Overview

- Universal design
- Role of occupational therapy
- Current state
- Root cause analysis
- Proposed solution
- Important lessons
- Next steps
Universal Design

Intentionally designing products and environments to benefit all users without needing adaptation

(Center for Universal Design, 1997)
Accessibility and Universal Design

**Accessibility**
- intended specifically for individuals with disabilities
- compatibility with AT

**Universal Design**
- all users in mind
- no need for AT or adaptation

(Aselin, 2014; Federici et al., 2005; Myhill et al., 2008)
Occupational Therapy Perspectives

- Environmental Focus
- Influences on Function
- Activity Analysis
- Facilitating Engagement

(American Occupational Therapy Association, 2014)
“...disability is an evolving concept...that results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others.”

*United Nations, 2006*
Person-Environment-Occupation Model

Virtual Environment

Performance

AT

Moodle

Person: Students

Occupation: Higher Education

(Law, Cooper, Strong, Steward, Rigby, & Letts, 1996)
What is currently happening?
Uses of the Internet

- information for prospective students
- applying to the university
- registering for courses
- library services
- paying student accounts
- online courses

(Asselin, 2014; Dutta, Schiro-Geist, & Kundu, 2009; Federici et al., 2005; Gradel & Edson, 2010; Heiman & Shemesh, 2012; Thompson, Burgstahler & Comden, 2010)
Existing Legislation

**ADA**
- anti-discrimination
- physical spaces

**Section 504**
- anti-discrimination
- academic accommodations

**Section 508**
- accessibility standards for acquired electronic information technology
- includes webpages

(Americans With Disabilities Act, 2008; Rehabilitation Act, as amended, 1998)
Quality Matters Rubric

Features

- checklist style assessment with point values
- quantitative data of overall online course quality
- eight categories
  - total of 43 standards
  - includes accessibility and usability standards

(Pollicia & McCallister, 2009; Quality Matters, 2016)
What is the problem?
Root Cause Analysis

Reactive approaches

- Section 504
- Case-by-case basis

Low legal risk

- Section 508 not applicable to private universities

(United States Department of Education, 2015)
Web Content Accessibility Guidelines

Principles

- perceivable
- operable
- understandable
- robust

Features

- written for web developers
- recommendations for general webpages and technology

(General Services Administration, 2016; World Wide Web Consortium, 2008)
Proposed Solution
Solution Requirements

**Implementable**
methods to easily apply UD principles

**Specific**
intended for online learning

**Understandable**
no technological jargon
UD Checklist for Online Courses

Ensure accessibility and implement UD principles
UD Checklist for Online Courses

Features

- 15-items
- Simple yes-no questions
- Single page of paper
- Supplementary website
  - Why and How for each item

Intended for use throughout course website design
Let’s explore the website.

http://web5.lib.pacificu.edu/universallydesignedonlinecourses/
Elements of Online Course Design
Text Styling

How would you style a section heading?

Formatting headings & paragraph levels
Text Styling

Formatting headings & paragraph levels
Text Styling

Formatting headings & paragraph levels

Level 1 heading

Path: h1
Text Styling

Formatting headings & paragraph levels
Text Styling

Font style, size, and color

a) Serif
b) Sans serif
c) Comic sans MS
Text Styling

Font style, size, and color

a) Serif

b) Sans serif

c) Comic sans MS
Text Styling

Font style, size, and color

a) Serif
b) Sans serif
c) Comic sans MS
Orientation

Section titles—description, date, week number
Orientation

Consistent layout and logical sequence

1. Learning objectives
2. Section resources
3. Assignments due
4. Discussion post
How do you keep track of your progress?
Orientation

Tracking progress
Descriptions

Alternative text for images, hyperlinks, and tables

IMG_0706.jpg
One volunteer needed

Descriptions

Alternative text for images, hyperlinks, and tables
Descriptions

Alternative text for images, hyperlinks, and tables
Important Lessons

- technological literacy
- clear application to virtual education
- focus on environmental barriers
- marketing to educators
  - particularly at private institutions
- OT perspective & PEO model
Next Steps

- incorporate into orientations and trainings
- integrate website into Pacific University Library website
- investigate effectiveness and perceptions
- present at professional conferences
  - Quality Matters annual conference (October 2016)
  - Oregon Technology in Education Network (February 2017)
Questions

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Contact

Jennifer Yee Cole, OTS

Pacific University, School of Occupational Therapy

JYCole@PacificU.edu

https://sites.google.com/a/pacificu.edu/jenniferyeecoleotd/
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