



This section shares suggestions for conducting a CBI on your campus.

What is the purpose of CBIs conducted by AccessCollege?

The overall goal of DO-IT's *AccessCollege* project is to ensure that students with disabilities receive a quality postsecondary education with the same opportunities for college and career success as those for students without disabilities. *AccessCollege* team members, representing a diverse set of twenty-two postsecondary schools, host CBIs on their campuses to identify, implement, and institutionalize policies, practices, and procedures that lead to more accessible courses and services.

AccessCollege and other DO-IT projects have hosted CBIs to solve problems related to accessibility and the application of universal design for many years. Topics of CBIs have included making

- websites at postsecondary institutions accessible to people with disabilities, <http://www.washington.edu/doit/cbi/webaccess/proceedings.html>;
- information technology accessible to precollege students, postsecondary students, and employees with disabilities, <http://www.washington.edu/accessit/>; and,
- science, technology, engineering, and mathematics programs welcoming and accessible to students with disabilities, <http://www.washington.edu/doit/Stem/>.

A characteristic of the CBI style is to honor participants as the *experts*. For example, in panel presentations the panelists are typically CBI participants. This way, they share their knowledge as *experts* on a topic and continue to participate in follow-

up activities as other participant *experts* share perspectives in other presentations. Typically, CBIs last from four hours to three days.

This guide outlines common ways to organize CBIs and shares sample agendas and visual aides that can help you shape a CBI on your campus. It also shares lessons learned from the *AccessCollege* team. It can be found online at <http://www.washington.edu/doit/cbiN/>. This publication and its associated videos and handouts complement the following comprehensive resources for making instruction and student services, respectively, accessible to all students.

- *Building the Team: Faculty, Staff, and Students Working Together—PRESENTATION AND RESOURCE MATERIALS.* <http://www.washington.edu/doit/TeamN/>
- *Students with Disabilities and Campus Services: Building the Team—PRESENTATION AND RESOURCE MATERIALS.* <http://www.washington.edu/doit/AdminN/>

What steps do we take to conduct a CBI?

It is expected that every campus will have a unique approach, but here are some steps to consider in planning a CBI:

1. Convene an existing *Community of Practice* or advisory group that focuses on disability issues or form a new group to plan the event. This type of group includes representation from key stakeholders and meets regularly to address campus accessibility issues.



2. Select a theme or topic area for your CBI. Possible topics include the following:

- Assuring that information technology (e.g., websites, computer labs, distance learning courses) are accessible to students, faculty, and staff with disabilities.
- Making student service units (e.g., career centers, student activities) accessible to students with disabilities.
- Increasing the skills of faculty to teach students with disabilities by teaching and implementing universal design strategies.
- Working with representatives from a wide variety of stakeholder groups on campus to create institutional change toward a more welcoming and accessible campus.

3. Identify handouts and videos to support the CBI (see the *Resources* section (p. 35) of these materials for examples to choose from).

4. Select speakers to present on specific topic areas related to access. Compile questions for small and large group discussions about issues, perspectives, and challenges related to the CBI topic.

5. Make logistical arrangements: schedule rooms, create assignments for small groups, and appoint note takers.

6. Invite members of key stakeholder groups to the event.

7. Conduct the CBI. Consult the publication *Equal Access: Universal Design of Conference Exhibits and Presentations*

at http://washington.edu/doit/Brochures/Programs/equal_conf.html and employ universal design principles in your presentation(s). Plan that by the end of the CBI, participants will have a strategic plan and/or task list to incorporate the content learned at the CBI into their specific areas of responsibility.

8. Evaluate the CBI. Use an evaluation instrument on pages 29-31, modify it, or develop your own.

9. Disseminate information from your CBI. Publish proceedings and/or articles in journals or campus publications. Submit a press release to campus and local newspapers. This step will expand the impact of your work.

What are some tips for delivering presentations?

In the publications noted earlier in these materials, DO-IT has provided tips for presentation delivery. For faculty presentations, consult http://www.washington.edu/doit/TeamN/present_tips.html; for presentations to student services personnel, consult http://www.washington.edu/doit/AdminN/present_tips.html.





What presentation and handout materials can we use for our CBI?

Through *AccessCollege* and other projects, DO-IT has created a comprehensive collection of publications and videos that can be used in your CBI. They can be found online by selecting “publications and videos” from the DO-IT website at <http://www.washington.edu/doit/>. Any CBI might include the handouts listed below.

- *Applications of Universal Design in Education (UDE)*
- *AccessCollege: An Alliance to Promote the Success of People with Disabilities in Postsecondary Education*
- *AccessCollege: Systemic Change for Postsecondary Institutions*
- *Universal Design in Education: Principles and Applications*
- *Universal Design: Principles, Process, and Applications*
- *DO-IT Free Printed Publications*
- *DO-IT Videos, Books, and Training Materials*

Listed below are additional publications, videos, web resources, and overhead visuals for specific CBI topics.

