Director’s Digressions: Universal Design of Instruction in Higher Education

By Sheryl Burgstahler, DO-IT Director

The interest in applications of universal design (UD) to postsecondary education continues to grow, and it seems that everyone wants to make learning environments more welcoming and accessible to the entire student body. I constantly hear of exciting applications of UD; if shared and replicated by others, these practices could have a significant impact.

Towards this goal, DO-IT continues to promote our ever-expanding e-book of promising practices that complements the more general content in the printed book, Universal Design in Higher Education: From Principles to Practice, whose second edition, edited by DO-IT Director Sheryl Burgstahler, will be published by Harvard Education Press later this year. In Universal Design in Higher Education: Promising Practices, practitioners share promising practices related to the application of universal design in postsecondary education settings. The online publication is freely available online at www.uw.edu/doit/UDHE-promising-practices/. It can be copied and distributed as a book or in part for noncommercial, educational purposes. The collection will continue to grow as more articles are submitted.

While you can contribute an article sharing a practice at any time, we will next update the collection with articles submitted for possible publication by the end of April. They
may be submitted to udbecop@uw.edu and should share specific ways practitioners and researchers have applied universal design in postsecondary settings along with evidence of success. They are peer-reviewed by members of the Universal Design in Higher Education Community of Practice, and, if accepted, edited by DO-IT. Authors must agree to allow us to freely distribute their articles in the online book, but retain copyrights to their individual contributions. For author guidelines, consult the preface of the book at www.uw.edu/doit/universal-design-higher-education-promising-practices.

I look forward to you joining us in this collaborative work. Our efforts can contribute to broadening participation in education and careers through inclusive practices and enhancing academic and career fields with the talents and perspectives of individuals with disabilities.

The University of Washington (UW) promotes creating accessible videos with its new resource, a video titled Captions: Improving Access to Postsecondary Education. Students, educators, and technology specialists in this video discuss the importance and benefits of captions for videos used in courses.

The UW began using Panopto lecture capture software in conjunction with the Canvas learning management system in the winter quarter of this year. If these videos don’t include captions, students who are deaf or hard of hearing are at a disadvantage. Usually, when a student requests an accommodation for captioning, all of the lecture capture content for that class is sent out to the UW’s captioning vendor for prompt turn-around so that all students have access to the captioned videos. Additionally, if the instructor creates his/her own videos with another online service, such as YouTube, then those too are captioned for deaf students, either by the instructor or sent out to an outside caption agency. Making captions a universal necessity for all videos would streamline these processes.

Who else would benefit by the use of captions? Not only do they benefit those with hearing impairments, but many others find them useful as well. English language learners often learn better when they can both see and hear the words—captions can reinforce their learning of both the language and the class material. Captions are also useful for anyone wanting to search through videos for keywords and quickly get to pertinent topics, or for people watching the video in a loud (can’t hear the video) or quiet (can’t use the audio) environment.

For more information, to watch Captions: Improving Access to Postsecondary Education, and to see more resources for creating accessible videos, visit www.uw.edu/accessibility/videos.
environments. My presentation was titled “Preparing for Accessible E-Learning.” Dr. Robert Stodden from the University of Hawaii spoke on “Supporting Students with Disabilities in Higher Education in the USA: 30 Years of Advocacy;” Mr. Martyn from the Open University, UK, presented “Accessibility Requires an Institution Wide Response: Lessons from The Open University, UK;” Dr. Takeo Kondo presented on “Current Situation and Future Challenge of Japanese Disability Student Services and ICT Utilization;” and our conference host, Dr. Yoko Hirose, presented “The Present Situation and the New Challenge: The Supporting Systems for the Students with Disabilities in the Open University of Japan.”

The accessibility of instruction and online learning in particular is of great interest because the Japanese Act on the Elimination of Disability Discrimination, which was enacted in 2013, will be implemented in 2016. This legislation requires that public universities provide reasonable accommodations to students with disabilities. Japan has an opportunity to learn from efforts in the US, UK, and other countries who have been dealing with this issue for many years.

