



**Missouri State.**<sup>TM</sup>  
U N I V E R S I T Y

# **Universal Design:**

**A new paradigm for designing equitable  
and inclusive learning environments.**

# Outline

- **Models of Disability.**
- **How we might reframe disability.**
- **Universal Design (UD) – definition and principles.**
- **Some examples of UD at MSU.**
- **Project Shift (U.S. Dept. of Education grant).**
- **How UD might be applied in instruction?**

# Model Comparison of Disability

Medical Model (Old)	Interactional/Socio-Political Model (New)
Disability is a deficiency or abnormality	Disability is a difference
Being disabled is negative	Being disabled, in itself, is neutral
Disability resides in the individual	Disability derives from the interaction between the individual and society
The remedy for disability-related problems is cure or normalization of the individual	The remedy for disability-related problems is a change in the interaction between the individual and society
The agent of remedy is the professional	The agent of remedy is the individual, an advocate, or anyone who affects the arrangements between the individual and society

## \* Disability is a social construct

- Carol J. Gill, Chicago Institute of Disability Research

# Reframing Disability

## How we respond to it?

- Access issues are the individual's problem to solve. Access is achieved through accommodations and retrofits that are retroactive, separate, and consumable.

## How could we respond differently?

- Access issues become the designer's problem to solve. Environments are designed to the greatest extent possible to be usable by all. The accommodations become proactive, inclusive, and sustainable.

(Sue Kroeger, 2009)

# Reframing Disability

## Accommodation

vs.

## Inclusive Design

Accommodations are re-applied each time a new individual enters the environment

- Individuals problem to solve
- Accommodations modifications
  
- Retroactive
- Separate
- Consumable

Environments are designed to be inclusive, requiring little continual alteration

- Designer's problem to solve
- Environments are designed to be usable by all (greatest extent possible)
- Proactive
- Inclusive
- Sustainable

(Sue Kroeger, 2009)

# Thoughts...

- **Why is disability identified with costs, not social justice?**
- **Why do we find ourselves asking what is the minimum we have to do?**
- **When we are working with a student why do we immediately think of possible accommodations rather than looking at the course design?**

# **Disability is Diversity**

**Disability should be viewed as a part of diversity:**

- **A part of our diversity strategic planning**
- **Appreciated and valued as an integral part of life**
- **People with disabilities make up the largest minority group that anyone can be a member of at any time**
- **A part of our cultural competence discussion**

# **What is Universal Design?**

- **Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. – Ron Mace**
- **The intent of Universal Design is to simplify life for everyone by making products, communications, and the built environment more usable by as many people as possible at little or no extra cost. Universal design benefits people of all ages and abilities.**

# Principles of Universal Design

## 1. Equitable Use

- The design is useful and marketable to people with diverse abilities.

## 2. Flexibility in Use

- The design accommodates a wide range of individual preferences and abilities.

## 3. Simple and Intuitive Use

- Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

## 4. Perceptible Information

- The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

## 5. Tolerance for Error

- The design minimizes hazards and the adverse consequences of accidental or unintended actions.

## 6. Low Physical Effort

- The design can be used efficiently and comfortably and with a minimum of fatigue.

## 7. Size and Space for Approach and Use

- Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

(North Carolina State University Center for Universal Design, 2009)

# UD Example – Wal-Mart Entrance



Extra Wide  
Doors

Automatic  
Entrance and  
Exit

Curbless  
Entrance and  
Exit for Carts  
and  
Wheelchairs

# **MSU UD Examples**

- **Admissions (alternative formats)**
- **RLS (staff training, procurement-copier, laundry)**
- **Counseling and Testing Center**
- **Bear Claw**
- **Recreation Center**
- **Images**

# Meyer Library - Walkway

Meyer Library is designed with a sloped walkway into the building as well as shorter stairs with handrails to make using the library more accessible to all and providing a choice to its users.