Creating a More Accessible Institution

Consider using the following additional products for a CBI on this topic.

Video

- *Self-Examination: Is Your Campus Accessible?*

Handouts

- *Self-Examination: Is Your Campus Accessible?*

Websites

- *The Board Room*
<http://www.washington.edu/doit/Board/>

- *The Center for Universal Design in Education*
<http://www.washington.edu/doit/CUDE/>

Overhead Visuals

- *Templates pp. 43-89*

Making Instruction Welcoming and Accessible to All Students

Consider using the following additional products for a CBI on this topic.

Videos

- *Building the Team: Faculty, Staff, and Students Working Together*
- *Equal Access: Universal Design of Instruction*
- *Working Together: Faculty and Students with Disabilities*

Handouts

- *Academic Accommodations for Students with Learning Disabilities*
- *Academic Accommodations for Students with Psychiatric Disabilities*
- *Effective Communication: Faculty and Students with Disabilities*
- *Equal Access: Universal Design of Instruction*
- *Invisible Disabilities and Postsecondary Education*
- *Universal Design of Instruction: Definition, Principles, and Examples*
- *Working Together: Faculty and Students with Disabilities*
- *Working Together: Teaching Assistants and Students with Disabilities*

Websites

- *The Faculty Room*
<http://www.washington.edu/doit/Faculty/>

Overhead Visuals

- *Templates pp. 43-59, 64-67, 70, 74, 86, 89*



Making Online Learning Accessible to All Students and Instructors

Consider using the following additional products for a CBI on this topic.

Videos

- *Computer Access: In Our Own Words*
- *Real Connections: Making Distance Learning Accessible to Everyone*
- *World Wide Access: Accessible Web Design*

Handouts

- *Real Connections: Making Distance Learning Accessible to Everyone*
- *Web Accessibility: Guidelines for Administrators*
- *Working Together: People with Disabilities and Computer Technology*
- *Working Together: Computers and People with Sensory Impairments*
- *World Wide Access: Accessible Web Design*

Website

- *AccessDL*
<http://www.washington.edu/doit/Resources/accessdl.html>

Overhead Visuals

- Templates pp. 43-70, 86, 89

Making Student Services Welcoming and Accessible to All Students

Consider using the following additional products for a CBI on this topic.

Videos

- *Access to the Future: Preparing Students with Disabilities for Careers*
- *Equal Access: Campus Libraries*
- *Equal Access: Student Services*

Handouts

- *Access to the Future: Preparing College Students with Disabilities for Careers*
- *Equal Access: Universal Design of Advising*
- *Equal Access: Universal Design of Career Services*
- *Equal Access: Universal Design of Financial Aid*
- *Equal Access: Universal Design of Housing and Residential Life*
- *Equal Access: Universal Design of Libraries*
- *Equal Access: Universal Design of Registration*
- *Equal Access: Universal Design of Student Services*
- *Equal Access: Universal Design of Tutoring and Learning Centers*
- *World Wide Access: Accessible Web Design*

Websites

- *The Center for Universal Design in Education*
<http://www.washington.edu/doit/CUDE/>
- *The Student Services Conference Room*
<http://www.washington.edu/doit/Conf/>

Overhead Visuals

- Templates pp. 43-59, 68-70, 87, 89

Assuring that Information Technology is Accessible to All Students

Consider using the following additional products for a CBI on this topic.

Videos

- *Access to Technology in the Workplace: In Our Own Words*
- *Computer Access: In Our Own Words*
- *Equal Access: Universal Design of Computer Labs*
- *Equal Access: Universal Design of Libraries*
- *Working Together: Computers and People with Learning Disabilities*
- *Working Together: Computers and People with Mobility Impairments*



- *Working Together: Computers and People with Sensory Impairments*
- *Working Together: Faculty and Students with Disabilities*
- *Working Together: People with Disabilities and Computer Technology*
- *World Wide Access: Accessible Web Design*

Handouts

- *Equal Access: Universal Design of Computer Labs*
- *Equal Access: Universal Design of Libraries*
- *Web Accessibility: Guidelines for Administrators*
- *Working Together: Computers and People with Learning Disabilities*
- *Working Together: Computers and People with Mobility Impairments*
- *Working Together: Computers and People with Sensory Impairments*
- *Working Together: People with Disabilities and Computer Technology*

Websites

- *AccessWeb*
<http://www.washington.edu/doit/Resources/accessweb.html>
- *The Center for Universal Design in Education*
<http://www.washington.edu/doit/CUDE/>
- *National Center on Accessible Information Technology in Education*
<http://www.washington.edu/accessit/>

Overhead Visuals

- Templates pp. 43-63, 69-70, 73, 89

Making Science, Technology, Engineering, and Mathematics Accessible to All Students

Consider using the following additional products for a CBI on this topic.

