

# Workshop 2:

## Universal Design for Libraries





**Welcome!**



# Introductions

# Learning Objectives

1. **Understand** the concept of Universal Design and be able to apply it to your library;
2. **Develop** a basic understanding of how federal laws and ALA policy impact your library;
3. **Apply** what you have learned to the development of programs and collections at your library;
4. **Identify** strategies for designing appropriate websites that adhere to accessibility standards.

# Agenda

## Foundations of Universal Design

- Models of Disability
- Design Theories
- Universal Design Principles
- The Law and ALA Policy
- Activity #1

# Agenda - Continued

## Applying Universal Design to Libraries

- Physical Barriers
- Collection Development
- Programming
- Website Accessibility
- Activity #2
- Recap
- Closing

# Foundations

**Why?**



# Models of Disability

# The Medical Model

The Medical Model defines disability as a medical issue, that there is something wrong with the individual and they need to be cured.

For example: If a patron in a wheelchair was unable to get into the library due to steps, the Medical Model would fault the patron with a wheelchair and not the fact that there is no ramp or ground level entrance.

# Discussion (#1)



What is your reaction to The Medical Model?

# The Social Model

The Social Model states that disability is a status put onto people by an unaccommodating society. It looks to remove the barriers preventing people with disabilities from contributing to society.

For Example: The Social Model, however, recognizes that it is the library's fault for not including an accessible entrance. It would also suggest that the library redesign the entrance so that everyone can enter the library with the addition of a ramp.

# Discussion (#2)



What is your reaction to The Social Model?

# Other Models of Disability

- Charity Model
- Empowerment Model
- Moral Model
- Legitimacy Model
- Social Adapted Model
- Economic Model

# Design Theories

# Barrier-Free Design

The concept of Barrier-Free Design focuses mainly on physical access to buildings.

Some examples are:

- Information/Reference/Check-Out Desks are wheelchair accessible
- Aisles of the shelves are wide and clear of obstacles
- Entrances into the library are wheelchair accessible



# Discussion (#3)



If Barrier-Free Design only focuses on people with one type of disability, it is possible that the design could hinder someone else. Can you think of any examples where this might be the case?

# Accessible Design

The concept of Accessible Design includes physical access but also involves more programs and services.

Some examples are:

- Staff trained in ASL
- DVDs are available in closed caption
- Microphones at programming events for those hard of hearing

# Discussion (#4)



1. What are some everyday programs and services available at your library that are examples of Accessible Design?
2. What programs and services could your library use that they don't currently have or provide?

# Universal Design

Universal Design takes the best concepts from Barrier-Free Design and Accessible Design and combines them.

Universal Design refers to creating products and facilities usable by a wide range of people with varying ability levels.

It is intended to benefit all users by making interaction and use comfortable, safe, and accessible.

# Universal Design Examples

Some examples are:

- Lighting should be warm; don't use fluorescents
- Use colors that can be identified by people with all types of color vision
- Present information in different forms (text, audio, visual, etc.)

# 7 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.

# 7 Principles of UD - Continued

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.

# 7 Principles of UD - Cont.

6. Low Physical Effort - The design can be used efficiently and comfortably 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.

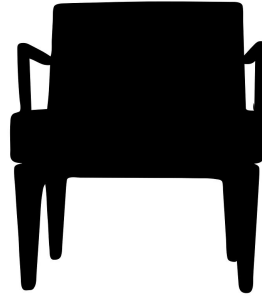
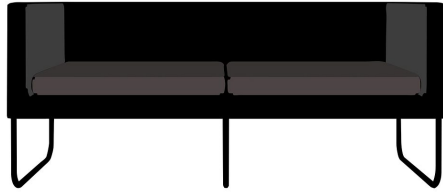


# 1. Equitable Use Example



Provide a variety of materials such as audiobooks, articles, books, websites, and/or videos on a particular topic.

## 2. Flexibility in Use



Libraries that have only one style of seating arrangements are not designed for all.

### 3. Simple and Intuitive Use



Use signage that has wording, easily recognizable symbols, and braille.

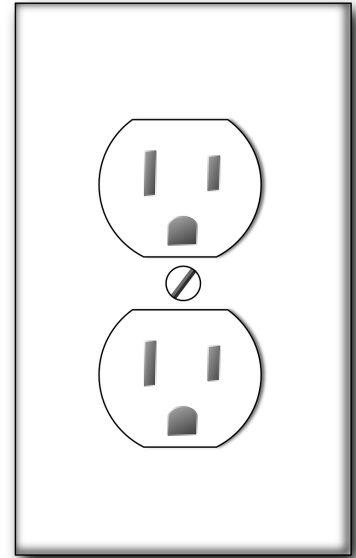
# 4. Perceptible Information

At the entrances to the library have a space that communicates the library layout along with “you are here” locators. This is also helpful to have in the stacks, particularly for libraries that have multiple floors and multiple sections on each floor.



# 5. Tolerance for Error

Avoid power outlets that stick up in the middle of the floor and power outlets that are behind the bottom bookshelf. Nowadays, patrons require more access to power outlets and as well as easy and quick access.