Much of the content of the symposium focused on how online learning can be delivered in such a way that it is accessible to students with disabilities. The Open University of Japan has an extensive distance learning program offered free to the public via television. Individuals who seek credit for participating in the offerings take proctored exams at a network of locations across the country. Open University if now moving toward more Internet-based course offerings. Although communication with our colleagues in Japan required an interpreter, the broad issues our countries are addressing with respect to distance learning are very similar.

An Update on DO-IT Japan
By Sheryl Burgstahler

Perhaps some of our readers do not know that there is a DO-IT Center in Japan at the University of Tokyo. Trust me, it is modeled after ours, though it may not be obvious from the website (doit-japan.org/doit/) unless you speak Japanese. The program began there in 2007 after Dr. Mamoru Iwabuchi engaged with the Seattle Center for one year as a visiting scholar. The program began then in 2007 after Dr. Mamoru Iwabuchi engaged with the Seattle Center for one year as a visiting scholar. Two DO-IT Ambassadors helped the first DO-IT Summer Study in Tokyo. Dr. Takeo Kondo, also from the University of Tokyo, was a visiting scholar for a year with DO-IT in Seattle and is now the director of DO-IT Japan.

It is exciting to see our practices replicated and in some cases modified to make it relevant to the Japanese culture. I travel to Japan often to engage with our colleagues there and share lessons learned in the US regarding the inclusion of people with disabilities in postsecondary education and careers. My last visit was in February as one of four invited speakers at the Open University of Japan’s annual international symposium on matters relating to higher education. The theme this year was on supporting students with disabilities, particularly in online learning.
AccessComputing PI Wins Two Awards
By Brianna Blaser, DO-IT Staff

DO-IT collaborator and AccessComputing Principal Investigator (PI) Richard Ladner has recently received two awards related to his work broadening the participation of people with disabilities in computing fields. This January at the National Science Foundation’s STEM-CP: Computing Education for the 21st Century PI Meeting, Richard received the Broadening Participation Community Award “in recognition of excellence and leadership in increasing access to computing for students with disabilities.” At the meeting, Richard delivered a keynote address titled “Accessibility Is Not Enough.”

This February, at the Tapias Celebration of Computing, Richard received the Richard A. Tapias Achievement Award for Scientific Scholarship, Civic Science, and Diversifying Computing. He was honored “for his incredible commitment and contributions to the disability community in computing.”

We’re lucky to have Richard as a partner in DO-IT’s efforts and look forward to continuing to work with him. Find more information about Richard’s efforts at www.geekwire.com/2014/disability-technology/.

30th Annual International Technology and Persons with Disabilities Conference
By Tami Tidwell, DO-IT Staff, and Terrill Thompson, DO-IT Technology Specialist

This year marked the 30th Annual International Technology and Persons with Disabilities Conference hosted in San Diego by California State University at Northridge (CSUN). DO-IT has had a long-term presence at the CSUN Conference.

DO-IT Director Sheryl Burgstahler has been attending since the conference started in 1985, Dan Comden and Terrill Thompson started attending in the early 1990’s, and DO-IT has had a booth in the Exhibit Hall for longer than anyone can remember. The CSUN Conference occurs in February/March each year and is the top assistive technology (AT) conference in North America, featuring exhibits by major AT vendors, hundreds of breakout sessions, and countless opportunities to network with colleagues and friends worldwide.

This year Sheryl, Terrill, and Hadi Rangin represented DO-IT and AccessComputing by presenting workshops on “Accessibility Training for Online Educators,” “Canvas LMS: A Case Study in Client-Vendor Collaboration for Accessibility,” and “Able Player: Building a Fully Accessible Open Source Media Player.” Tami Tidwell, Anna Marie Golden, Cynthia Bennett, and Catie Baker staffed the DO-IT booth and networked with worldwide AT professionals.