Videos

- *Equal Access: Science and Students with Sensory Impairments*
- *The Winning Equation: Access + Attitude = Success in Math and Science*
- *Working Together: Computers and People with Learning Disabilities*
- *Working Together: Computers and People with Mobility Impairments*
- *Working Together: Computers and People with Sensory Impairments*
- *Working Together: People with Disabilities and Computer Technology*
- *Working Together: Science Teachers and Students with Disabilities*

Handouts

- *Equal Access: Science and Students with Sensory Impairments*
- *Making Science Labs Accessible to Students with Disabilities*
- *The Winning Equation: Access + Attitude = Success in Math and Science*
- *Working Together: Computers and People with Learning Disabilities*
- *Working Together: Computers and People with Mobility Impairments*
- *Working Together: Computers and People with Sensory Impairments*
- *Working Together: People with Disabilities and Computer Technology*

Websites

- *The Alliance for Access to Science, Technology, Engineering, and Mathematics*
<http://www.washington.edu/doit/Stem/>
- *National Center on Accessible Information Technology in Education*
<http://www.washington.edu/accessit/>

Overhead Visuals

- Templates pp. 43-67, 69-70, 89



Assuring that Employment Opportunities and Services are Accessible to Students with Disabilities

Consider using the following additional products for a CBI on this topic.

Videos

- *Access to the Future: Preparing Students with Disabilities for Careers*
- *Access to Technology in the Workplace: In Our Own Words*
- *Finding Gold: Hiring the Best and the Brightest*
- *It's Your Career: Work-Based Learning Opportunities for College Students with Disabilities*

Handouts

- *Access to the Future: Preparing College Students with Disabilities for Careers*
- *Equal Access: Universal Design of Career Services*
- *Finding Gold: Hiring the Best and the Brightest*
- *It's Your Career: Work-Based Learning Opportunities for College Students with Disabilities*

Website

- AccessCAREERS
<http://www.washington.edu/doit/Careers/>

Overhead Visuals

- Templates pp. 43-59, 68-70, 87, 89

What should we include in the invitation to a CBI?

In addition to the schedule and location, emphasize the relevance of the topic, the need for representation from diverse groups, the interactive nature of the program, and expected outcomes. On the following page is a CBI sample letter of invitation.





Dear [Name],

You are invited to participate in a *Capacity-Building Institute (CBI)*, to be held at [institution] on [date] from [start time] to [end time]. Please register for this meeting at [URL].

The CBI has been organized as a result of recent conversations at the [institution], where faculty, staff, and administrators have discussed ways in which universal design (UD) can create welcoming and inclusive learning environments for all students. Given the rapid pace at which the application of universal design is evolving in higher education, the [university / college] has become increasingly aware of the professional development needs of faculty and staff to apply UD principles within and outside of the classroom.

The goals of the CBI are to engage faculty, staff, and administrators in a discussion that will ultimately lead to improved accessibility of courses and services that takes into consideration the diverse learning styles, abilities, and disabilities of today's students.

The CBI will have three guest speakers presenting on specific topic areas related to UD. The *Institute* will also include a brainstorming session in which issues, perspectives, and challenges related to UD will be actively explored. All participants will leave with a strategic plan for incorporating universal design into their specific disciplines.

The CBI will include information on relevant legislation, principles of universal design, specific ways to create inclusive classrooms and services, information on local resources, and the development of a personal or departmental action plan to apply practical universal design strategies to transform curricula or services.

Thank you for your interest in creating inclusive communities for all students at [Institution].

Sincerely,
[Institutional Representative]



What is an example of an agenda for a half-day CBI?

Following is an agenda and timeline for a four-hour CBI on universal design of instruction. Videos referred to in the sample agenda are available in the *Resources* section of this binder. Most videos and publications are also available online at <http://www.washington.edu/doit/Brochures/>. At the end of the agenda are suggestions for extending its length to a full day and/or changing the focus to universal design of student services or systemic change of an entire campus.

Universal Design of Instruction *Capacity-Building Institute* Agenda

8:00-8:25 a.m. **Check in, Refreshments**

8:30 -9:00 **Welcome/Introductions**

Distribute CBI Agenda and the following handouts

(available at <http://www.washington.edu/doit/Brochures/>)

- *AccessCollege: An Alliance to Promote the Success of People with Disabilities in Postsecondary Education*
- *AccessCollege: Systemic Change for Postsecondary Institutions*
- *Universal Design in Education: Principles and Applications*
- *Universal Design of Instruction: Definition, Principles, and Examples*
- *Equal Access: Universal Design of Instruction*
- *DO-IT Free Printed Publications*
- *DO-IT Videos and Training Materials*

9:00-9:10 **Typical Accommodations**

Emphasize that a disability services office typically provides accommodations and describe your institution's process. Introduce the video, which focuses on accommodations for students with disabilities.