## 6. Low Physical Effort



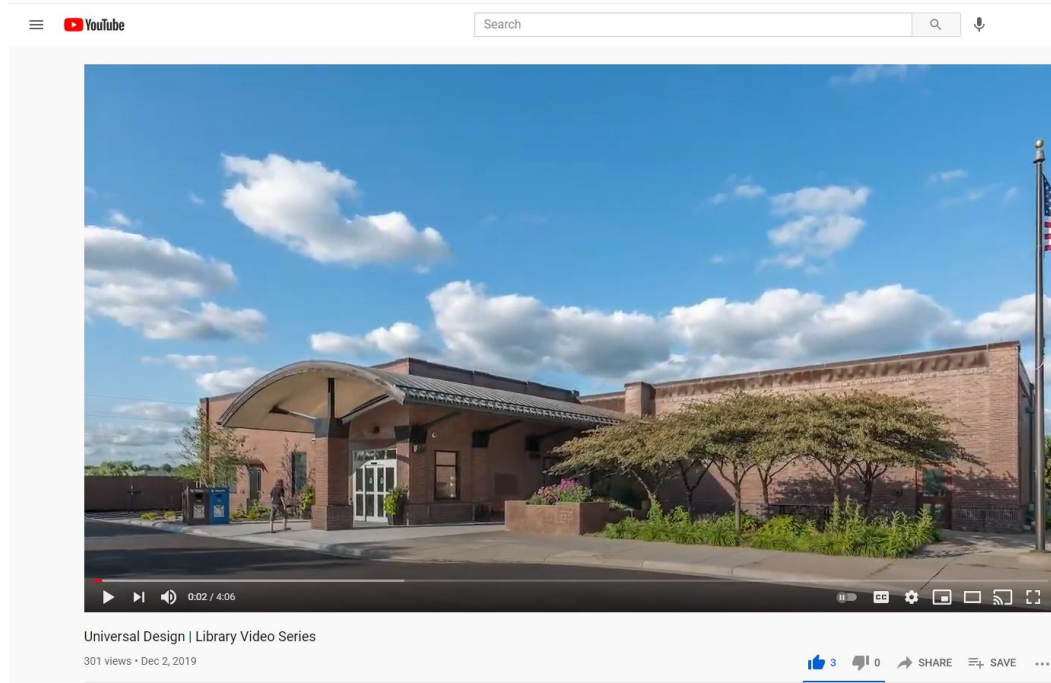
Shelving takes up a lot of space and it is hard to navigate around for patrons in a wheelchair. Providing online content such as eBooks and audiobooks allows for more open space at your library.

# 7. Size and Space for Approach and Use

Allow for the patron to create their own work space. Desks where the patron can change the height at will are also good accessible furniture.



# Universal Design Video



Video: “Universal Design - Library Video Series.” (4:06 minutes). -

[Link to the Universal Design Video](#)



# Discussion (#5)



1. What are some examples of Universal Design that your library has already implemented?
2. Is there something you would like to see implemented at your library regarding accessibility (think of an encounter with a patron with a disability, what type of program or service would benefit them)?

# **The Law and ALA Policy**

# The Rehabilitation Act of 1973

The Rehabilitation Act of 1973 bans discrimination based on disability in federal programs and institutions that receive federal funding.



# Section 508 of The Rehabilitation Act

- Equal Access
- Includes electronic information
- Federal funding (including school libraries and public libraries)

# Discussion (#6)



What are some ways that the library provides equal access to information and resources?

# Americans with Disabilities Act

- Entitled to the same rights as everyone else
- Businesses can't discriminate on hiring based on disability
- Title II
- Physical Access to buildings
- Effective communication
- Libraries must include:
  - Large print and braille books (alternative formats)

# ADA Library Examples

1. Tables at the library should have 27 inch high clearance and 19 inches of depth.
2. Space between furniture should be 40 inches.
3. The top row at the stacks shouldn't be higher than 48 inches.
4. Aisle should have at least 36 inches of clearance but 42 inches is preferred.
5. Service desks (reference, check out, etc.) shouldn't be higher than 36 inches.
6. The floor should be smooth and bump free.

