#### **REFERENCES**



#### **Publications**

The following publications are referenced in these materials.

Blackorby, J., & Wagner, M. (1996). Longitudinal post school outcomes of youth with disabilities: Findings from the National Longitudinal Transition Study. *Exceptional Children*, 62, 399-413.

Burgstahler, S. (Ed.). (2002). Building the team: Faculty, staff, and students working together. Seattle: DO-IT, University of Washington. Retrieved August 1, 2007, from http://www.washington.edu/doit/TeamN/.

Burgstahler, S. (Ed.). (2005). Students with disabilities and campus services: Building the team. Seattle: DO-IT, University of Washington. Retrieved August 1, 2007, from http://www.washington.edu/doit/AdminN/.

Burgstahler, S. (2007a). *Applications of Universal Design in Education (UDE)*. Seattle: DO-IT, University of Washington. Retrieved August 1, 2007. *http://www.washington.edu/doit/Brochures/Academics/app\_ud\_edu.html*.

Burgstahler, S. (2007b). Equal Access: Universal Design of Instruction. Seattle: DO-IT, University of Washington. Retrieved August 1, 2007, from http://www.washington.edu/doit/Brochures/Academics/equal\_access\_udi.html.

Burgstahler, S. (2007c). Equal Access: Universal Design of Student Services. Seattle: DO-IT, University of Washington. Retrieved August 1, 2007, from http://www.washington.edu/doit/Brochures/Academics/equal\_access\_ss.html.

Burgstahler, S. (2007d). *Universal Design in Education: Principles and Applications*. Seattle: DO-IT, University of Washington. Retrieved August 1, 2007, from http://www.washington.edu/doit/Brochures/Academics/ud\_edu.html.

Burgstahler, S. (2007e). *Universal Design* of Instruction: Definition, Principles, and Examples. Seattle: DO-IT, University of Washington. Retrieved August 1, 2007, from http://www.washington.edu/doit/Brochures/Academics/instruction.html.

DO-IT. (2007). AccessCollege: Systemic Change for Postsecondary Institutions. Seattle: University of Washington. Retrieved August 1, 2007, from http://www.washington.edu/doit/Brochures/Academics/access\_college.html.

Levin, J. S. (1998). Sense-making in the community college: The meanings of organizational change. (Clearinghouse No. JC980173). Arizona. (ERIC Document Reproduction Service No. ED417777).

Levy, A., & Merry, U. (1986). *Organizational transformation: Approaches, strategies, theories*. New York: Praeger.

National Council on Disability and Social Security Administration. (2000). *Transition and post-school outcomes for youth with disabilities: Closing the gaps to post-secondary education and employment*. Washington, DC: Author.

National Organization on Disability. (2004). *Harris 2004 survey of Americans with disabilities*. Washington, DC: Author.

Oliver, M., & Barnes, C. (1998). *Disabled people and social policy*. London: Longman.

Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). Changes over time in the early postschool outcomes of youth with disabilities. A report of findings from the National Longitudinal Transition Study-2 (NLTS2). Menlo Park, CA: SRI International.

#### **DO-IT Comprehensive Training Materials**

The following materials can be purchased from DO-IT or freely viewed online.

Building the Team: Faculty, Staff, and Students Working Together—PRESENTATION AND RESOURCE MATERIALS.

Comprehensive materials that include a 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. http://www.washington.edu/doit/TeamN/.

Students with Disabilities and Campus Services: Building the Team—PRESENTATION AND RESOURCE MATERIALS.

Comprehensive materials that include a 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. http://www.washington.edu/doit/AdminN/.

Making Math, Science, and Technology Instruction Accessible to Students with Disabilities—A RESOURCE FOR TEACHERS AND TEACHER EDUCATORS. Comprehensive materials and resources help science, math, and technology teachers fully include students with disabilities in their classes and labs. http://www.washington.edu/doit/MathSci/.

#### **DO-IT Websites**

The following websites provide training and resources for postsecondary faculty, administrators, and students. They can be accessed by selecting; *AccessCollege* from the DO-IT website at *http://washington.edu/doit/* or by using the uniform resource locations indicated below.

The Faculty Room

http://www.washington.edu/doit/Faculty/
The Faculty Room is a place for postsecondary faculty and administrators to learn
about how to create classroom environments, e-learning, and other activities that
maximize the learning of all students, including those with disabilities.