9:10-9:30 **Show the video *Building the Team: Faculty, Staff, and Students Working Together*** (found at <http://www.washington.edu/doit/Video/team.html>)

After the video, answer questions. Describe how universal design (UD) complements the accommodation model by encouraging faculty to be proactive and to plan ahead in making their courses accessible to students with disabilities. Refer to the UD handouts and use some of the overhead visuals (e.g., pp. 43-59, 64-67, 70, 74, 86, 89) provided in the *Resources* section of this publication.

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UDI Agenda *(continued)*

Tell participants that the next video, also developed through a nationwide collaboration, gives information on the process and specific examples of universal design applied to instruction.

10:00-10:15

Show the video *Equal Access: Universal Design of Instruction* (found at http://www.washington.edu/doit/Video/ea_udi.html)

Respond to questions. End by emphasizing the need for both UD and accommodations to maximize the success of all students and to reduce the impact of having students with disabilities in your classes (by planning ahead).

10:15-10:30

Break

Emphasize that UD increases access and reduces, but does not eliminate, the need for accommodations. Tell participants to, after the break, meet in small, preassigned groups (perhaps defined by the table where they are sitting) to make a list of specific things instructors can do to make their courses more accessible to all students, including those with disabilities. Each group needs to select a discussion leader, recorder, and reporter that participants can choose. Distribute poster paper and felt pens to each group.

10:30-11:00

Discussion in small groups

What can instructors do to make their courses more accessible to all students, including those with disabilities?

11:00-11:20

Small groups report to large group

Post lists so that everyone can see them.

11:20-11:35

Break

Tell participants to, after the break, reconvene in their small groups. Together they will make a list of specific things the institution can do to help faculty make their courses more accessible to all students, including those with disabilities.

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UDI Agenda (*continued*)

- | | |
|------------------|---|
| 11:35-12:05 | Discussion in small groups
What can institutions do to help faculty make their courses more accessible to all students, including those with disabilities? |
| 12:05-12:20 p.m. | Small groups report to large group.
Post lists so that everyone can see them. |
| 12:20 -12:30 | Conclusion and Evaluation
Refer participants to <i>The Faculty Room</i> (http://www.washington.edu/doit/Faculty/) and campus resources.

Distribute the form <i>Post-Evaluation of Professional Development</i> (found on pp. 31-32). Ask the participants to fill out the form and return to the facilitator.

Thank participants for coming and tell them the lists of suggestions will be combined into proceedings and mailed (email or postal) to a designated location. |

This CBI outline can be extended to a full day or longer by adding one or more of the following activities:

- A student panel where students with different types of disabilities talk about their accommodations, good / bad experiences with instructors, and what works for them.
- A presentation and discussion on accessible web design or some other special topic.
- A demonstration of assistive technology for people with disabilities.
- A faculty member shares his / her implementation of universal design.
- A discussion on how topics of accessibility and universal design could be incorporated into a course (e.g. in an engineering class, students could be required to address accessibility issues in a design project).

This CBI can be modified to address systemic change for the entire institution (DO-IT, 2007) or for specific areas such as the student service organizations (e.g., career centers, admissions offices) or information technology by using appropriate videos, handouts, websites, and overhead visuals (see pp. 7-9).



What are examples of agendas for full-day CBIs?

Following is an agenda of a full-day CBI that is similar to one conducted at Florida State University. Its purpose was to improve the accessibility of campus websites.

Capacity-Building Institute on Website Accessibility **Florida State University (FSU)** **Agenda**

Morning: Overview of Accessibility of Online Resources

8:00-8:30 a.m. **Check in, Refreshments**

8:30-8:45 **Welcome Message**
 President
 Vice President for Student Affairs

Distribute the evaluation form *Pre- and Post-Test for Professional Development* (found on pp. 29-30) to participants and ask them to fill out the *Pre-Test* (front side of the form).

Distribute CBI Agenda and the following handouts (found at <http://www.washington.edu/doit/Brochures/>)

- *AccessCollege: An Alliance to Promote the Success of People with Disabilities in Postsecondary Education*
- *AccessCollege: Systemic Change for Postsecondary Institutions*
- *Universal Design in Education: Principles and Applications*
- *Universal Design: Principles, Process, and Applications*

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CBI on Website Accessibility *(continued)*

- *Working Together: People with Disabilities and Computer Technology*
- *World Wide Access: Accessible Web Design*
- *Web Accessibility: Guidelines for Administrators*
- *DO-IT Free Printed Publications*
- *DO-IT Videos, Books, and Training Materials*

8:45-9:30

Overview of Universal Design of Online Instruction

Participants explore the big picture of accessible online teaching and learning:

- How are students with disabilities affected by inaccessible course content?
- What makes technologies accessible?
- What does universal design mean?
- What are the legal requirements?
- How is online access achieved for students who are blind and visually impaired, are deaf or hard of hearing, have mobility impairments, have reading disorders (e.g., dyslexia), and / or have attention deficits?
- What standards, guidelines, and resources are available to assist in ensuring that instructional content is delivered in a way that is accessible to all students?

