An ID’s Approach to Accessibility – Lessons Learned

Ben Saxon
Justin Tumelaire
• Discuss *accessibility* and its relationship to your organization
• Discuss the implications of non-compliant learning content to learners, costs, and schedules
• Identify stages within the development process for compliance.
• Discuss strategies for addressing challenges associated with non-compliant learning content
Discussion

• Work in your tables and make a list of what comes to mind when you think about accessibility.

• Consider how your institution delivers content, and what must be considered (videos? PPTs? PDFs?)
What is Cengage’s IDD team?

Instructional Design and Delivery (IDD) delivers unique end-to-end outcome-based academic services that integrates technology, content, and design to support institutions’ goals.

IDD focuses on the following market verticals: Retention, Completion, Accountability, Readiness and Employability

IDD partners with:
- For-profit, private career, trades, etc.
- Not-for-profit, traditional colleges and universities
- Community colleges and online college systems
- Cengage product teams

Cengage Institutional Services
Roles

- Project Teams
  - Project Manager
  - Lead ID
  - Educational Technologist
  - Copyeditor
- Accessibility ID
- Learning Center of Excellence
  - Director of UDL and Accessible Technology
  - Accessibility/UDL Specialist
## Phases of a Project

<table>
<thead>
<tr>
<th>Scoping</th>
<th>Pre-Launch</th>
<th>Project Launch</th>
<th>Dev &amp; Prod</th>
<th>Project Close</th>
</tr>
</thead>
</table>
| • Work with sales to identify the scope of work for the project. | • Create design prototype  
• Evaluate all texts for accessibility and content gaps  
• Run design summit, get customer feedback  
• Update docs & plan | • Confirm and go over detailed schedule and design prototype with stakeholders  
• Point out how accessibility will be addressed | • Create deliverables using decisions from design prototype  
• Remediate assets as determined in the Handoff Doc | • Discuss lessons learned  
• Send any updated materials to the Product Team |

### Accessibility IDs
- (designated IDs) support scoping—fill out Scoping Gap Analysis and handoff docs for accessibility
- **Accessibility IDs** fill out the Full Gap Analysis for accessibility, answer questions about design
- **Lead ID** shows design prototype to the customer and talks about how accessibility will be addressed in the solution
- **IDs** design deliverables to meet accessibility requirements
- **Accessibility IDs** answer questions
- **IDs discuss** lessons learned and content updated for accessibility
Our Sphere of Influence:

- Student-facing Office docs or PDFs we include or content we write has:
  - Screen-readability
  - Appropriate color contrast
  - Appropriate reading order
  - Descriptive links
  - Accessible form functions
- Images in editable files (test bank questions, PPTs, lectures) have:
  - Appropriate alt text
  - No text in the images
- Videos, including those in a platform, have:
  - Closed captioning
  - Transcripts

* We will check much more than this in scoping, to ensure that the customer knows, and we design for, what we cannot change (by including alternate activities etc.)
Scoping Gap Analysis

• Expanded Gap Analysis to include both content and accessibility
• Review a **sample** of the content for the project (based on project size)
• Determine where content lacks accessibility
  • Effort
  • Cost
  • Schedule
• Focus on the content that aligns to learning objectives
## Scoping Gap Analysis (Example)

### Course Objectives

<table>
<thead>
<tr>
<th>Course Objective</th>
<th>Chapter(s)</th>
<th>Coverage Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 1</td>
<td>1, 2, 3</td>
<td>None</td>
</tr>
<tr>
<td>Objective 2</td>
<td>4, 5, 6</td>
<td>None</td>
</tr>
<tr>
<td>Objective 3</td>
<td>1, 2, 3</td>
<td>None</td>
</tr>
<tr>
<td>Objective 4</td>
<td>4, 5, 6</td>
<td>None</td>
</tr>
</tbody>
</table>

### Course Number and Title

| ECO210 Microeconomics | Microeconomics | McEachern | 6 | 2016 | 9781337408059 |

### Accessibility Remediation Required and Time/Cost to Remediate

<table>
<thead>
<tr>
<th>Asset Type (what?)</th>
<th>Remediation</th>
<th>ID (hours)</th>
<th>Ed Tech (hours)</th>
<th>Vendor ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Many graphs (estimating 200) do not have alt text or not adequate (estimating 300)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CNOW</td>
<td>Can’t be launched by using keyboard - can’t change</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aplia homework</td>
<td>Not accessible - can’t change</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Flashcards are fine</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Videos are fine</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Case Study in Word with questions</td>
<td>Word does not use headings - one for each chapter and there are 24 chapters (10 mins each)</td>
<td>4</td>
<td>0.5</td>
<td>0</td>
</tr>
<tr>
<td>Instructor Resources: PPT</td>
<td>PPTs need slide titles and order of items needs to be fixed - 20 PPTs, 8 slides per to fix = 5 hour per to fix</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Testbank-Cognoset</td>
<td>No alt text in graphs, would need to be added in Cognoset (estimate 400)</td>
<td>200</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>PDF</td>
<td>Writeable form fields have no descriptions and would need to be added (estimate 10)</td>
<td>5</td>
<td>1</td>
<td>5,000</td>
</tr>
</tbody>
</table>

### Ed Tech and Vendor Costs

- Total ID hours: 334
- Total Ed Tech hours: 46.5
- Total vendor cost: $21,000
Full Gap Analysis

- Pre-launch: Full Gap Analysis
  - All courses are considered
  - Confirm there are no major deviations from scoping
- Prototyping and Development:
  - Full Gap Analysis informs design – make sure that design reflects the accessibility decisions
  - Log newly uncovered accessibility issues to the Full Gap Analysis as they are uncovered
- Project Close:
  - Send updated files to Product
# Full Gap Analysis (Example)

## Full Gap Analysis

**Alisha/Val, Nate**  
Amazing Automotive Academy 2018  
Canvas v10  
Objectives: booklist

<table>
<thead>
<tr>
<th>Course Number and Title</th>
<th>Textbook Title</th>
<th>Author (include multiple authors)</th>
<th>Edition</th>
<th>Pub Year/Date</th>
<th>ISBN-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO210 Microeconomics</td>
<td>Microeconomics</td>
<td>McEachern</td>
<td>6</td>
<td>2019</td>
<td>9781337408059</td>
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### Case Study in Word with questions

- Word docs don’t use headings: One for each chapter and there are 24 chapters (10 mins each)
  - Needs to be done

### Instructor Resources: PPT

- PPTs need slide titles and order of items needs to be fixed - 24 PPTs, 8 slides per to fix = .5 hour per to fix
  - Needs to be done

### Testbank: Cognosco

- No alt text in graphs, would need to be added in Cognosco (estimate 400) - changed to 100
  - Needs to be done

### PDF

- Writeable form fields have no descriptions and would need to be added (estimate 10)
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Discussion, Part 2

• What have you learned that you can implement at your institution?
Questions?
Accessibility Tools/Resources

- How to Meet WCAC 2 (Quick Reference)
- WebAIM Color Contrast
- ChromeLens – Used to simulate complete or partial blindness and colorblindness.
- HTML Code Sniffer – assesses the accessibility of HTML
- NVDA screen reader (NonVisual Desktop Access) – free screen reader
- Microsoft Office accessibility checkers