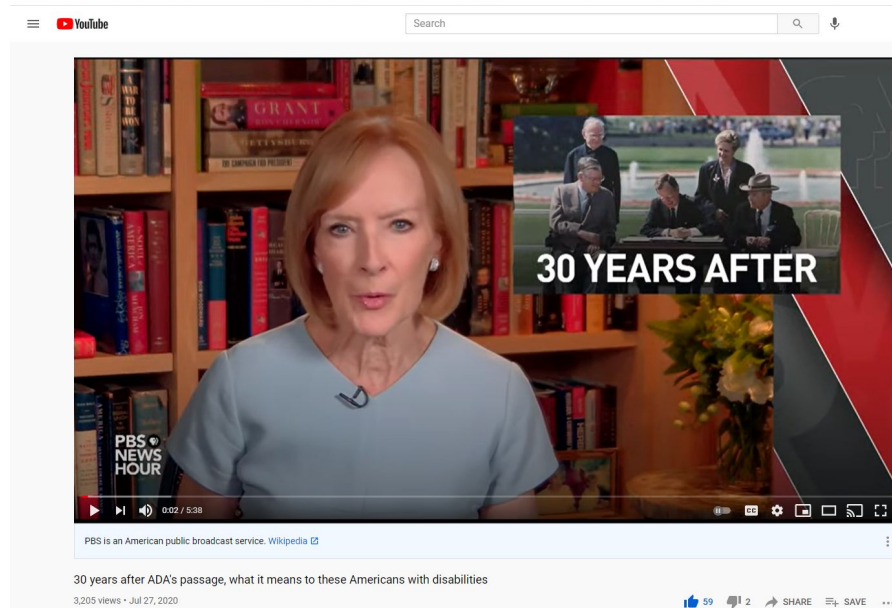
# Discussion (#7)



Brainstorm five more examples of things that you can implement in your library that can be ADA compliant.



# 30 Years After ADA Video



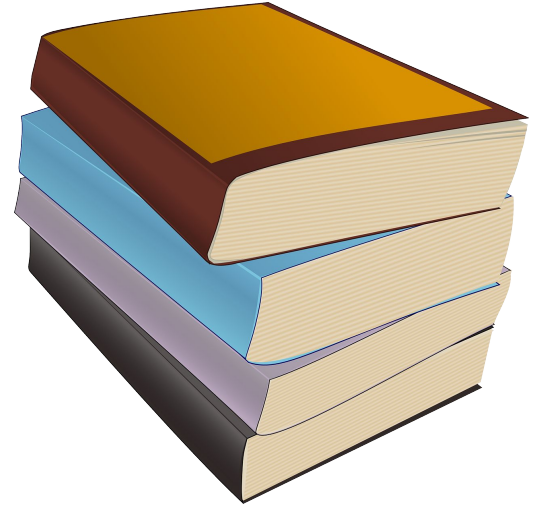
Video: “30 years after ADA's passage, what it means to these Americans with disabilities.” (5:38) - [Link to the "30 Years After" Video](#)

# ALA Policy - Part 1

- History of serving people with disabilities
- Library of Congress first services to people with disabilities was in 1897
- Standards regarding equal access were created in 1961
- Policy was updated in 2001

# ALA Policy - Part 2

1. The Scope of Disability Law
2. Library Services
3. Facilities
4. Collections
5. Assistive Technology
6. Employment
7. Library Education, Training, and Professional Development
8. ALA Conferences
9. ALA Publications and Communications



# 1. The Scope of Disability Law

Providing equitable access for people with disabilities is required by federal law.

Examples: Section 504 of the Rehabilitation Act of 1973 and The Americans with Disabilities Act of 1990.

## 2. Library Services

Libraries must not discriminate against people with disabilities. Libraries should provide accommodations as well as include people with disabilities in planning and evaluation of library spaces.

Examples: Extended loan periods, waived late fines, extended reserve periods, etc.

# 3. Facilities

Libraries are required to follow ADA regulations regarding physical space.

Examples: clear paths of travel to and throughout the facility, accessible tables, public service desks, etc.



# 4. Collections

Library materials must be accessible to patrons with disabilities and with a variety of formats.

Examples: Audiobooks, books, graphic novels, large print, movies, etc.

# 5. Assistive Technology

Libraries should integrate assistive technologies into their libraries based on communications with people with disabilities, agencies, organizations and vendors.

Examples: screen readers, audiobooks, etc.





# 6. Employment

Libraries should recruit people with disabilities into the LIS field and provide accommodations for employment.

Example: Extra time on civil service tests, tests read out loud, etc.

# 7. Library Education, Training, and Professional Development

All graduate programs should teach students about accessibility, assistive technology and the needs of people with disabilities in regards to library services.

Example: Accessibility classes, professional development for staff regarding accessibility, etc.



# 8. ALA Conferences

ALA conferences must be held at locations that are accessible to people with disabilities.

Example: Easy to navigate locations, microphones at lectures, etc.

# 9. ALA Publications and Communications

Works published under ALA must be available in alternative formats.

Example: Electronic text, audiobooks, etc.

# Activity #1

## Directions:

1. Break into small (3-5) discussion groups (group size depends on the amount of people attending).
2. Three different library scenarios will be shown on the PowerPoint slide.
3. Each group will be assigned a scenario and decide what you would do in that situation, keeping in mind the Universal Design principles.
4. After 15 minutes the groups will come back together and a speaker for each group will discuss what the group decided and why.

# Scenario 1

You are a reference librarian at a mid-sized public library in a city. A patron comes up to your desk and you notice that they hold a white cane. She tells you that she just moved to the area and that it's her first time in the library. She also tells you she is looking for a book on how to care for household plants. As the patron is asking their question, two other patrons que up behind her and look impatient. What do you do?