Currently, you can view accessible video sessions from the conference such as “Screen Readers: Limitations and Possible Improvements” and “Copyrights and Third Party Captioning: Challenges and Solutions” at www.csun.edu/cod/conference/2015/sessions under the heading “Webcasts.”

DO-IT Director Sheryl Burgstahler (right) with staff members Tami Tidwell (left) and Terrill Thompson (center) at CSUN.
My Experience at the 2015 Richard Tapia Conference
By Lauren Gaber, AccessComputing Team Member

I received a scholarship from AccessComputing to attend the 2015 ACM Richard Tapia Celebration of Diversity in Computing in Boston, Massachusetts that took place on February 18 – 21. This year’s conference theme was diversity at scale, which focused on “celebrating efforts to move diversity in all aspects of computing beyond conversation and study into full practice and implementation.”

This was my first big computing conference, and the first time I have flown alone. Though I was nervous at first, I gained confidence in being able to be independent. I was psyched to attend workshops on resumes, graduate school, and networking, and by putting myself out there, I learned to be more comfortable in walking up to strangers and striking up a conversation. Being open to new things and putting my regular fears on hold for a while really let me get the most out of the conference and meet a variety of new people.

Before the opening presentation, I met with students from Grinnell, Virginia Tech, and Purdue, and felt very welcomed. The Fireside Chat went very well, and I had the opportunity to meet with the some of the speakers, including David Martinez and Bill Kindred from MIT Lincoln Laboratory, who recommended a book called “Smart Machines,” by John Kelly.

I spent a lot of time at the career fair meeting as many representatives as possible to learn about my different options for school and careers. There were local schools as well as big name recruiters like IBM and Google. I gained a ton of fantastic resources and learned about a lot of opportunities, including scholarships to graduate school. I even got an interview for an intern position in a national lab!

There were also some really great talks, panels, and speeches. My two favorite plenary speakers were Chad Jenkins, who gave a talk on robotics titled “Robotics to Reach Out and Change the World,” and Shaun Kane, who gave a talk on accessibility technology entitled “Superhuman Computing: Designing Custom Software and Hardware Interfaces to Support Our Natural Abilities.” My favorite panels were the “When Working for Diversity in CS Becomes Your Day Job” and “Disability: Celebrating a Face of Diversity.” The first panel shared interesting stories about working for inclusion, and I learned some very effective techniques Harvey Mudd College implemented to get more women and girls involved in computing careers.

The disability session was the best opportunity I’d had thus far to make myself aware of the other people from AccessComputing. One thing we discussed was the term “disabled,” and the negative connotations behind it; this made me think a lot about how I identify myself—something I’m still figuring out. The session seemed short, but I was glad to meet and talk with so many great people. I really think representation matters, and the experience instilled in me a real pride and sense of belonging in the professional computing community.
Overall, this conference was very inspiring and informative. I learned about fields in computing that I wasn’t aware of before or just didn’t have comprehensive access to at my own institution, such as library science, human-computer interaction, security, ethics and privacy, cloud computing, and machine learning. The experience also made me set a list of future goals, including staying in contact with my network; investigating the University of Michigan Ann Arbor’s 3D printing lab; and getting more professionals with disabilities involved in advocacy and networking.

**Staying Connected Fridays at the Burke**  
By Tina Tran, DO-IT Staff

On a Friday every month, AccessSTEM hosts Staying Connected Fridays at the Burke Museum and other locations on campus. Participants come together to catch up over free coffee and food. Here, we spend our time connecting with other students, listening to each others’ success stories, and provide a space for mentorship and support. Each meeting covers a range of topics from social justice, health and well-being, or accommodations in school.

On February 20th, students and graduates came together to discuss their various fields of study and their future plans. One of the students discussed their interests in physical therapy programs, and another student shared their story on being accepted into a Ph.D. physical therapy program. Another student shared their achievements in receiving a regional scholarship award, while providing guidance for other students applying for scholarships. Students often find this event a fun, engaging way to connect with their peers.