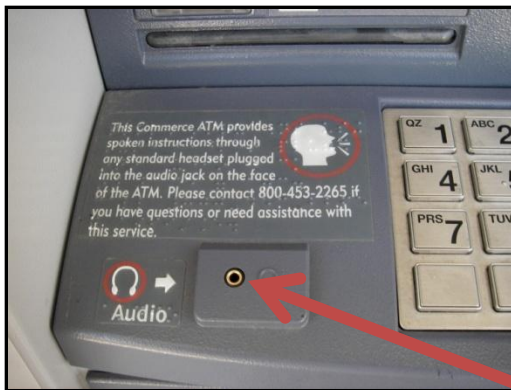
# Campus Vending



Large Display Braille Buttons

Product Pictures with Large Print

# Commerce Bank's ATMs



Universally designed ATMs provide users with banking conveniences through Braille instruction, as well as spoken instructions through a standard headset.

# Accessible/Gender-Neutral Restroom



This bathroom design allows users to have a personal care attendant of the opposite sex if needed or allows for parents to assist with their child's bathroom needs. It is also helpful to people whose gender expression is variant to common cultural norms.

# Strong Hall: Furniture



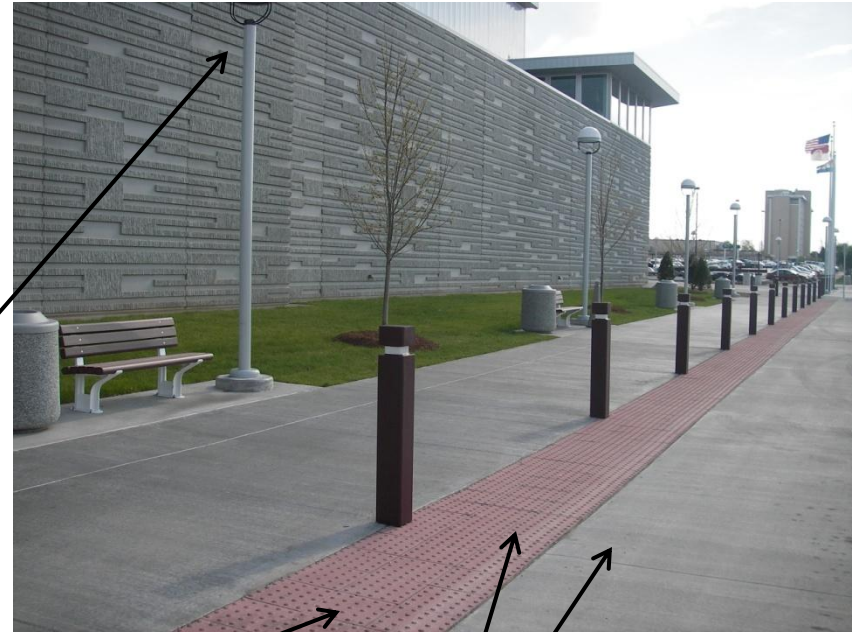
Classrooms have accessible seating for all users. The furniture is easily adaptable to create different seating configurations.

# Washers and Dryers in Residence Halls



Washers are designed so users can open washers from the top or from the front. Dryers are available at different heights for user's convenience. Machines also have Braille labels on controls.

