support-programs/disabled-students-programs-services/accessible-computer-laboratories