# Scenario 2

You are a librarian at a school library working at the check-out desk. Your library doubles as an instruction space. A middle school age kid comes into the library with a guide dog to look for audio books during his study hall. Your colleague is busy teaching a class how to cite different types of resources for the class's end of the year project. The presence of the dog distracts multiple kids to the point where the class teacher comes to you to ask that the student with the guide dog leave the library. What do you do?

# Scenario 3

You are a librarian at an academic library in a private university. Your library has been receiving complaints from the Deaf community on campus about the lack of American Sign Language (ASL) interpreters on library staff. Your boss acknowledges the problem and suggests that the staff covering the reference and circulation desks be trained in ASL. However, there is not enough funds in the budget for training and the budget for the following year has already been sent to the board for approval. What do you do?



# Role Play Debriefing

1. What do you think was the most important outcome of this roleplay?
2. In your role-play session, what, if anything, should have been asked or included that wasn't?
3. What did you learn from this activity?

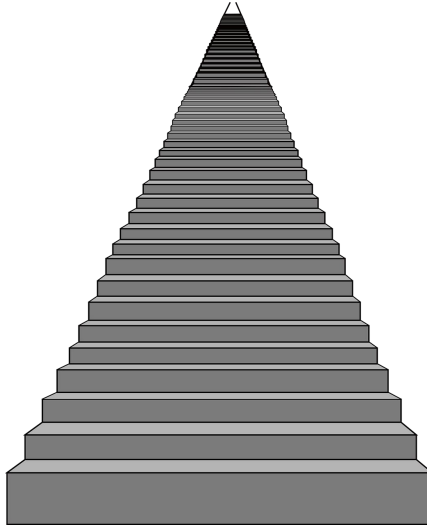
# Break



# **Applying Universal Design to Libraries**

# Physical Barriers

# Quote by Stella Young



“No amount of smiling at a flight of stairs has ever made it turn into a ramp.”

# Project ENABLE - Challenge Video (#1)



🔒 P5 Holly Jin\_Video 1\_With CC

1 year ago | More

Video: “The Challenge - Holly Jin - Physical Barriers” (3:20) -  
[Link to Challenge Video](#)

# Discussion (#8)



What would you do?

# Project ENABLE - Solutions Video (#1)



🔒 P5 Holly Jin\_Video2\_With CC.mp4

Video: "The Solution - Holly Jin - Physical Barriers." (7:24). -

[Link to Solutions Video](#)



# Examples of Physical Barriers in the Library - Part 1

1. Building Orientation: Display maps near the entrances of where everything is located.
2. Service Desks: Service Desks (reference, tech help, check out, etc.) need to be at a height accessible to a person with a wheelchair.
3. Shelving: Bottom shelves tilted up, avoid placing books on the top row.

# Examples of Physical Barriers in the Library - Part 2

4. Learning and Study Areas: Make sure patrons can choose the layout they want and have flexible furniture available in study areas.
5. Power outlets: Avoid floor outlets and extension cords.
6. Lighting: Avoid fluorescent lights as it can give headaches to people who are light sensitive. Use warm light.

# Examples of Physical Barriers in the Library - Part 3

6. Self-service: There are both pros and cons. It is faster and more efficient yet someone who isn't used to using technology might find it
7. Navigation: Spaces between shelves should be 36 inches, heights of tables for wheelchair access should be 27 inches height, etc.

# Collection Development

# Collection Development and UD

Collection Development is an important part of building an Inclusive and accessible library. There are two main ways to go about building an Inclusive collection.

- Type of materials
- Content of Materials



# 1. Periodicals/Magazines



Some students may benefit from a large collection of interesting periodicals/magazines.

## 2. Graphic Novels

While graphic novels have a wide appeal to the entire student body, they may be especially helpful for students with intellectual or learning disabilities who struggle with reading.



# 3. Audiobooks



Audiobooks are available on cassette, CD, playaway, or digital recording.

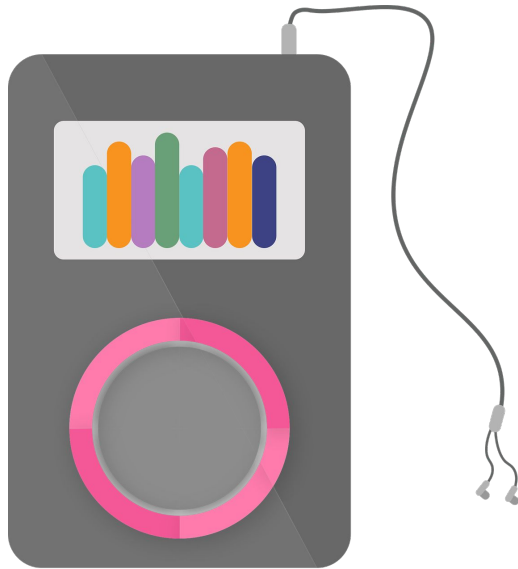


# 4. Large Print Books

Students with visual impairments may be aided by the use of large print books.



# 5. iPods & Other MP3 Players



iPods and other MP3 players can be loaded with audiobooks for the enjoyment of all students.

# 6. Tablet Computers & eReaders

Tablet, computers, and eReaders assist readers in a variety of ways.