9:30-10:30

Online Accessibility Nuts and Bolts

In an interactive session, participants are led through a mock Blackboard™ course, which features a variety of accessibility problems and solutions. How do you assure that all students have access to Blackboard, your website, Adobe® PDF files, Microsoft® Word documents, PowerPoint presentations, and other resources?

10:30-10:45

Break

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CBI on Website Accessibility *(continued)*

10:45- noon

Web Accessibility @ FSU

Discussion moderated by staff from FSU, College of Information and Assessment Services

FSU faculty, staff, and administrators brainstorm the current state of accessibility of instructional technology at FSU and identify next steps for moving forward. Suggestions are recorded on a flip chart.

- Where are we now?
- Where do we want to be?
- How can we get there?

12:00-1:10 p.m.

Lunch and Student Panel

Real students with real issues share what it is like to be a person with a disability attending a major university and using online content. Participants ask questions.

Afternoon: Steps Toward Web Accessibility

1:10-3:15

(with one break)

Web Accessibility Techniques

Participants further explore common web accessibility problems and solutions. They learn the state of accessibility on a variety of technologies and file formats used in delivering web content, including PDF, Flash®, multimedia, PowerPoint, Blackboard, Java™, and AJAX. Resources are provided with more detailed information including the DO-IT Knowledge Base, which is linked from the DO-IT website at <http://www.washington.edu/doit/> at "Search DO-IT Knowledge Base."

3:15-3:30

Break

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CBI on Website Accessibility (continued)

3:30-4:15

Discuss the Accessibility of FSU Websites

After a brief introduction to available FSU web accessibility evaluation tools and resources, participants discuss the accessibility of specific FSU websites in one or multiple groups. Those with promising designs demonstrate their approaches to accessibility, and participants brainstorm possible solutions to accessibility problems.

4:15-4:30

Conclusion and Evaluation

Summarize content and results of *CBI*. Participants complete the *Post-Test for Professional Development* (back side of form found on pp. 29-30), which was distributed at the beginning of the *CBI*, and return to a designated location.





Following is the agenda of a full-day *CBI* that is similar to one conducted by the University of Washington. Its purpose was to help teachers fully include students with disabilities in their science courses by applying universal design and providing accommodations.

Accessible Science Capacity-Building Institute (CBI)

In cooperation with Washington Science Teachers Association (WSTA)
and Oregon Science Teachers Association (OSTA)

University of Washington

Agenda

8:30-9:00 a.m. **Registration, Continental Breakfast**

9:00-10:45 **Introductions**

Distribute the evaluation form *Pre- and Post-Test for Professional Development* (found on pp. 29-30) to participants and ask them to fill out the *Pre-Test* (front side of the form).

Distribute CBI Agenda and handouts (located at <http://www.washington.edu/doit/Brochures/>)

- *Making Math, Science, and Technology Instruction Accessible to Students with Disabilities—A RESOURCE FOR TEACHERS AND TEACHER EDUCATORS* (which includes most handouts and videos referenced in the agenda)
- *DO-IT Free Printed Publications*
- *DO-IT Videos, Books, and Training Materials*

View video

Working Together: Science Teachers and Students with Disabilities (on DVD or at http://www.washington.edu/doit/Video/wt_sci.html).

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Accessible Science CBI Agenda (continued)

Presentation

Access Barriers, Access Solutions—Accommodations and Universal Design.

View video

The Winning Equation: Access + Attitude = Success in Math and Science (on DVD or at <http://www.washington.edu/doit/Video/winequ.html>).

Activity

Complete a *Student Abilities Profile* (at <http://www.washington.edu/doit/Brochures/Programs/accommodation.html#sap>).

10:45- noon

Activity

Discover accommodation and universal design strategies for a hands-on science activity.

View video

Equal Access: Universal Design of Instruction (on DVD or at http://www.washington.edu/doit/Video/ea_udi.html).

Presentation

Making Science Labs Accessible to All Students.

12:00-12:45 p.m.

Lunch

12:45-2:15

Discuss

What can individual stakeholders (e.g., a student, teacher, parent) do to increase the success of students with disabilities in STEM (science, technology, engineering, and mathematics)? Consider both accommodations and universal design approaches.

Activity

Create a personal plan for implementation of universal design of your instruction. Distribute a copy of the publication *Equal Access: Universal Design of Instruction* (located at http://www.washington.edu/doit/Brochures/Academics/equal_access_udi.html), cross out items that do not apply; insert implementation dates for others.

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Accessible Science CBI Agenda *(continued)*

Report

What steps will you take to make your courses more accessible?

2:15-3:30

View video

Computer Access: In Our Own Words (on DVD or at http://www.washington.edu/doit/Video/comp_acc.html) Note that additional technology videos in handouts focus on specific disabilities related to learning, mobility, and vision.

Presentation

Overview of Technology Access Barriers and Solutions—Assistive Technology and Universal Design.

Discuss

What can institutional stakeholders (e.g., schools, districts, state agencies) do to increase the success of students with disabilities in STEM? What systemic change efforts would you recommend? Consider both policies and practices.