# JQH Arena – Side view

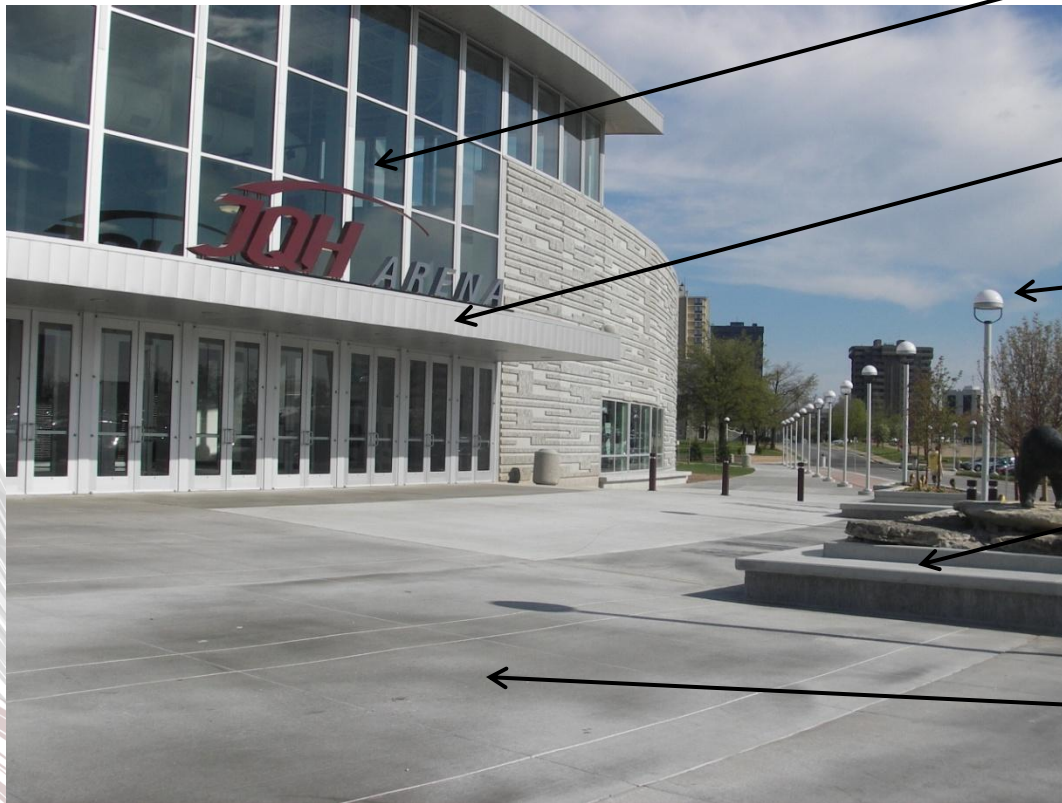


Lighted Sidewalk

Curbless  
Sidewalk

Contrasting  
Texture and  
Color

# JQH Arena – Front Entrance



Good Use of  
Natural Light

Covered  
Entryway

Good Lighting

Package Shelf  
and Seating

Sloped Entry –  
No Ramp

# **Project ShIFT (Shaping Inclusion through Foundational Transformation)**

- **Create institutional change by addressing underlying systems and campus-wide conceptualizations of disability**
- **Curricular change and faculty development activities will be implemented through a systemic analysis and retraining of the campus disability services (DS) staff**
- **Incorporate social model thinking and universal design (UD) into practice**
- **Include faculty in the redesign of curriculum, the use of UD instructional strategies, and the infusion of disability into course content.**

# **Project ShIFT Opportunities**

- **Changes in Disability Services (website and blog)**
- **Faculty member selected**
- **Faculty development**
- **Research (importance of diversity research)**
- **Disability as a part of cultural competency curricula**
- **Disability Studies program**

# **Universal Design in Instruction**

- **We can utilize principles of UD in our teaching.**

## **Example: Notetaking**

- 1. Have three students post their notes to an accessible website -OR-**
- 2. Instructor posts outline or powerpoint slides to accessible website**

# **Universal Design in Instruction**

- **Would this enhance the accessibility of the course for students with disabilities?**
- **Would it reduce the need for an accommodation?**
- **Would it enhance the learning of others?**
- **Might it affect the retention of students?**

# **Basic Examples of UDI**

- **Think about universal learning while in the planning stages of developing a course.**
- **Use a teaching methodology that incorporates all learning styles.**
- **Describe handouts and overhead visuals.**
- **Post presentation notes, handouts or summary notes on an accessible website so participants can obtain them prior to the lecture.**
- **Provide visual materials with verbal descriptions.**
- **Ensure that all multi-media is captioned or that an alternative format is provided.**
- **Consider providing choices for assignments.**

# **Universal Design in Instruction**

- **Would this enhance the accessibility of the course for students with disabilities?**
- **Would it reduce the need for an accommodation?**
- **Would it enhance the learning of others?**
- **Might it affect the retention of students?**

# Conclusion

- **Models of Disability.**
- **How we might reframe disability.**
- **Universal Design (UD) – definition and principles.**
- **Some example of UD at MSU.**
- **Project ShIFT (U.S. Dept. of Education grant).**
- **How UD might apply in instruction?**
- **Future book series hosted by FCTL.**
- **Questions?**