# 7. Braille Material

Braille is a tactile writing system used by people with visual impairments.

Most state libraries have talking book collections as well that can be acquired through interlibrary loan.

For example, the National Library Service for the Blind and Print Disabled is an excellent resource that you can use.

# Content of Materials

While having access to different types of resources is good to have, having a book with disability representation is just as important.

Historically, people with disabilities are underrepresented in books.

However, disability representation in books began to turn more positive in the late 1990s and early 2000s.

There are two main types of disability representation in books. They are Inclusion Literature and Immersive Literature

# Inclusion Literature

The disability is the focal point of the story.

Inclusion Literature “can help patrons develop awareness and empathy by providing a genuine connection to the lives of individuals with disabilities.”

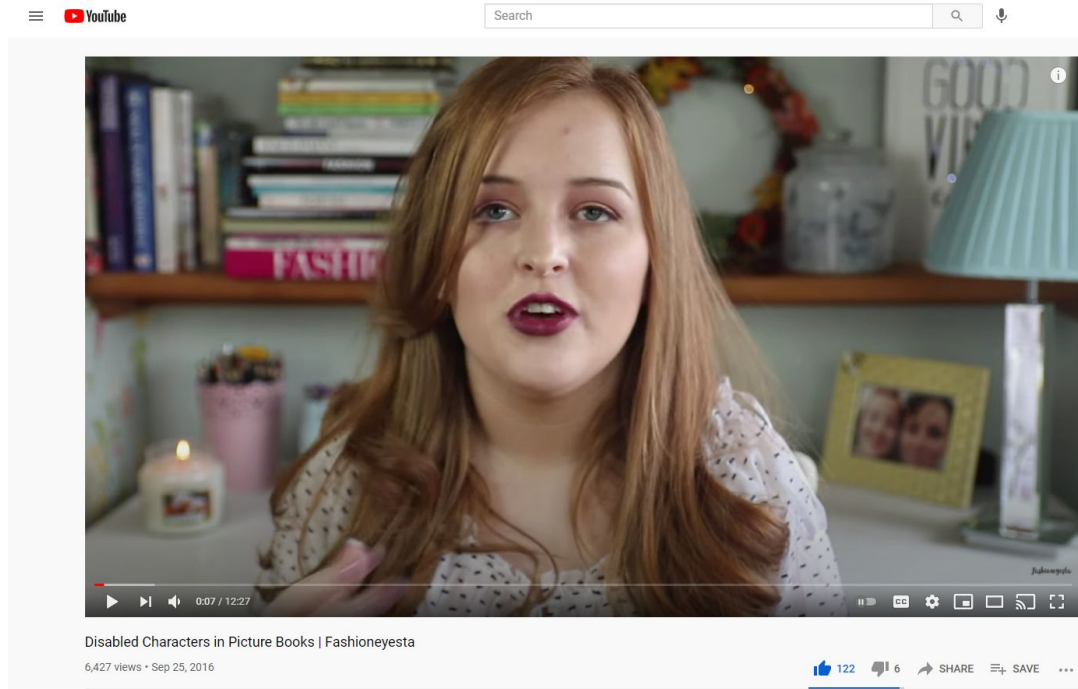


# Immersive Literature

Immersive Literature includes a character with a disability, but that disability is not the story's focal point. The disability community prefers this type of literature.

However, there are few picture books of this type of literature.

# Disabled Characters in Picture Books



[Video: “Disabled Characters in Picture Books.” \(12:57\) - Link to Disabled Characters in Picture Books Video](#)

