Basics of Information and Communications Technology (ICT) Accessibility

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Definition of Accessible

• “Accessible means a person with a disability is afforded the opportunity
  • to acquire the same information,
  • engage in the same interactions, and
  • enjoy the same services as a person without a disability
  • in an equally effective and equally integrated manner,
  • with substantially equivalent ease of use.

  – The person with a disability must be able to obtain the information as fully, equally and independently as a person without a disability.”

  – Settlement Agreement, US Dept of Education and Institutes of Higher Education
ICT Accessibility

• Target Audience
  – Employees and Prospective Employees
  – Students and Prospective Students
  – Members of the public who...
Disability Types

• Visual
• Hearing
• Motor
• Cognitive

• Different types of Assistive Technology (AT)
Accessibility Laws & Guidelines

• Section 508, Rehabilitation Act Amendments
  – Standards for Compliance
  – Section 508 Refresh

• Worldwide Web Consortium (W3C)
  – Web Content Accessibility Guidelines (WCAG) 2.0
  – Accessible Rich Internet Applications (WAI-ARIA)
  – Authoring Tool Accessibility Guidelines (ATAG)
  – User Agent Accessibility Guidelines (UAAG)
Accessibility Best Practices

- BBC Mobile Accessibility Best Practices
- Leading Experts in ICT Accessibility and Higher Education
- Office of Civil Rights (OCR) Settlement Agreements
  - U.S. Department of Education
  - U.S. Department of Justice
ICT in Higher Education

• Includes:
  – Academic and Online Courses
  – Databases
  – Dynamic Rich Internet Applications
  – E-commerce, Online Payment Systems
  – Electronic Documents
  – Interactive Tutorials
  – Library Services
  – Registration Systems
  – Software Programs
  – Text Messaging Apps
  – Video Conferencing Systems
  – Web Conferencing Systems
  – Websites: Desktop and Mobile
  – Web-based Applications
  – etc.
Who is Responsible?

• **Everyone** involved in the design, development and delivery of electronic or web-based content

  – Administrators
  – Content Experts
  – Database Developers
  – Digital Media Developers
  – Faculty or Designates
  – Instructional Designers
  – Procurement Personnel
  – Program Developers (including Grants)
  – Third Party Contractors
  – Website and Application Developers
  – Website Designers
  – *etc.*
Accessibility Baked-in vs. Retrofitting

• **Baked-in**: added *during* design, development as *best practice*
  1) Accessibility

• **Retrofitting**: added *after-the-fact*, tear apart and rebuild
  1) Remediation
  2) Accessibility
Example: Use Word Styles

Title of Document – Heading 1

Section Title – Heading 2
The quick brown fox jumped over the lazy dog. This is Normal text.
_The quick brown fox_. This is Emphasis text.
**The quick brown fox.** This is Strong text.

Sub-section Title – Heading 3
The quick brown fox jumped over the lazy dog. This is Normal text.
_The quick brown fox_. This is Emphasis text.
**The quick brown fox.** This is Strong text.

Sub-sub-section Title – Heading 4
The quick brown fox jumped over the lazy dog. This is Normal text.
_The quick brown fox_. This is Emphasis text.
**The quick brown fox.** This is Strong text.
Semantic Structure vs. Visual Indicators

Heading 1

Text <Normal>
- Image ALT Text
- Descriptive Hyperlink

Heading 2

Text <Normal>
1. Image ALT Text
2. Descriptive Hyperlink

Heading 3

Text <Normal>
- Image ALT Text
- Descriptive Hyperlink

Heading 2

Text <Normal>
- Image ALT Text
- Descriptive Hyperlink
Heading 1

Text <Normal>
- Image ALT Text
- Descriptive Hyperlink

Heading 2

Text <Normal>
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2. Descriptive Hyperlink

Heading 3

Text <Normal>
- Image ALT Text
- Descriptive Hyperlink

Heading 2

Text <Normal>
- Image ALT Text
- Descriptive Hyperlink
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<tr>
<th>Heading 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text &lt;Normal&gt;</td>
</tr>
<tr>
<td>• Image ALT Text</td>
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<tr>
<td>• Descriptive Hyperlink</td>
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</tbody>
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<table>
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<tr>
<th>Heading 2</th>
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<tbody>
<tr>
<td>Text &lt;Normal&gt;</td>
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<tr>
<td>1. Image ALT Text</td>
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<tr>
<td>2. Descriptive Hyperlink</td>
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<tr>
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<td>Text &lt;Normal&gt;</td>
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</tbody>
</table>

Equally Effective Access? Fully, equally, independently?
ICT Accessibility - Implementation

5 Common Challenges

1. Accessibility vs. Disability
2. Administrative Buy-in
3. Iterative Process
4. Training
5. Procurement