3:30-4:00

Conclusion and Evaluation

What did you learn and how will you apply it?

Ask participants to fill out the *Post-Test for Professional Development* (back side of form found on pp. 29-30), which was distributed at the beginning of the CBI, and return to a designated location.



What is an example of a multiple-day *CBI*?

Below is an agenda for a multi-day *CBI* that is similar to one conducted by the University of Washington. Participants in a wide variety of positions developed solutions for the under-representation of people with disabilities in science, technology, engineering, and mathematics (STEM). Most participants were administrators or support staff for projects that serve to increase the successful participation of women, minorities, and people with disabilities in STEM.

AccessSTEM Capacity-Building Institute Increasing the Participation of People with Disabilities in all STEM Projects and, Ultimately, in Careers Agenda

Tuesday

7:00-9:00 p.m. **Evening social and time to get acquainted (optional)**

Wednesday

8:00-9:00 a.m. **Buffet Breakfast, Networking**

9:00-9:50

Welcome

Dr. Sheryl Burgstahler, DO-IT Director, University of Washington

Distribute the evaluation form *Pre- and Post-Test for Professional Development* (found on pp. 29-30) to participants and ask them to fill out the *Pre-Test* (front side of the form).

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AccessSTEM CBI Agenda (continued)

Distribute CBI Agenda and the following handouts
(available at <http://www.washington.edu/doit/Brochures/>)

- *Making Math, Science, and Technology Instruction Accessible to Students with Disabilities — A RESOURCE FOR TEACHERS AND TEACHER EDUCATORS* (which includes most handouts and videos referenced in the agenda)
- *DO-IT Free Printed Publications*
- *DO-IT Videos, Books, and Training Materials*

Introductions

Students with disabilities share STEM access perspectives in video *Working Together: Science Teachers and Students with Disabilities* (on DVD or at http://www.washington.edu/doit/Video/wt_sci.html)

9:50-10:30 **Pursuit of a STEM Career: A Personal Story**
Dr. Imke Durre, Scientist, National Climatic Data Center

10:30-10:45 **Break**

10:45-11:15 **Broadening Participation in STEM**
Dr. Mark Leddy, National Science Foundation

11:15-11:55 **Access Barriers, Solutions—Accommodations and Universal Design.**

Teachers and students share ideas for assuring access to STEM courses for students with disabilities in video
The Winning Equation: Access + Attitude = Success in Math and Science (Video and handouts available at <http://www.washington.edu/doit/Video/winequ.html>)

11:55- noon **Introduction to Small Group Discussion Format**

12:00-1:30 p.m. **Lunch and Working Group Discussions**
How are STEM access issues for people with disabilities the same as those for other underrepresented groups (e.g., racial/ethnic minorities, women)? How are they different?

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AccessSTEM CBI Agenda *(continued)*

- | | |
|-----------|---|
| 1:30-1:50 | Working Group Reports
Each group shares one way STEM access issues for people with disabilities are (1) the same as and (2) different from those for other underrepresented groups (e.g., racial/ethnic minorities, women). |
| 1:50-2:45 | Activity: Discover Accommodation and Universal Design Strategies for a Hands-on Science Activity
Valerie Sundby, Lyla Crawford, Project Coordinators,
<i>AccessSTEM</i>

Educators share universal instructional design strategies in video <i>Equal Access: Universal Design of Instruction</i> (Video and handouts available at http://www.washington.edu/doit/Video/ea_udi.html) |
| 2:45-3:00 | Break |
| 3:00-3:50 | Critical Junctures Panel
Projects to increase participation of people with disabilities in STEM share experiences and insights. |
| 3:50-4:30 | Working Group Discussions
In what ways do making STEM activities accessible to students with disabilities benefit other students? |
| 4:30-4:50 | Working Group Reports
Each group shares one way making STEM activities accessible to students with disabilities benefits other students. |
| 4:50-5:00 | Preview of Tonight's Activity and Tomorrow's Agenda, Daily Feedback |
| 5:00 | Adjourn |
| 6:30-8:30 | Dinner, Networking, and Discussion of Future Collaborations |

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AccessSTEM CBI Agenda (continued)

Thursday

8:00-9:00 a.m.

Buffet Breakfast, Networking

9:00-10:25

Overview of Agenda

Panel

Projects that increase the participation of underrepresented minorities and women in STEM share lessons learned in broadening participation in STEM. How can those lessons be applied to increase the participation of people with disabilities in STEM?

10:25-10:40

Break

10:40- noon

Students with disabilities share transition strategies in video

Taking Charge II: Two Stories of Success and Self-Determination (Video and handout available at http://www.washington.edu/doit/Video/charge_2.html)

Panel

People with disabilities who are also racial/ethnic minorities or women share their stories. With what communities do they identify? What promotes and what inhibits the pursuit of STEM courses and careers?