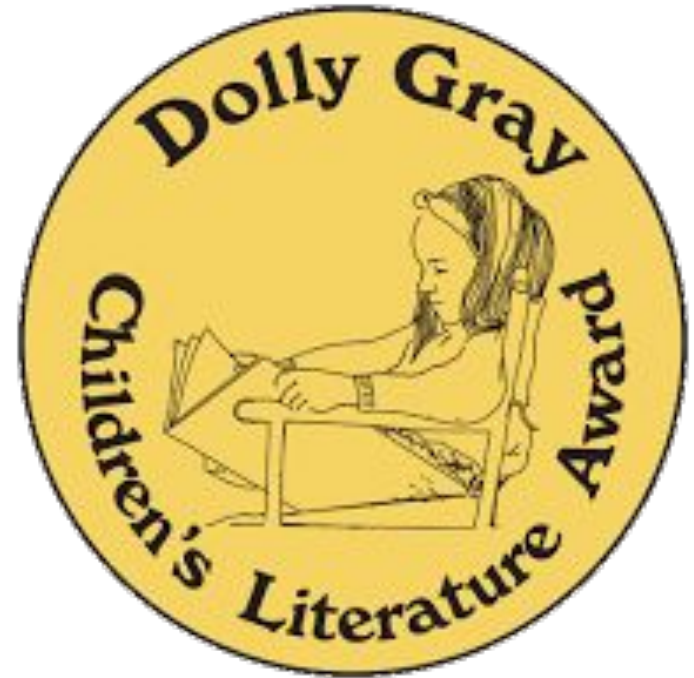
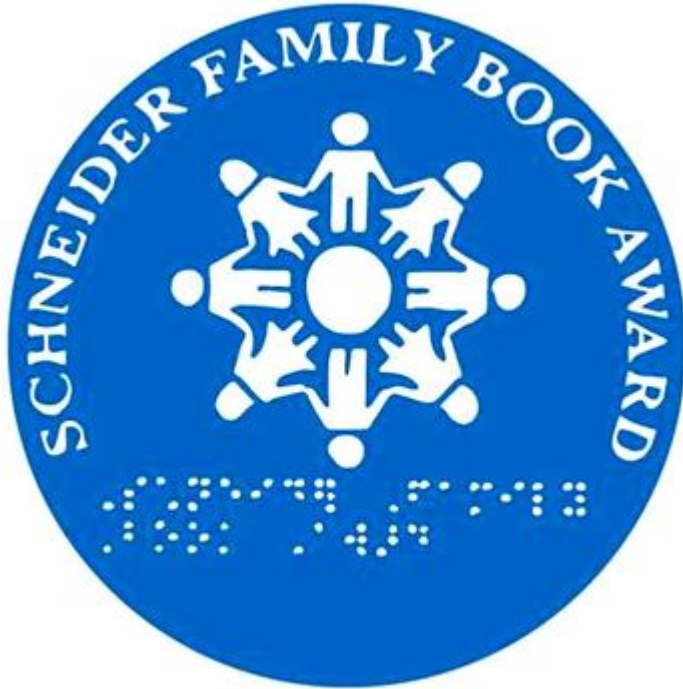


# Discussion (#9)



Why is it important for children with disabilities to see themselves represented in children's books?

# The Schneider and Dolly Gray Awards



# Programming

# Makerspaces - Part 1

- Collaborative spaces in libraries and schools that promote teamwork in creating DIY (“Do It Yourself”) projects
- Open to both children and adults
- Includes both “High Tech” (ex: 3D printers) and “Low Tech” (ex: Legos)

# Makerspaces - Part 2

The Fayetteville Free Library in upstate New York was the first public library in the U.S. to create a makerspace. They called it the “Fab Lab” and contains a variety of tools:

- 3D printers
- Laser Cutters
- Vinyl Cutters
- CNC Mills
- Sewing Machines

# Examples of Machines in Makerspaces

1. Sewing Machines
2. 3D Printers
3. Laser Cutters
4. Hand Tools
5. Electronics
6. Rapid Prototyping
7. Computers



# Sensory Story Time - Part 1

Geared toward younger children in the 2-5 year old range who have sensory processing difficulties.

Provides less distractions and focus more on situational awareness while accomplishing the main activity.

# Sensory Story Time - Part 2

1. Seeing
2. Hearing
3. Touching
4. Smelling
5. Tasting
6. Proprioception - Awareness of one's body.
7. Vestibular - Understanding ourselves in proportion to the world.





# Sensory Story Time - Part 3

Utilizes the combination of the reenactment of colorful picture books, calming music, dancing, and crafts in order to help the children stimulate their senses.

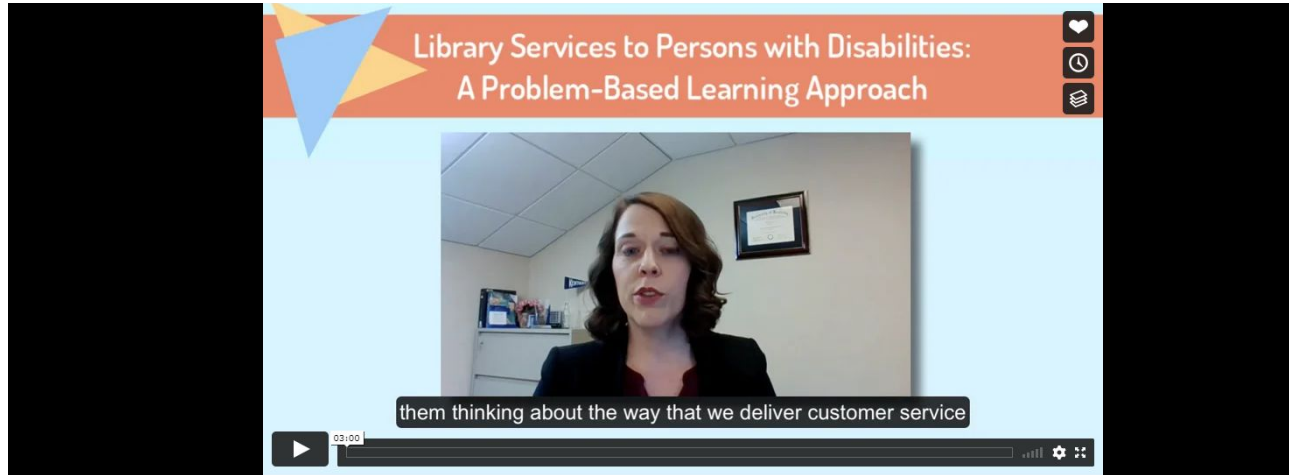
Works on socializing with peers as well as practice making choices in low-stakes settings.

