

# An Instructional Design Approach to Accessibility – Lessons Learned

Presenter: Justin Tumelaire, Cengage Learning

## Agenda

- *accessibility* and its relationship to your institution
- Instructional Design and Delivery (IDD) in context
- how accessibility fits into the IDD development process
- how ensuring accessibility affects cost and schedule
- addressing challenges associated with non-compliant learning content

## Discussion

- What are some of the things that your institution currently does to support the delivery of accessible content?
- What are some of the challenges that your institution has encountered when trying to deliver accessible content?

## 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 partners with:

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

## 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

Scoping	Pre-Launch	Launch	Development and Production	Project Close
• Work with sales to identify the scope	• Create design prototype	• Confirm and go over detailed	• Create deliverables using decisions	• Discuss lessons learned

<p>of work for the project.</p> <ul style="list-style-type: none"> <li>• Accessibility IDs (designated IDs) support scoping— fill out Scoping Gap Analysis and handoff docs for accessibility.</li> </ul>	<ul style="list-style-type: none"> <li>• Run design summit, get customer feedback</li> <li>• Update docs &amp; plan</li> <li>• Accessibility IDs evaluate all content and fill out the Full Gap Analysis for accessibility, answer questions about design.</li> </ul>	<p>schedule and design prototype with stakeholders</p> <ul style="list-style-type: none"> <li>• ID shows design prototype to the customer and talks about how accessibility will be addressed in the solution.</li> </ul>	<p>from design prototype</p> <ul style="list-style-type: none"> <li>• IDs design deliverables to meet accessibility requirements.</li> <li>• Accessibility IDs answer questions.</li> </ul>	<ul style="list-style-type: none"> <li>• Send any updated materials to the Product Team</li> <li>• IDs discuss lessons learned and content updated for accessibility</li> </ul>
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### 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 Spreadsheet)

Scoping Gap Analysis					
	Alisha/Val, Nate		10/11/2018	Total ID hours:	334
	Amazing Automotive Academy 2018	Canvas v 10		Total Ed Tech hours:	46.5
	<a href="#">objectives</a>	<a href="#">booklist</a>		Total vendor cost:	\$21,000
Course Number and Title	Textbook Title	Author (include multiple authors)	Edition	Pub Year/Date	ISBN-13
ECO210 Microeconomics	Microeconomics	McEachern		6	2019 9781337408059
Accessibility remediation required and time/cost to remediate					
Asset Type (what?)	Remediation	ID (hours)	Ed Tech (hours)	Vendor (\$)	
Reading	Many graphs (estimating 200) do not have alt text in the reading, images with no alt text or not adequate (estimating 300)	0	0	\$0	
CNOW	Can't be launched by using keyboard- can't change	0	0	0	
Aplia homework	not accessible- can't change	0	0	0	
Flashcards are fine		0	0	0	
videos are fine		0	0	\$0	
Case Study in Word with questions	Word docs don't use headings - One for each chapter and there are 24 chapters (10 mins each)	4	0.5	\$0	
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	12	1	0	
Testbank- Cognero	no alt text in graphs, would need to be added in Cognero (estimate 400)	200	40	0	
PDF	Writeable form fields have no descriptions and would need to be added (estimate 10)	5	1	\$5,000	
Course objectives	Chapter(s)	Coverage concerns			
Course objective 1	1, 2, 3	None			
Course objective 2	4, 5, 6	None			
Course objective 3	1, 2, 3	None			
Course objective 4	4, 5, 6	None			

## 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 Spreadsheet)

Full Gap Analysis					
Alisha/Vai, Nate Amazing Automotive Academy 2018 Canvas v 10		10/11/2018	Total ID hours:	71	
			Total Ed Tech hours:	12.5	
			Total vendor cost:	\$5,000	
Course Number and Title	Textbook Title	Author (include multiple authors)	Edition	Pub Year/Date	ISBN-13
ECO210 Microeconomics	Microeconomics	McEachern	6	2019	9781337408059
Accessibility remediation required and time/cost to remediate					
	Asset Type (what?)	Remediation	ID (hours)	Ed Tech (hours)	Vendor (\$)
We can't change alt-text in readings because they are in MT; customer is aware can't change in the platform - customer is aware no aplia	Reading	many graphs (estimating 200) do not have alt text in the reading, images with no alt text or not adequate (estimating 200)	0	0	\$0
	CNOW	Can't be launched by using keyboard- can't change	0	0	0
	Aplia homework	not accessible- can't change	0	0	0
	Flashcards are fine		0	0	0
	videos are fine		0	0	\$0
	needs to be done	Case Study in Word with questions	Word docs don't use headings - One for each chapter and there are 24 chapters (10 mins each)	4	0.5
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	12	1	0
using only 100 questions total for whole course	Testbank- Cognero	no alt text in graphs, would need to be added in Cognero (estimate 400) - changed to 100	50	10	0
ID role is to review that vendor did it right	PDF	wrote some items have no descriptions and would need to be added (estimate 10)	5	1	\$5,000
Course objectives	Chapter(s)	Coverage concerns			
Course objective 1	1, 2, 3	None			
Course objective 2	4, 5, 6	None			
Course objective 3	1, 2, 3	None			
Course objective 4	4, 5, 6	None			

### Discussion, Part 2

- What have you learned in this presentation that you can implement at your institution?
- What suggestions do you have for improving our process?