12:00-1:30 p.m.

Lunch and Working Group Discussions

What can STEM projects do to increase the participation of students with disabilities?

1:30-1:50

Working Group Reports

Each group shares two things STEM projects can do to increase the participation of people who have disabilities.

1:50-2:30

Information Technology Access Barriers and Solutions: Assistive Technology and Universal Design

Students demonstrate assistive technology in video *Computer Access: In Our Own Words* (Video and handout available at http://www.washington.edu/doit/Video/comp_acc.html).

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AccessSTEM CBI Agenda (continued)

Accessible Web Design

Terry Thompson, Technology Specialist, *AccessSTEM*
How to make web pages accessible to people with disabilities is demonstrated in the video *World Wide Access: Accessible Web Design* (video and handouts available at <http://www.washington.edu/doit/Video/www.html>).

2:30-3:05

Science Lab Access Barriers and Solutions: Accommodations and Universal Design

Dr. Samantha Langley-Turnbaugh, Associate Professor and Chair Department of Environmental Science and Policy, University of Southern Maine. Distribute brochure *Making Science Labs Accessible to Students with Disabilities* (located at http://www.washington.edu/doit/Brochures/Academics/science_lab.html).

3:05-3:15

STEM students with sensory impairments and educators share experiences in video *Equal Access: Science and Students with Sensory Impairments* (video and handout available at http://www.washington.edu/doit/Video/ea_sci_sensory.html).

3:15-4:00

Break

4:00-4:55

Discussion

How can projects best measure the outcomes and impacts of their interventions to increase the participation of underrepresented minorities, women, and people with disabilities in STEM?

4:55-5:00

Preview of Tomorrow's Agenda, Daily Feedback

Dinner on Your Own

continued on next page



AccessSTEM CBI Agenda *(continued)*

Friday

8:00-9:00 a.m.

Buffet Breakfast, Networking, Discussion

9:00-10:15

Making Your Project Accessible to Participants with Disabilities: A Checklist

Activity: Distribute a copy of the brochure *Equal Access: Universal Design of Your Project* (located at: <http://www.washington.edu/doit/Brochures/Programs/design.html>). Begin a personal plan for implementation: In your copy of the brochure, cross out items that do not apply and write an implementation date for others.

Discussion: How can the checklist be adapted for use in NSF STEM projects?

10:15-10:30

Break

10:30-11:45

Conclusion

What can we do as a group to promote access to STEM for people with disabilities?

- Proceedings
- Publication/ checklist
- Review of Disability Studies, other journals
- Presentation/ poster/ publication at NSF's Joint Annual Meeting (JAM), other meetings

Visit the *AccessSTEM* website, including a Knowledge Base of Q&As, case studies, and promising practices, at <http://www.washington.edu/doit/Stem/>.

11:45 a.m.

Evaluation

Box lunch and further discussion.

Participants asked to fill out the *Post-Test for Professional Development* (back side of form found on pp. 29-30), which was distributed at the beginning of the CBI, and return to a designated location.

Have a safe trip home!



How can we evaluate our *CBI*?

The *AccessCollege* team has developed two evaluation instruments that you might consider using for your *CBI*.

- The first one, titled *Pre- and Post-Test for Professional Development*, can be printed as a two-sided handout. Ask participants to fill in the front side at the beginning of the *CBI* and the back side at the end.
- The second one, *Evaluation of Professional Development*, is a shorter, post-only evaluation instrument that is particularly suitable for short *CBIs*.

These instruments are printed on the following pages.

Pre- and Post-Test for Professional Development

Pre-Test

Please complete this survey to assess your knowledge pre- and post- the professional development training you are participating in. Please complete this side of the survey, the Pre-Test, before this program starts. Complete the other side of this page, the Post-Test, at the end of the program. Return the survey to the envelope provided by the facilitator. Your responses will be used for research purposes to help us determine the value of this professional development and create training materials. Each part of the survey will take about five minutes. Participation is voluntary and anonymous and you may choose not to answer every question. Thank you for your feedback.

Current position: ☐ Faculty ☐ Administrator ☐ Support Staff
 ☐ K-12 Teacher ☐ Employer

☐ Other: _____

Gender: ☐ Female ☐ Male

Number of years, if any, of teaching experience: _____

Have you ever had a student with a disability in your class, program, or service?	Yes	No	Unsure
Do you have any colleagues, friends, or family members with disabilities?	Yes	No	Unsure
Do you have a disability?	Yes	No	Unsure

Check the box to indicate your level of confidence that in your class, program, or service area you are (before training) able to:	Very Confident		Not at all Confident	
Apply universal design principles and strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use technology in a way that supports students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Refer students with disabilities to appropriate campus resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meet legal obligations to students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make your course/service/program accessible to students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What do you hope to learn in this program?