The Student Services Conference Room http://www.washington.edu/doit/Conf/
The Conference Room is a place for staff in postsecondary libraries; career services, admissions, financial aid, and registration offices; computer labs; and other campus services.

The Board Room

http://www.washington.edu/doit/Board/ The Board Room 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
The Student Lounge helps students with disabilities prepare for and succeed in postsecondary studies.

The Center for Universal Design in Education http://www.washington.edu/doit/CUDE/
The Center for Universal Design in Education shares the definitions, principles, guidelines, and strategies for applying universal design to instruction, student services, information technology, and physical spaces.

#### **OVERHEAD VISUALS**



Following are examples of templates that can be used in creating overhead visuals for a *Capacity-Building Institute* as noted on pp. 7-10. Many more options can be found in the following publications:

- 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/



## Universal Design in Education:

# From Principles to Practice

 $http://www.washington.edu/doit/Brochures/Academics/ud\_edu.html$ 





## Universal Design of Learning

Universal Design of Instruction

Universal Design of Technology

Universal Design of Facilities

**Universal Design of Student Services...** 





#### **Key Resources**

Select "AccessCollege" from the DO-IT website at www.washington.edu/doit/

#### for

- The Faculty Room
- The Conference Room
- The Board Room
- The Student Lounge
- The Center for Universal Design in Education





"No otherwise qualified individual with a disability shall, solely by reason of his/her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity of a public entity."



#### "Otherwise qualified"

meets the academic and technical standards requisite to admission or participation

#### with or without

- reasonable modifications to rules, policies, or practices;
- removal of architectural, communication, or transportation barriers; or
- provision of auxiliary aids and services.



## "Person with a disability" is any person who:

- has a physical or mental impairment which substantially limits one or more major life activities including walking, seeing, hearing, speaking, breathing, learning, and working;
- has a record of such an impairment; or
- is regarded as having such an impairment.





#### **Examples of Disabilities**

- Low Vision
- Blindness
- Hearing Impairments
- Mobility Impairments
- Mental Health/Psychiatric Impairments
- Health Impairments
- Learning Disabilities





#### **Access Challenges**

- Physical Differences
- Sensory Differences
- Cognitive/Learning
   Differences
- Attention Differences
- Communication Differences
- Differences in Socioeconomic Status, Race, Culture, Gender

DO-IT



#### **Approaches to Access:**

 Accommodations (Reactive)

 Universal Design (Proactive)



#### **Accommodations**

Alternate formats, services, adjustments, & technology for specific students.



#### **Universal Design=**

"The design of products and environments to be usable by all people, without the need for adaptation or specialized design."

**Center for Universal Design, North Carolina State University** 





## Diversity in Postsecondary Institutions

- Ethnic/Racial Minorities
- English as a Second Language
- Different Learning Styles
- People with Disabilities
- Age, Gender Differences



#### Principles of Universal Design

- Equitable Use
- Flexibility in Use
- Simple and Intuitive Use
- Perceptible Information
- Tolerance for Error
- Low Physical Effort
- Size and Shape for Approach and Use

DO-IT



#### **UD** is not:

 just beneficial to people with disabilities.

about lowering standards.

about one-size-fits-all.

UD can be applied incrementally.



## **UD Products/ Environments:**

- are flexible enough to be directly used (without assistive technologies, modifications) by people with a wide range of abilities and circumstances.
- are compatible with assistive technologies and other accommodations for those who cannot efficiently access/use the products/ environments directly.

DO-IT



#### **UD Steps**

- 1. Identify application.
- 2. Define universe.
- 3. Involve consumers.
- 4. Adopt guidelines/standards/ performance indicators.
- 5. Apply UD guidelines/standards/ performance indicators.
- 6. Plan for accommodations.
- 7. Train & support.
- 8. Evaluate.

http://www.washington.edu/doit/Brochures/Programs/ud.html





# Universal Design in Education (UDE) can be Applied to:

- Instruction
- Student Services
- Information Technology
- Physical Spaces



#### **UD** of IT

- Computers
- Software
- Websites
- Videos
- Office Equipment

•



#### **UD of Computer Labs**

- Planning, Policies, and Evaluation
- Facility and Environment
- Lab Staff
- Information Resources
- Computer, Software, and Assistive Technology

http://www.washington.edu/doit/Brochures/Technology/comp.access.html





#### Problem --- Solution

access to 

assistive technology (AT)

access to ———— universal electronic design resources

DO-IT



### **UD Video/Multimedia Presentation:**

- is videotaped with captions in mind.
- has large, clear captions.
- is designed so that key content is spoken as well as demonstrated visually.
- has audio-described version available.



