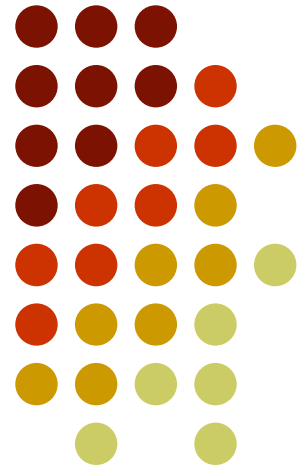


# Building a Thesaurus from the Ground Up: Cataloging Universal Design Images

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# How It All Began



- Richard Duncan, Researcher at the Center for Universal Design (CUD) at North Carolina State University (NCSU)
  - Had large number of images stored on the Center's server
  - Wanted to share them with other UD centers and with the Public Health Image Library (PHIL) at the Center's for Disease Control (CDC) in Atlanta

# A Goal is Set



- Develop a standard method for cataloging UD-related images, including...
  - Thesaurus
  - Taxonomy (Classification)
  - Rules for cataloging

# The Challenge



- Standards will largely be used by UD practitioners rather than librarians and visual resources professionals
- Making something simple, straightforward, and easy to understand

# What Exactly is Universal Design?



- Grew out of barrier-free design, accessible design, and assistive technology
- Wide-ranging solutions for everyone, not just those with disabilities
- Does not stigmatize individuals
- Everything is usable to all

# Common Example of Universal Design



# 7 Principles of Universal Design



1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive Design
4. Perceptible Information
5. Minimizing Consequences for Error
6. Low Physical Effort
7. Size and Space for Approach and Use

# Center for Universal Design (CUD) at NCSU



- Established in 1989
- A national research, information, and technical assistance center that evaluates, develops, and promotes accessible and universal design in housing, buildings, outdoor and urban environments and related products.
- <http://www.design.ncsu.edu/cud/>



# Public Health Image Library (PHIL)



- Sponsored by the Centers for Disease Control
- Collection of still images, image sets, and multimedia files related to public health
- MeSH (Medical Subject Headings) is primary controlled vocabulary used
- <http://phil.cdc.gov/phil/home.asp>

# The Division of Labor



- Hugh Kelsey – Project Manager
- Barbara Brenny – Builder of Controlled Vocabularies
- Richard Duncan – Universal Design Guru

# Self-Education



- **Accessible Environments: Toward Universal Design**, Ronald L. Mace, Graeme J. Hardie, and Jaine P. Place, 1996
- **Universal Design Handbook**, Wolfgang F.E. Preiser, 2001
- Publications section of CUD's website:  
[http://www.design.ncsu.edu/cud/pubs\\_p/pubs\\_p.htm](http://www.design.ncsu.edu/cud/pubs_p/pubs_p.htm)

# Creating the Taxonomy



- Purpose is to describe UD product or environment
- Four tiers
- Top levels: Non-Residential, Residential, Product Design, and Transportation Vehicles
- Expandable and goes beyond current needs
- Some terminology borrowed from LCSH and AAT

# Designing the Taxonomy to Support Uncertainty



Non-Residential	Public Entrances
Non-Residential	Public Rest Rooms

# Incorporating the Language of Universal Design



Parks	Improved Parks	
Parks	Unimproved Parks	
Transportation Spaces	Rest Stops	Improved Rest Stops
Transportation Spaces	Rest Stops	Unimproved Rest Stops

# Incorporating the Language of Universal Design



Transportation Spaces	Service Stations	Full-Service
Transportation Spaces	Service Stations	Self-Service

# Keeping Terminology Current



Asylums and Orphanages

vs.

Psychiatric Hospitals and Children's  
Homes



# Problem Terminology



- Assisted Living Facilities
- Congregate Housing
- Residential Care Homes
- Retirement Communities
- Senior Apartments
- Nursing Homes
- Homes for the Elderly
- Active Adult Communities
- Alzheimer's and Dementia Care
- Adult Foster Care Homes
- Continuing Care Retirement Community

# Creating the Thesaurus



- Purpose is to fill in important terms not covered by taxonomy and UD principles
- Complements taxonomy

# Creating the Thesaurus



- Residential, Single-Family Dwellings, Houses
- Bathrooms
- Toilet Tank Levers

# Creating the Thesaurus



- Pulled terms from AAT, LCSH, books on Universal Design, and other resources
- Making relationships between terms revealed missing terminology
- Main subject areas: building components, yard and landscape elements, age groups, physical movements, furniture components, disabilities, disorders, information technology, and UD concepts

# Testing the Taxonomy and Thesaurus



- Richard, the UD researcher, cataloged 25 of his images
- His work was reviewed by Barbara, who then noted how she would have cataloged each image
- Hugh reviewed both versions and recorded his observations

# Testing the Taxonomy and Thesaurus



- Barbara and Richard made similar choices
- Suggests UD practitioners will understand how to use taxonomy and thesaurus
- Resulted in more changes to both controlled vocabularies

# Preparations for Evaluation by UD Practitioners



- Created cataloging instructions via a diagram
- Wrote explanation of taxonomies and thesauri and how they relate to the description of images
- Sent package to evaluators

# Evaluators' Responses



- Happy to see a standardized way to catalog UD images
- Provided lists of terms to be added, amended, or removed
- Feed back used to make further changes to taxonomy and thesaurus



# Next Steps



- Putting Richard's 250 images into PHIL
- Publishing taxonomy and thesaurus on Center for Universal Design's website, the CDC's website, or both
- Project put on hold due to Richard leaving his position at CUD
- Plan to resume project in the near future



Thank You