DO-IT NEWS

Meet the 2021 *Scholars*!

By Sheryl Burgstahler, DO-IT Director

This summer DO-IT will host its twenty-ninth annual Summer Study program for DO-IT *Scholars*, which again will be hosted online. So many things have changed in the last year, and though we have all been challenged, we have found many benefits to this growth in our online programs and abilities to connect with those across wider distances. Even though the delivery of our DO-IT Summer Study has been modified to make sure we are as inclusive and safe as possible, the main purpose of our program has not changed: DO-IT provides participants with opportunities to learn about postsecondary education, life on a college campus, challenging academic and career fields, networking, and technology, and we have fun along the way!

2019 Scholars and Interns view optical illusions at the Center for Neurotechnology.

Primary funding for the *Scholars* program is provided by Washington State. To learn more, visit *uw.edu/doit/programs/do-it-scholars*.

I am pleased to introduce to you the 2021 *Scholars*:

Abby attends North Creek High School in Bothell. Her favorite subjects are American Sign Language and science. She hopes to help others by going into the medical field. She has vision and learning disabilities.

Alex attends Pacific Learning Center. His favorite classes are math and science. He hopes to pursue the field of astronautical engineering and to work for NASA. He has autism and anxiety.

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Alex goes to school in Washington State and enjoys classes in theater and humanities. They hope to explore these fields in college.

Ashlee attends Bothell High School, where she enjoys her math and astronomy classes. She hopes to major in early childhood education. She has a learning disability and anxiety.

Avery attends Redmond High School and Bellevue College through Running Start. His favorite academic areas are English and art. He's exploring interests in engineering, life sciences, veterinary medicine and architecture. Avery has ADHD, anxiety, and a social communication disorder.

Bella lives in Washougal and is a junior at the Washington State School for the Blind where she enjoys all of her classes. She hopes to work with either children or animals in her future.

Ben attends Ballard High School. His favorite academic fields are history and archaeology. He hopes to enter a college program that will help him experience other cultures and times in history, both by reading and hearing about them and being able to explore them himself. He has autism and ADHD.

Deliah is a junior at Ellensburg High School. Her favorite classes are those in the areas of art, drama, and theater. She hopes to become a voice actor and produce her own cartoon show.

Jaida attends Pacific Northwest Washington Connection Academy and participated in cross country at Kelso High School. Her favorite subjects are history and English. She would like to pursue her master's or PhD in education.

Jesper attends Yellow Wood Academy where he enjoys his classes in English and anatomy and physiology. His goal is to become an occupational therapist that specializes in assistive technology. He has cerebral palsy and vision disabilities.
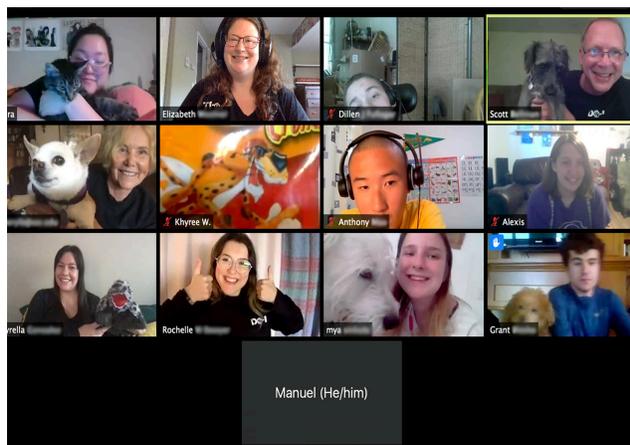
One of the pros of online Summer Study is the ability to learn about each other's home and family, including all the pets!

Jocelyn attends Cashmere High School where she enjoys her classes in art and English. She hopes to get a degree in social work to work with a diverse group of people and help children. She has learning disabilities.

Kevin attends Newport High School in Bellevue. His favorite academic areas are computer science and information technology. He hopes to someday attend the University of Washington and go on to work as a professional programmer or engineer. Kevin has Duchenne muscular dystrophy.

Len attends the Washington State School for the Blind. Their favorite classes are math and English. After high school, they plan on attending Western Washington University to get an English degree with a focus in creative writing. Long term plans include becoming a professor. Len has autism and retinitis pigmentosa.

