

Disrupting Ableism and Advancing STEM: Rooting out Bias and Barriers

Understanding Workplace and Workforce Barriers to Full Participation of People with Disabilities: Reimagining Access

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Universal Design as a Verb

- “Turning [Universal Design] into a checklist defeats so much of the historical purpose of [Universal Design]...That is [Universal Design] should be registered as **action**—a patterning of engagement and effort.”
- “Such lists invite us to believe that Universal Design would stop if all the boxes were checked. We should be more interested in places to start thinking, doing, acting, and moving.”

– Dolmage, *Academic Ableism*, p. 145

Barriers to Access

- **Infrastructure:** existing components of an organization's established physical and organizational structures and facilities
- **Policies and Procedures:** written (and sometimes unwritten) organizational policies about and/or which affect disabled individuals, and the processes by which these policies are executed

Barriers to Access

- **Culture:** The overall organizational understanding of and approach to disability from the top-down, including how leaders, management, and co-workers frame, and interact with, disability in the context of work
- **Unmet Access Needs of the Individual:** The unique aspects of a person disability that may require updates to infrastructure, policies/procedures, and/or culture to achieve meaningful access

Barriers to Access: Infrastructure

- **Built environment (worksites, workspace, equipment)**
 - Laboratories, fields sites
- **Software, Websites, and Other Technology**
 - Standard and HR software, field-specific software

Overview and Examples: Infrastructure

- **Training and career development**
 - Accessible for disabled employees
 - Training of management and others for inclusivity
- **Employee resources**
 - Insurance/Benefits
 - Non-normative work models

Overview and Examples: Policies/Procedures

- **Job listings and advertisement**
 - Extraneous “required” skills that exclude disabilities
- **“Accommodations”**
 - Invasive: “Forced Intimacy” (credit: Mia Mingus)
 - Lengthy
 - Gatekeeping (credit: Kelsey Byers)

Overview and Examples: Culture

- **Ableist Culture in Generalized Workplaces**
- **Scientific Culture and Values**
 - Medical model of disability
 - Assumptions of objectivity
 - Productivity
 - Independence

Overview and Examples: Unmet Access Needs of the Individual

- **Assumption of a disability “prescription”**
 - Lack of adaptability and creativity
 - Results in ongoing unmet access needs
 - *Every disability is unique*

Assessing Accessibility and Evaluating Ableism

- **Government Tools**
 - EEOC enforcement guidance
- **Publicly and privately funded tools**
 - EARN
 - AccessSTEM

Assessing Accessibility and Evaluating Ableism

- **Infrastructure, Built Environment: Broad**
 - ADA Guidelines
- **Infrastructure, Built Environment: STEM**
 - Lab Tools: DO-IT, Ontario's Universities
 - Field: Royal Geographical Society
 - Innovation: for example, 3D printing

Assessing Accessibility and Evaluating Ableism

- **Infrastructure: Websites, Software, Digital Products and Documents**
 - WCAG Guidelines
 - [Section508.gov](https://www.section508.gov)
- **Infrastructure: Training**
 - Accessible conferences: SIGACCESS; Mittendorf & Jimmons, 2022; Wu, Martiniello, Swenor, 2022.

Assessing Accessibility and Evaluating Ableism

- **Policies and Procedures**

- Resources on re-examining accommodations: Clarke 2023; Mittendorf 2022.

- **Culture**

- Disability inclusion metric (Lysette et al., 2012)
- Workplace culture surveys (usually commercial)

- **Unmet Access Needs**

- AskJAN.org

The Retrofit: Ableism in Action

- **The issue of the retrofit:**
 - “Retrofits address inequities and inaccessibility, but do so in ways that reinforce ableism, turning disabled people into charity cases or villains,” instead situating the granter of access as the “hero” (Dolmage, p. 70)
- **But centering access offers features that can help more than just one employee**
 - E.g., Closed captioning; flexible scheduling

Reimagining Justice in STEM

- **Whose knowledge counts? (Hammel, p. 7)**
 - Academy lock-out
 - “Cripistemologies” (credit: Lisa Duggan)
- **Is there only one “correct” model of work? Of science?**
 - Community-led and humanities scholarship
 - Interdependence as advancement

Reflections

- **Whose knowledge counts?**
- **Is there only one “correct” model of work? Of science?**
- **What would be needed to re-imagine cultural approach to disability in science?**
- **What does *performing access as an action* look like?**

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