# Sensory Story Time Best Practices

1. Have a visual schedule
2. Repeat
3. Its okay to shorten stories
4. Have designated spots for each child to sit
5. Keep it small
6. Turn it down
7. Make it interactive



# Project ENABLE - Challenge Video (#2)



🔒 P4\_Rachel Combs Video 1\_with Captions

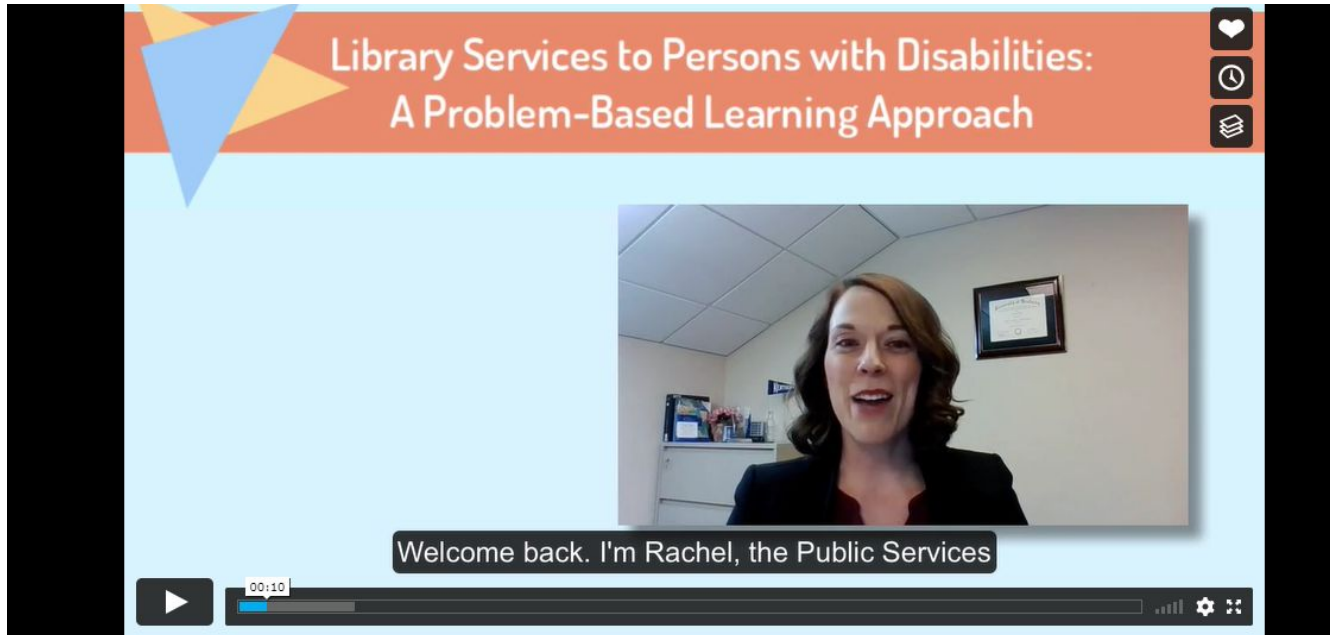
Video: “The Challenge - Rachel Combs - Adequate Program Accessibility” (3:00) - [Link to Challenge Video](#)

# Discussion (#10)



What would you do?

# Project ENABLE - Solutions Video (#2)

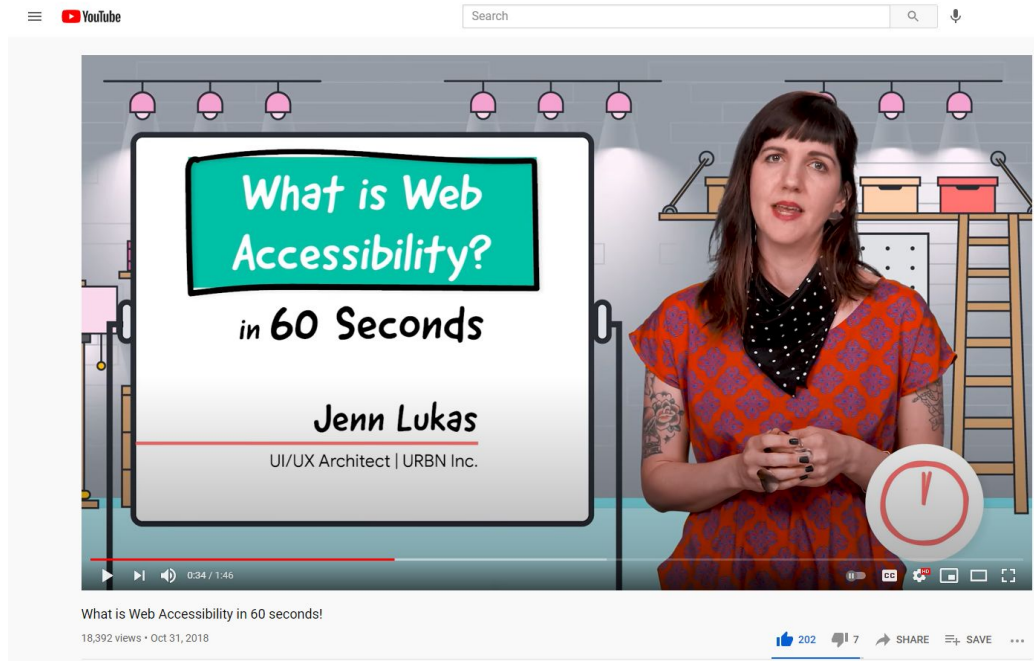


Video: “A Solution - Rachel Combs - Adequate Program Accessibility” (5:25) -

[Link to Solutions Video](#)