PJ attends the Torah Academy of the Pacific Northwest. He loves science and hopes to become an architect. PJ has neurofibromatosis type 1, autism, ADHD, and a hearing impairment.

Rohit attends Tesla STEM High School in Redmond. He enjoys computer science and math. He would like to study computer science to work in the technology industry. He has autism spectrum disorder.

Sammy attends Bellevue College through the Career Education Options program and Renton HOME Program. She enjoys studying natural science and history. Sammy hopes to help students who have challenges in school through her career. She has dyspraxia.

Sarafina attends Anacortes High School where she is very interested in anything to do with STEM with a particular interest in geography. She hopes to be a science teacher. She has autism, ADHD, OCD, anxiety, and scoliosis.

Sophia is a junior at Newport High School in Bellevue. Her favorite subjects are computer science and biotechnology. She hopes to build wearable technology and signal-processing tools that improve the user experience for people who wear hearing aids.

Warren attends school in Washington State where he enjoys studying math and art. He plans on going to college to study art or design.

DO-IT Director Wins the Diversity in Technology Leadership Award
By Elizabeth Woolner, DO-IT Staff

Each year, the National Alliance for Partnerships in Equity (NAPE) and the NAPE Education Foundation honor individuals in education and work who embody a commitment to equity, inclusion, and diversity.

This year, DO-IT Director Sheryl Burgstahler won the Diversity in Technology Leadership Award. This award recognizes a role model to the national community of excellence in science, technology, engineering, and mathematics (STEM). Sheryl was chosen for her embodiment of the following values:

- Promotes diversity, equity, and inclusion in her organization
- Collaborates, mentors, and advocates to inspire and develop future leaders from underrepresented groups
- Is innovative, creative, and agile in moving her community forward to promote diversity, equity, and inclusion in technology and STEM
- Uses research- and evidence-based mechanisms to advance diversity, equity, and inclusion
- Demonstrates measurable outcomes showing increased participation of underrepresented groups in technology and/or STEM

The awardees were honored on April 29, 2021 at the end of NAPE's annual summit. As she accepted the award, Sheryl made the following statement: "I would like to thank NAPE for recognizing the accomplishments of my Accessible Technology Services unit at the University of Washington along with our partners and collaborators. Projects led by our DO-IT Center and the IT Accessibility Team have increased the successful participation of people with disabilities in college and careers, using technology as an empowering tool. The speed at which thousands of on-site courses and services at our postsecondary institutions were moved to online formats in response to the pandemic was impressive, but it also shined a light on the many shortcomings with respect to accessibility. Much work remains to be done in making these offerings fully accessible to and inclusive of people with disabilities. We will continue to collaborate with like-minded individuals and organizations to work toward leveling the playing field in academic opportunities and careers for people with disabilities. Through this award NAPE highlights the importance of considering people with disabilities in all diversity, equity, and inclusion initiatives."

Learn more about the award at *napequity.org/ about-us/nape-awards*.

Standardized Testing Accommodations
By Dustine Bowker, DO-IT Ambassador

As part of my journey towards law school and a legal career in the Disability Rights or other civil rights field, I took the Law School Admission Test (LSAT) back in mid-February with a 50%-extended-time accommodation in a relatively-quiet room at a hotel near my house. That said, getting my testing accommodations, particularly the extended-time, was a process that took months. For anyone who is about to take a standardized test after high school, here are some takeaways from my experience with taking the LSAT with that accommodation, from the perspective of someone who just took one.

First, do NOT register for any test until you are certain that you have the sufficient documentation for requesting testing accommodations in place. I made this mistake when I originally registered, in September 2019, for the January 2020 LSAT. I didn't know how long the process would take, so I waited until December to obtain and submit the necessary documentation, thinking it would be a quick process. I didn't have the documentation when I registered, and thought I could find a way to obtain and submit the documentation before the deadline to submit them in early December, thinking it would be a quick process. Not only did I not have the sufficient documentation at that time, I also had to be diagnosed for my disability again, and the earliest opportunity to be diagnosed again wasn't until after the deadline to submit my request for accommodations. I ended up canceling my registration for the January 2020 LSAT, which cost me $150 in the long-run.