Pre- and Post-Test for Professional Development

(continued)

Post-Test

Check the box to indicate your level of confidence that in your class, program, or service area you are now able to:	Very Confident		Not at all Confident	
Apply universal design principles and strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use technology in a way that supports students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Refer students with disabilities to appropriate campus resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meet legal obligations to students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make your course/service/program accessible to students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Will you implement elements of what you learned? ☐ Yes ☐ No

If yes, what will you implement?

- ☐ Include a statement in my syllabus/program brochure/website that indicates how to obtain disability-related accommodations.
- ☐ Use multi-modal presentations.
- ☐ Arrange the physical space I use to be more easily accessed by everyone.
- ☐ Ensure that all materials used in my class/program are available in alternate formats.
- ☐ Be prepared to respond to requests for accommodations.
- ☐ Ensure that commercial media I use (e.g., DVDs) are captioned.
- ☐ Create simple directions for assignments and forms and otherwise make them easier to complete.
- ☐ Regularly assess the accessibility of my course, service, or program.
- ☐ Other (please describe):

Please describe the strengths and/or weaknesses of this professional development.

Suggest additional programs and materials that would be helpful for faculty and/or staff related to working with students with disabilities.



What can we do after the CBI to maximize its impact?

Develop proceedings to share with CBI participants, other members of stakeholder groups, and campus decision-makers. Examples of proceedings can be found at <https://www.washington.edu/doit/cbi/>.

Submit articles based on the proceedings to a professional journal. An example can be viewed in a special issue of the *Journal of Special Education*, Volume 18, Number 4, 2003, at <http://jset.unlv.edu/18.4/issuemenu.html>.

Write a press release for campus and local newspapers. This effort can disseminate findings to stakeholders and build enthusiasm for future CBIs.

Associate your CBI with a committee that meets on an ongoing basis. For example, at the University of Washington, the Advisory Committee on Disability Issues sponsored a CBI and then used the proceedings to help set its agenda for future efforts and to support its recommendations.

If you are developing a new group, consider using a *Community of Practice* (CoP) structure. A CoP is a group of people who share a common concern and interact regularly to improve their practice. CoPs identify problems, goals, and resources; assess measurable change; and monitor and adjust plans and activities. See p. 4 for more information about CoPs.



Where can we get more presentation ideas and materials?

DO-IT has a large collection of curriculum materials, short handouts, and videos that can be useful to you in developing your CBI. Select “publications and videos” from the DO-IT home page at <http://www.washington.edu/doit/> to browse through the collection. The following sets of comprehensive training materials are of particular relevance to faculty and student service personnel on a postsecondary campus.

- *Building the Team: Faculty, Staff, and Students Working Together—PRESENTATION AND RESOURCE MATERIALS*. Synthesis of research, institutionalization guidelines, presentation tips, tailored presentations, overhead visuals, and handouts help faculty and administrators at postsecondary institutions fully include students with disabilities in courses.



- *Students with Disabilities and Campus Services: Building the Team — PRESENTATION AND RESOURCE MATERIALS*. Synthesis of research, institutionalization guidelines, presentation tips, tailored presentations, overhead visuals, and handouts to help student service staff and administrators make their campus services more accessible to students with disabilities.
- *Making Math, Science, and Technology Instruction Accessible to Students with Disabilities — A RESOURCE FOR TEACHERS AND TEACHER EDUCATORS*. Comprehensive materials and resources to help science, math, and technology teachers fully include students with disabilities in their classes and labs.
- *The Student Services Conference Room* (<http://www.washington.edu/doit/Conf/>). A place for staff in postsecondary libraries, admissions/financial aid, and registration offices; computer labs; and other campus services—includes a searchable database of frequently asked questions, promising practices, and tips on how to create accessible student service organizations.
- *The Board Room* (<http://www.washington.edu/doit/Board/>). Provides guidance to postsecondary administrators regarding policies and practices that maximize the learning and participation of all students, including those with disabilities.
- *The Student Lounge* (http://www.washington.edu/doit/Resources/college_prep.html). Helps students with disabilities prepare for and succeed in postsecondary studies.
- *The Faculty Room* (<http://www.washington.edu/doit/Faculty/>). A place for postsecondary faculty and administrators to learn about how to create classroom environments and activities that maximize the learning of all students, including those with disabilities—includes legal issues, universal design principles, and accommodation strategies.
- *The Center for Universal Design in Education* (<http://www.washington.edu/doit/CUDE/>). Shares the definitions, principles, guidelines, and strategies for applying universal design to instruction, student services, information technology, and physical spaces.

In addition, the following websites provide comprehensive resources for presenters and participants.

- *The Faculty Room* (<http://www.washington.edu/doit/Faculty/>). A place for postsecondary faculty and administrators to learn about how to create classroom environments and activities that maximize the learning of all students, including those with disabilities—includes legal issues, universal design principles, and accommodation strategies.
- *The Center for Universal Design in Education* (<http://www.washington.edu/doit/CUDE/>). Shares the definitions, principles, guidelines, and strategies for applying universal design to instruction, student services, information technology, and physical spaces.