# Website Accessibility

# What is Website Accessibility?



Video: "What is Web Accessibility in 60 seconds!" (1:46) -

[Link to Website Accessibility Video](#)

# UD and the Library Website - Part 1

1. Equitable Use - Changing the color contrast on your library website to avoid stigmatizing patrons with color blindness.
2. Flexibility in Use - Providing customization for dashboards can enable patrons to be able to choose for themselves how they want the layout of the website to look like.
3. Simple and Intuitive Use - Don't have a busy webpage. This can cause distraction and make navigation through the website tedious. Sometimes, a simple design is the best design.



# UD and the Library Website - Part 2

4. Perceptible Information - Adding transcripts and closed captions to videos on your library website can help patrons who have trouble hearing.
5. Tolerance for Error: If your library website has a login form, make sure to add input format validation errors. This basically means if you type a password wrong or leave a form blank, the page responds by showing text next to the form indicating what was wrong. If the patron types the wrong letter by accident, it will let the patron know rather than just being blocked.

# UD and the Library Website - Part 3

6. Low Physical Effort: Make sure that your library website is navigable by the tab feature on keyboards. Using the tab key as a way to navigate through the website can help patrons who have trouble clicking a mouse.
7. Size and Space for Approach and Use: Use the text to describe where the link will go. For example, the text “Click Here” is not a helpful link name but “About Us” is. This helps the user navigate the website easier.

# WCAG Guidelines

- You can also use the Web Content Accessibility Guidelines 2.1 (WCAG 2.1) as another tool in assessing your library's website.
- These were created by the World Wide Web Consortium, otherwise known as W3C.
- The first guidelines, WCAG 1.0, were published in 1999. The current version is WCAG 2.1 (as of June 2021), which was released in 2018.
- W3C is currently in the process of creating the WCAG 2.2 standards that you can see if you visit their website.

# Web Content Accessibility Guidelines 2.1

## (WCAG 2.1) - Part 1

1. Perceivable - Information and user interface components must be presentable to users in ways they can perceive;
  - 1.1. Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.
  - 1.2. Provide alternatives for time-based media.
  - 1.3. Create content that can be presented in different ways (for example simpler layout) without losing information or structure.
  - 1.4. Make it easier for users to see and hear content including separating foreground from background.

# WCAG 2.1 - Part 2

2. Operable - User interface components and navigation must be operable;
  - 2.1. Make all functionality available from a keyboard.
  - 2.2. Provide users enough time to read and use the content.
  - 2.3. Do not design content in a way that is known to cause seizures or physical reactions.
  - 2.4. Provide ways to help users navigate, find content, and determine where they are.
  - 2.5. Make it easier for users to operate functionality through various inputs beyond the keyboard.

# WCAG 2.1 - Part 3

3. Understandable - Information and the operation of user interface must be understandable;
  - 3.1. Make text content readable and understandable.
  - 3.2. Make Web pages appear and operate in predictable ways.
  - 3.3. Help users avoid and correct mistakes.

# WCAG 2.1 - Part 4

4. Robust - Content must be robust enough that it can be interpreted by a wide variety of user agents, including assistive technologies.
  - 4.1. Maximize compatibility with current and future user agents, including assistive technologies.

# Discussion (#11)



Can you think of other website accessibility examples?



# Web Accessibility Tools

Google Lighthouse - A Chrome browser extension. It provides you with an immediate report on the accessibility of your website. Google Lighthouse looks at the performance, accessibility, best practices, and SEO of the webpage. Free to use.

WAVE - A browser extension that provides you with visual feedback on your webpage by using different color icons. Each icon indicates a different error. Free to use.

# Activity #2

## Directions:

1. Break into small (3-5) discussion groups (group size depends on the amount of people attending).
2. Begin an action plan of how to get started on applying universal design in your library.
3. Put at least two examples for each category (physical barriers, website accessibility, collection development, program development, and policy).
4. After 15 minutes the groups will come back together and a speaker for each group will discuss what the group decided and why.

# Recap

1. Models of Disability
2. Design Theories
3. Universal Design Principles
4. The Law and ALA Policies
5. Physical Barriers
6. Collection Development
7. Programming
8. Website Accessibility

# Closing

1. Complete the workshop evaluation.
2. Submit it to the instructor.
3. Take what you have learned and apply at least one new idea to your library.
4. Enjoy your day!

**Thank you!**