Ultimately, I was re-diagnosed for my disability in early January 2020, and about a week after my appointment, I had received the sufficient accommodations documentation required for the LSAT from my psychologist. I ended up signing up for the February 2021 LSAT in late November, with about two weeks before the hard deadline to submit my accommodations, and submitted my accommodations
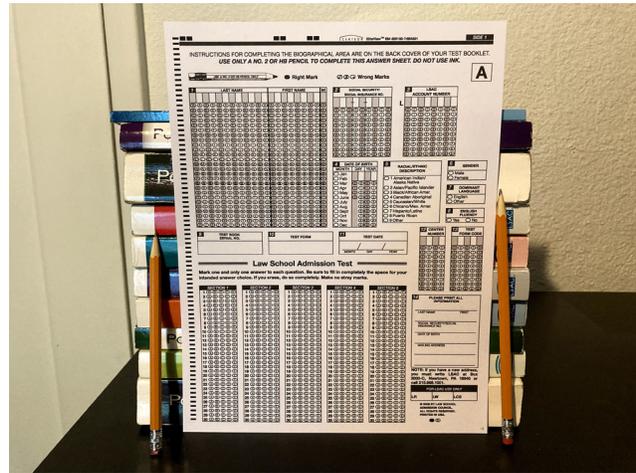
Preparing your testing accommodations before signing up for the test allows for the smoothest testing process.

documentation a day later. It took a couple of weeks for my testing accommodations to be approved.

If, like me, you need to be diagnosed for your disability again, do that as soon as possible. It is better to have the documentation earlier rather than later.

Additionally, conduct all possible research on the process of submitting your request for accommodations. I started by looking at the applicable links on the LSAT website, beginning with a general homepage on accommodations, and then browsing through the left-hand menu for any other links of interest, especially "documentation requirements." I highly suggest exploring the applicable "testing accommodations" section(s) of the official website of the test you're about to take, especially for pages that discuss general information, including documentation and other requirements, as well as the proper procedure for submitting your request for testing accommodations, and any and all hard deadlines and other important dates regarding your request. Finally, if there's a phone number or email dedicated for testing accommodations, don't be afraid to use those, especially if you have any further questions or inquiries.

Check out DO-IT's Award at the NSF STEM for All Video Showcase
By Scott Bellman, DO-IT Program Manager

Each year, TERC (originally Technical Education Research Centers) hosts an event called the National Science Foundation (NSF) STEM for All Video Showcase, sharing three-minute videos from federally funded projects that seek to improve science, technology, engineering, and math (STEM) education. During the weeklong event, a wide variety of stakeholders (educators, policy makers, industry representatives, and the general public) are encouraged to participate and share in meaningful discussion. According to the STEM for All website, "All participants will be able to view the video presentations, post to the facilitated discussions related to each video, and vote for the videos that are most effective in conveying the creative work being done." Showcase videos and discussions are archived for future access after the event. Videos submitted in 2021 by DO-IT Center and its collaborators include these videos:

- Increasing Access to Informal STEM Learning (*videohall.com/p/2243*)

- Women with Disabilities in STEM Academic Careers (*videohall.com/p/2207*)

- Mentoring Students with Disabilities in Research Experiences (*videohall.com/p/2205*)

- Center for Neurotechnology: Creating Access for All (*videohall.com/p/2241*)

The DO-IT video Women with Disabilities in STEM Academic Careers, led by Brianna Blaser and leaders of the DO-IT *AccessADVANCE* (*uw.edu/doit/programs/advance*) project, won a prestigious STEM for All Showcase Presenter's Choice Award! The award is bestowed upon a video for quality of content and its ability to engage the audience in lively discussion. Recipients are selected by the STEM for All community of presenters and co-presenters, representing a group of leading researchers in the field of STEM education. Congratulations to Brianna and the *AccessADVANCE* team.

Women with Disabilities in Academic Careers.

Still with captions from the Women with Disabilities in STEM Academic Careers video

Increasing the Participation of Women with Disabilities in Academic STEM Careers
By Brianna Blaser, DO-IT Staff

AccessADVANCE, a new project funded by the National Science Foundation (NSF, Award # HRD-2017017 and HRD-2017054) held its inaugural capacity building institute (CBI) on May 25 and 27. At the event, *AccessADVANCE* staff and participants shared challenges and solutions regarding the recruitment and participation of women with disabilities in diversity, equity, and inclusion (DEI) activities and academic STEM careers, presented on accessibility practices within academic departments, and ways that we can all work together to increase the participation and advancement of women with disabilities in academic STEM careers.