#### **UD of Instruction Steps**

- 1. Identify course.
- 2. Define universe.
- 3. Select instructional strategies for good practice.
- 4. Adopt guidelines/performance indicators.
- 5. Apply UD guidelines/standards/ performance indicators.
- 6. Plan for accommodations.
- 7. Evaluate.

http://www.washington.edu/doit/Brochures/Academics/equal\_access\_udi.html





#### **UD** of Instruction

- Class Climate
- Physical Environments/ Products
- Delivery Methods
- Information Resources/ Technology
- Interaction
- Feedback
- Assessment
- Accommodation

http://www.washington.edu/doit/Brochures/Academics/equal\_access\_udi.html





#### **UDI Examples**

- Put a statement on your syllabus inviting students to meet with you to discuss disability-related accommodations and other learning needs.
- Use multiple modes to deliver content (e.g., lecture, discussion, hands-on activities, Internet-based interaction, and fieldwork).
- Provide class outlines and notes on an accessible website.
- Face the class and speak clearly.
- Use captioned videos.
- Assess student learning using multiple methods.





#### **UD of Curriculum**

## Provide Multiple Means of:

- Representation
- Expression
- Engagement



#### **UD of Student Services**

- Planning, Policies, & Evaluation
- Physical Environments/ Products
- Staff
- Information Resources/ Technology
- Events

http://www.washington.edu/doit/Brochures/Academics/equal\_access\_ss.html





UD of instruction, curriculum, student services, technology, physical spaces

#### minimizes

the need for assistive technology & other accommodations.



# There is a need for both:

- Universal Design (Proactive)
- Accommodations (Reactive)





#### **Assure Access to:**

- physical spaces.
- computers.
- information resources
   (e.g., publications, videos, websites).
- events.
- on-site learning.
- distance learning.
- student services.



#### **Address Issues Related to:**

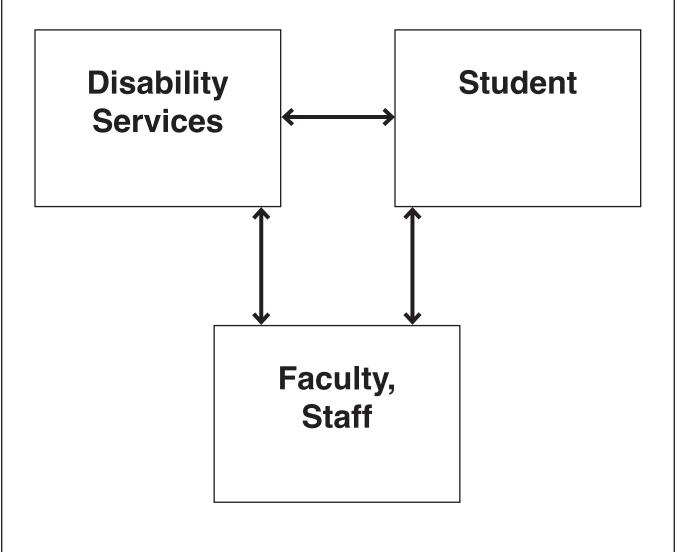
- procurement
- development
- use

And

- policies
- procedures
- training/support



#### **UD Impact on Roles**





1. Institution-level mission, vision, and values statements are inclusive of all people, including those with disabilities.





2. Disability is included in campus discussions of and training on diversity and special populations.





3. Policies, procedures, and practices are regularly reviewed for barrier removal and inclusivity of people with a diverse range of characteristics, including disability.





4. Administrators, staff, faculty, and student leaders are trained and empowered to take action around disability and universal design issues.





5. People with disabilities are visible (even if their disabilities are not) on campus including in positions of power and authority (e.g., administrators, faculty, student leaders).





6. Budgeting reflects the reality of the cost of applying universal design and of accommodating current and prospective employees, students, and visitors with disabilities.





