

Abstract Title:

Round Table Discussion: How College and University Engineering and Physics Departments Can Model Inclusivity, Accessibility, and Universal Design

Participants:

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Abstract

A physics professor, a director of a disability support services office, and a student with a disability will lead a round table discussion. The topic they will discuss is how a college's engineering and physics departments develop a welcoming environment for students who have disabilities; support their needs; and maintain the essential requirements of the academic programs. Their personal experiences and insights, as well as information about best practices, will be shared.

ResourcesInclusivity

Access STEM: The Alliance for Students with Disabilities in Science, Technology, Engineering, and Mathematics. *Access STEM* is one of several regional alliances funded by the National Science Foundation (NSF) to increase the successful participation of people with disabilities in academic studies and careers.

<http://www.washington.edu/doi/stem>

Chemists with Disabilities (CWD)

Many scientists and technicians who have disabilities are pursuing successful careers in chemistry and allied sciences-in industry, education, and government. CWD members personally demonstrate the professional achievements of individuals with disabilities in the chemical sciences. The primary barrier facing persons with disabilities aspiring to study and work in fields requiring chemistry has been attitudinal. CWD strives to inform chemistry educators and employers of scientific and technical personnel about the capabilities and contributions of chemical professionals who happen to have physical, sensory, or learning disabilities.

<http://membership.acs.org/c/cwd/>

Commission on Professionals in Science and Technology.

Scientists and Engineers with Disabilities. *CPST Comments*, May 30, 2007

<http://www.cpst.org/hrdata/documents/pwm13s/C444D022.pdf>

ENTRY POINT!

This program of the American Association for the Advancement of Science (AAAS) offers outstanding internship opportunities for students with disabilities in science, engineering, mathematics, computer science, and some fields of business. To meet the challenge of the competitive global economy in the new millennium, private industry and government research agencies must expand the pool of technical talent. Students with disabilities who have demonstrated high motivation, persistence, and achievement in academic areas are placed in internships in research and development throughout the country. Mentors advise the students on future undergraduate coursework, plans for graduate study, and/or employment.

<http://ehrweb.aaas.org/entrypoint/about.htm>

Accessibility

Making Science Labs Accessible to Students with Disabilities

Application of Universal Design to a Science Lab

http://www.washington.edu/doi/Brochures/Academics/science_lab.html

Teaching Chemistry to Students with Disabilities: A Manual for High Schools, Colleges, and Graduate Programs. (2001). Dorothy L. Miner, Ron Nieman, Anne B. Swanson, and Michael Woods, Editors. American Chemical Society Committee on Chemists with Disabilities. The American Chemical Society.

<http://membership.acs.org/c/cwd/TeachChem4.pdf>

Using Computers to Make Science Labs Accessible to Students with Disabilities Conference Proceedings. (2000). Karen Milchus and John Goldthwaite., Center On Disabilities, Technology And Persons With Disabilities California State College, Northridge

<http://www.csun.edu/cod/conf/2000/proceedings/0147Milchus.htm>

Making the Readily Accessible Accessible Again

The Journal Science, June 27, 2003

http://sciencecareers.sciencemag.org/career_development/issue/articles/2450/making_the_readily_accessible_accessible_again

Universal Design

The Center for Universal Design (CUD)

CUD is a national information, technical assistance, and research center that evaluates, develops, and promotes accessible and universal design in housing, commercial and public facilities, outdoor environments, and products. Our mission is to improve environments and products through design innovation, research, education and design assistance

<http://www.design.ncsu.edu/cud/>

Center for Applied Special Technology (CAST)

CAST is the leader in Universal Design for Learning (UDL) is a framework for designing curricula that enable all individuals to gain knowledge, skills, and enthusiasm for learning. UDL provides rich supports for learning and reduces barriers to the curriculum while maintaining high achievement standards for all.

<http://www.cast.org/>

Universal Design of Instruction

A Checklist for Inclusive Teaching

http://www.washington.edu/doi/Brochures/Academics/equal_access_udi.html

Universal Design of Physical Spaces

A Checklist for Designing Spaces That Are Welcoming, Accessible, and Usable

http://www.washington.edu/doi/Brochures/Programs/equal_access_spaces.htm

Universal Design of Your Project

A Checklist for Making Projects Welcoming, Accessible, and Usable. Project DO-IT, University of Washington

<http://www.washington.edu/doi/Brochures/Programs/design.html>