Proceedings from the event will be shared at *uw.edu/doit/programs/advance*. *AccessADVANCE* is also creating and sharing other resources on these topics and hosting a Community of Practice, where participants can share ideas about inclusion and accessibility for women with disabilities in academia, assist in the creation and dissemination of resources, and recruit important stakeholders to the community. To join, email *doit@uw.edu*.

Join Efforts to Make Informal STEM Learning Accessible

By Scott Bellman, DO-IT Program Manager

Learning about science, technology, engineering, and mathematics (STEM) can be fun, especially in informal settings outside of the traditional classroom. Informal settings may include places like museums, galleries, and science exhibits. People with disabilities often face access challenges as they explore informal learning settings. Access barriers may prevent a student from gaining knowledge and fully participating in various educational activities.

DO-IT's *Access to Informal STEM Learning* (*AccessISL*; grant #DRL-1906147) project supports efforts to develop a capacity building model for making informal STEM learning (ISL) opportunities more welcoming and accessible to everyone- especially individuals with disabilities. All stakeholders are encouraged to join this effort, including students, teachers, professionals within ISL programs, and educators who train future ISL practitioners.

Student interns worked with project staff and educators to create a publication called *Checklist for Making Informal Learning Accessible to Students with Disabilities* (*uw.edu/doit/checklist-making-informal-learning-accessible-students-disabilities*). The checklist can be used by anyone interested in exploring access features at an ISL program. This resource


Students explore a greenhouse on the University of Washington campus in 2011.

helps users understand accessibility features of information technology, facilities, policies, staff training, and more.

AccessISL also maintains an online Knowledge Base (*uw.edu/doit/programs/accessisl/knowledge-base*) that contains case studies, promising practices, and Q&As regarding accessible ISL and the accessibility of technology, college, and careers for individuals with disabilities. Below are examples of articles developed during the *AccessISL* project:

- How can informal STEM learning program support individuals with vision impairments?
- How can informal STEM learning program support individuals with mobility impairments?
- Visitor Voices: Sharing perspectives of museum visitors with disabilities
- Accessibility resources at Intrepid Museum
- Where can I learn more about accessibility and universal design of informal STEM learning programs?

People who are interested in accessible ISL are encouraged to join the *AccessISL* Community of Practice (*uw.edu/doit/programs/accessisl/get-involved/accessisl-community-practice*) to participate in discussions and learn of opportunities to promote the increased participation of people with disabilities in informal science education offerings, training programs, and careers.

Students with disabilities work on an activity together at the Pacific Science Center in 2017.
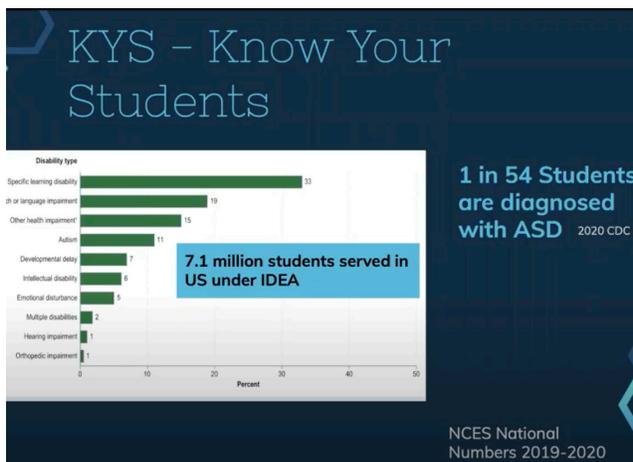
A screenshot from Teaching CS to Neurodiverse Students, showcasing a breakdown of disabilities.