7. Measures of student success (e.g., retention, course completion, graduation) are the same for all student populations, including students with disabilities, and institutional research includes this data.





8. Campus publications, websites, marketing, and public relations include images and content related to disabilities.





 Campus publications and websites, including webbased courses, meet established accessibility standards.





10. Disability issues are regularly included as a component of the curriculum.





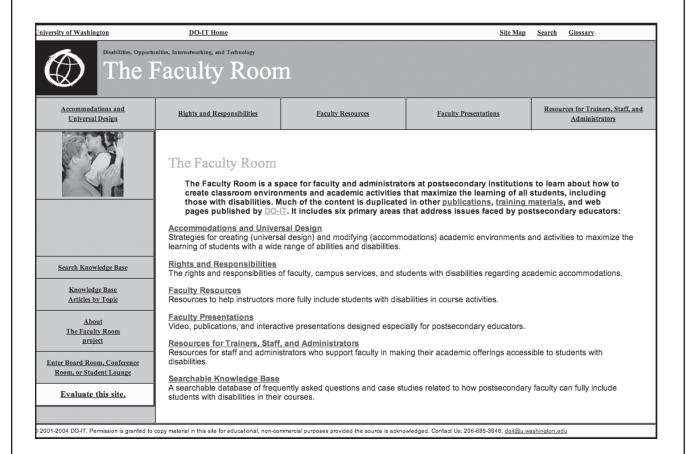
11. All campus facilities and other spaces are physically accessible.





#### The Faculty Room

#### http://www.washington.edu/doit/Faculty/

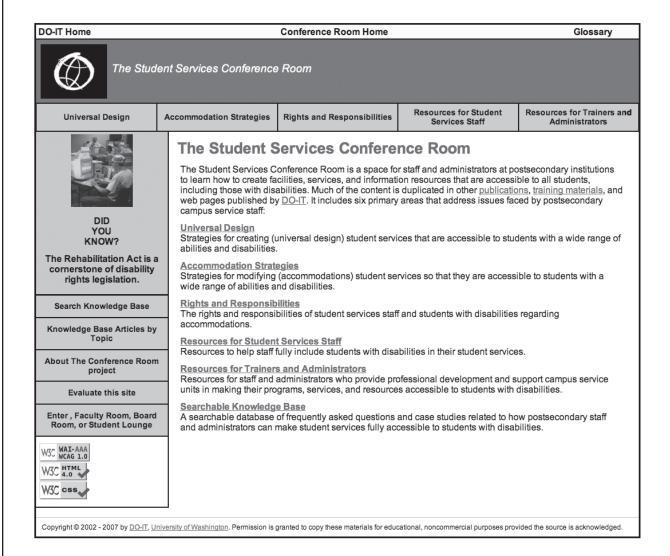






#### The Student Services Conference Room

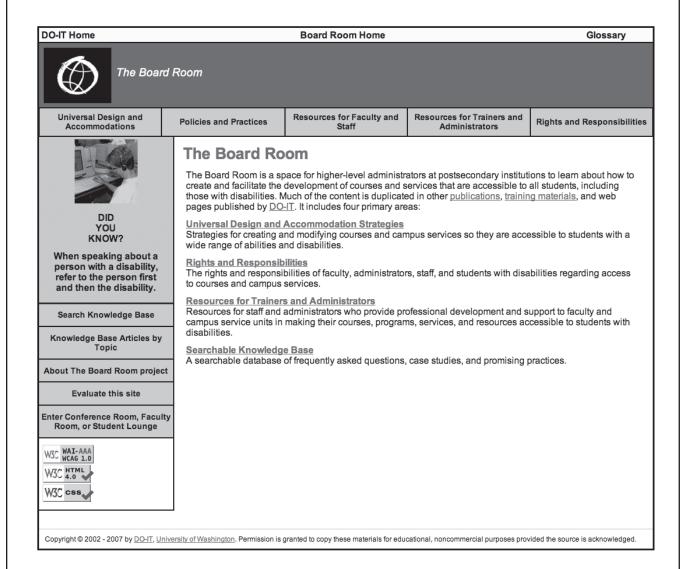
#### http://www.washington.edu/doit/Conf/





#### The Board Room

#### http://www.washington.edu/doit/Board/





#### The Center for UD in Education

#### http://www.washington.edu/doit/CUDE/

