AccessADVANCE: Advancing Women with Disabilities in Academic STEM Careers

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Today’s topics

- AccessADVANCE leaders, objectives & activities
- Experiences of women faculty in STEM fields
- Accommodations & universal design (UD) approaches to making campuses & project products & environments welcoming & accessible
- Ways you can engage in AccessADVANCE
- Resources, Q&A
Discussion

In the chat, share examples of challenges that may be faced by women faculty in STEM fields.
AccessADVANCE partners

- University of Washington DO-IT Center
  - Sheryl Burgstahler, PI & Director
  - Brianna Blaser, Associate Director

- UW Human Centered Design & Engineering
  - Cecilia Aragon, Co-PI

- North Dakota State University ADVANCE Forward Project
  - Canan Bilen-Green, PI
AccessADVANCE objectives

- For Institutions & Organizations
  Implement systemic changes within STEM departments & BP activities so that women with disabilities in academic positions are welcome & fully included & can achieve success.

- For the Entire Community
  Developing resources regarding institutional practices to increase the successful participation of women with disabilities in academic STEM careers.
AccessADVANCE activities

Through CBIs & online CoP, work with the community to:

1. Develop systemic change strategies that make STEM depts & BP projects more inclusive of female faculty with disabilities.

2. Create resources to improve the climate for female faculty with disabilities in STEM departments & relevant organizations.

3. Provide technical assistance regarding accessibility of policies, practices, & resources.

4. Encourage engagement of allies in the ARC Network & the INCLUDES National Network.
Examples of access issues

- Disability-related issues that impact productivity
- Challenges in attending conferences
- Inaccessible online tools related to HR & benefits
- Inaccessible tools used for meetings & collaboration
- Uncaptioned videos
- Inaccessible meetings
- Inaccessible grant portals, journal articles & review processes
- Concerns in requesting accommodations
- Disability-related issues related to scheduling courses
- Lack of mentors with disabilities
Encourage STEM departments & BP projects to

- Make academic recruitment & tenure processes more welcoming & accessible.
- Ensure departmental meetings, events, & other activities are welcoming to, accessible to, & inclusive.
- Develop strategies to increase the retention & promotion rates of women with disabilities.
- Design websites & facilities to be accessible & utilize accessible IT.
- Develop collaborations that lead to future innovative projects, policies & practices.
- Disseminate materials & best practices.
In an inclusive environment everyone

- who meets requirements, with or without accommodations, is encouraged to participate
- feels welcome
- is fully engaged in accessible & inclusive environments & activities
Individual-Centered Community Building Model

Key stakeholders (like you!) that contribute to the success of women with disabilities

- Person with disability
- Family members
- Peers, near peers, mentors, allies
- Professional organizations and broadening participation efforts
- Service providers
- Postsecondary administrators, faculty, staff
- Technology vendors
- Legislators, policy makers
- Funding agencies

Success of Women with Disabilities in Academic STEM Careers
What is the legal basis for access?

- Section 504 of the Rehabilitation Act of 1973
- The Americans with Disabilities Act of 1990 & its 2008 Amendments
- State & local laws
Consider **ability** on a continuum

- understand English, social norms
- see
- hear
- walk
- read print
- write with pen or pencil
- communicate verbally
- tune out distraction
- learn
- manage physical/mental health
Poll: Does your project or department take steps to be accessible?

- Yes
- No
- I’m not sure

If yes, share details in the chat.
One-minute history of the evolution of responses to human differences

- Eliminate, exclude, segregate
- Cure, rehabilitate, accommodate
- Social justice: Inclusion & universal design
Accommodation-focused approach to access

Adjust an existing product or environment for a specific person:

- creating accessible documents
- captioning videos
- sign language interpreters
AccessADVANCE practices embrace

- the social model of disability,
- social justice education,
- disability as a diversity issue,
- intersectionality, &
- universal design (UD)
But sometimes it is the design of the product or environment that should be reconsidered…
“Coffeepot for Masochists”, Catalog of Unfindable Objects by Jacques Carelman; in Donald Norman’s *The Psychology of Everyday Things*, 1988
Universal Design (UD)

“the design of products & environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”

The Center for Universal Design
www.design.ncsu.edu/cud
Proactive design terminology

- accessible design
- usable design
- inclusive design
- universal design
- barrier-free design
- design for all
- ...

Diagram:

- Usable
- Universal Design
- Inclusive
Applications of Universal Design in Education

**Instruction**
- Class climate
- Interaction
- Physical environments/products
- Delivery methods
- Information resources/technology
- Feedback
- Assessment
- Accommodation

**Services**
- Planning, policies, and evaluation
- Physical environments/products
- Staff
- Information resources/technology
- Events

**Information Technology**
- Procurement/development policies
- Physical environments/products
- Information
- Input/control
- Output
- Manipulations
- Safety
- Compatibility with assistive technology

**Physical Spaces**
- Planning, policies, and evaluation
- Appearance
- Entrances/routes of travel
- Fixtures/furniture
- Information resources/technology
- Safety
- Accommodation
3 sets of principles underpin UDHE guidance for all aspects of education

- 7 Universal Design
  - 3 Universal Design for Learning
  - 4 Web Content Accessibility Guidelines
In a nutshell,

1. Provide multiple ways for participants to learn & to demonstrate what they have learned.
2. Provide multiple ways to engage.
3. Ensure all technologies, facilities, services, resources, & strategies are accessible to individuals with a wide variety of disabilities.
“When you plant lettuce,
if it does not grow well, you don't blame the lettuce. You look for reasons it is not doing well.

It may need fertilizer, or more water, or less sun...”

-Thích Nhất Hạnh, Vietnamese Buddhist Monk
UD of physical spaces

“The Daily”

UW

1970
UD provides **inclusive access**
UD of technology

- builds in accessibility features

- ensures compatibility with assistive technology
Beneficiaries of captions on videos

People who:

- are unable to hear the audio
- are English learners
- are in a noisy or noiseless location
- have slow Internet connections
- want to know the spelling of words
- need to find content quickly
More UD = fewer accommodations
As an attitude, a framework, a goal, & a process, UD:

- Values diversity, equity, & inclusion
- Promotes best practices & does not lower standards
- Is proactive & can be implemented incrementally
- Benefits everyone
- Minimizes the need for accommodations
How to engage in AccessADVANCE

- Attend Capacity Building Institutes
- Attend/present in webinars
- Apply for a minigrant
- Review project products
- Send email to doit@uw.edu & ask to join our Community of Practice (CoP)
AccessADVANCE

- will advance knowledge about how postsecondary STEM departments, postsecondary administrations, & other organizations can engage all segments of the population in their work by making structural changes that create departmental norms, policies, practices, & cultures that are inherently inclusive of female faculty with disabilities in STEM.
Resources

- AccessADVANCE
  uw.edu/doit/programs/advance
- Center on Universal Design in Education
  uw.edu/doit/cude
- **NEW:** Creating Inclusive Learning Opportunities in Higher Education: A Universal Design Toolkit
- Sheryl Burgstahler – sherylb@uw.edu
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