Watch AccessCSforAll's Webinars for CS Educators Teaching Students with Disabilities

By Brianna Blaser, DO-IT Staff

AccessCSforAll hosted a series of four webinars called Accessible Computer Science: Teacher to Teacher, funded by the Infosys Foundation USA. In these webinars, computer science (CS) teachers who specialize in teaching blind and visually impaired students, deaf and hard of hearing students, and learning disabled and neurodiverse students shared strategies that other K-12 educators can use to include students with disabilities in their classroom. Recordings of each webinar are available on our *AccessCSforAll* webinar page at *uw.edu/accesscomputing/accesscsforall/webinars*.

Teaching CS to Blind and Visually Impaired Students

Gina Fugate shared lessons learned teaching CS to students who are blind and visually impaired. Gina is an assistive technology teacher at Maryland School for the Blind and has also taught students who are blind and visually impaired in a public school setting. She earned her M.Ed. in special education with an emphasis on visual disabilities. She co-coaches the DOT5UDOGS and 180 Optimum using Quorum Lego Robotics for First Lego League.

Teaching CS to Deaf and Hard of Hearing Students

Elizabeth (Beth) Kimball shared lessons learned teaching computer science to students who are deaf and hearing impaired. Beth is a graduate of multiple universities with a passion for anything new. Currently, Beth teaches computer science at Indiana School for the Deaf in the middle and high school STEM departments.

Teaching CS to Students with Learning Disabilities

Sarah Ciras shared lessons learned teaching computer science to students with learning disabilities. Sarah is a special education teacher at Landmark School in Beverly, MA and has been teaching for 11 years. This year she was named a CSTA Equity Fellow. She has spoken at several conferences about making CS accessible to students with language based learning disabilities.

Teaching CS to Neurodiverse Students

Robert DeFillippo shared lessons learned teaching CS to neurodiverse students. Mr. Robert DeFillippo is a 25-year educator who has worked with varied exceptionalities throughout his career. In 2008, Mr. DeFillippo earned the Annie Sullivan award for excellence in education, along with being named the 2018 national Champion of Computer Science award winner for his work with equity and accessibility to computer science for students with severe cognitive and emotional disabilities.

Learn More about Creating Inclusive Learning Opportunities in Higher Ed
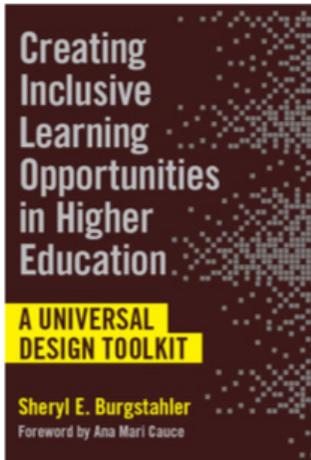
Published by Harvard Education Press, Sheryl Burgstahler's newest book, *Creating Inclusive Learning Opportunities in Higher Education*, delivers a step-by-step guide for putting the principles of universal design (UD) into action for all aspects of a postsecondary campus. Sheryl offers top-down, bottom-up, and middle-out strategies for transforming a higher education environment into one where physical spaces, learning materials and activities, technology and digital resources, and campus services are welcoming and accessible to all students, while minimizing the need for accommodations for individuals with disabilities.

Complementing her edited book *Universal Design in Higher Education: From Principles to Practice*, this volume lays out how faculty, service providers, high level administrators, and other stakeholders can contribute to a barrier-free environment for all students, including those with disabilities. Along with principles, guidelines, practices, and processes that underpin a framework in which to conceptualize and apply UD, Dr. Burgstahler shares the implementation model to tailor to any campus exploring ways to meet broad goals with respect to diversity and inclusivity.

More details about the book can be found at *uw.edu/doit/creating-inclusive-learning-opportunities-higher-education* and the book can be ordered online through Amazon or Harvard Education Press.

About DO-IT

DO-IT (Disabilities, Opportunities, Internetworking, and Technology) serves to increase the successful participation of individuals with disabilities in challenging academic programs and careers, such as those in science, engineering, mathematics, and technology. Primary funding for DO-IT is provided by the National Science Foundation, the State of Washington, and the U.S. Department of Education.

For further information, to be placed on the DO-IT mailing list, request this newsletter or other materials in an alternate format, or make comments or suggestions about DO-IT publications or web pages, contact us at

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DO-IT News Updates
For monthly news updates and past newsletters, visit *uw.edu/doit/news*

All in-person images in this publication are from pre-pandemic events.