Staying Connected Fridays works to bring the AccessSTEM community together in an open environment to connect and support. For more information on upcoming Staying Connected Friday dates, email Scott Bellman at swb3@uw.edu for details and to RSVP.

![Staying Connected Fridays at the Burke](image)

DO-IT Hosts Accessible IT CBI  
By Brianna Blaser, DO-IT Staff

DO-IT hosted an accessible IT capacity building institution (CBI) on February 4 – 6, 2015 in Seattle, WA. Over 50 participants attended, including disability service professionals, individuals with disabilities, and IT professionals from across Washington State.

The CBI provided a forum for sharing interventions and strategies that promote accessibility of IT in colleges and universities. A highlight of the CBI were the two panels on Thursday. The first panel featured IT professionals discussing video accessibility; the second panel featured students with disabilities discussing what types of technology they use.

![Accessible IT CBI on February 4 - 6, 2015](image)
Both panels gave perspective on what steps we should be taking towards reaching accessible technology.

Staff for Accessible Technology Services, which includes the Access Technology and DO-IT Centers, presented on topics related to web accessibility, accessible documents, and working with vendors. Other topics discussed were the accessibility of websites, accessible online learning courses, universal design, and a variety of other issues.

Professionals and students from colleges across Washington State worked in groups throughout the event to answer questions such as “What barriers do you face on your campus related to IT accessibility?” and “What strategies can you implement on your campus to encourage accessibility of webpages and media?” Their answers to these questions and more will be published in the proceedings of the event later this month.

Overall, the CBI was a great opportunity to bring together people and create and share ideas on accessible IT in postsecondary education. Individuals who attended left with concrete plans for ways to affect change related to IT accessibility on their own campuses. By hosting this CBI and others similar to it, DO-IT hopes to continue the trend of bringing people together to discuss important disability-related issues and create change among schools and our community.

Launch of DO-IT’s Redesigned Website
DO-IT launched our redesigned website in January, with a new look, easier navigation, and a mobile-friendly, accessible design. Our new site is very user friendly, showcasing over twenty years of disability-focused work and resources. The site is a great example of how accessible design can still be modern and approachable.

DO-IT’s website features all of our participant programs; a wealth of information on universal design; a searchable knowledge base with over 700 Q&As, case studies, and promising practices; over 50 videos with searchable captions and transcripts; and hundreds of freely accessible publications and resources.

The new site took over a year of work and countless hours from a core team. Our website is always a work in progress, with continual edits and updates being made on a daily basis. Feedback is always welcome and appreciated. Contact doit@uw.edu with any comments or visit www.uw.edu/doit/about/about-site to learn more about the accessibility of the site.
Enter the Elevator Pitch Contest

AccessSTEM Careers is hosting its second annual Elevator Pitch Contest for college students and job seekers with disabilities! In 90 seconds, participants pursuing science, technology, engineering, and mathematics will pitch their skills and career goals to employers and mentors. They will improve their pitches, enhance their professional network, win prizes, and learn about open career positions.

The Elevator Pitch Contest will take place on April 14th from 2 pm to 4 pm on the University of Washington campus. To find out more information, contact Scott Bellman at swb3@uw.edu.

Join our STEM Bio Book!

Are you a student or recent graduate with a disability who studied STEM in college? Consider submitting a short biography to our STEM biography book. Share the story of your experiences in STEM, the people who have made a difference in your STEM education, or a bold idea you have about using STEM to shape the future. Contact Scott Bellman at swb3@uw.edu for more information and the requirements for submitting.

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. It is part of Accessible Technology Services and UW-IT at the University of Washington. 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, or request this newsletter or other materials in an alternate format, contact:

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The Browser: Calendar of Events

For a schedule of conferences, visit
www.uw.edu/doit/resources/events