



**How Do I Know If My PDF Is Accessible?**

The Session begins at 1:00 pm CST  
We will be testing audio quality periodically

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**Useful Keyboard Shortcuts**

- Full list - *Keyboard Shortcuts* from the *Help* menu on the Menu Bar.
- Speaker level Up:  
Windows: Ctrl+Alt+Up Arrow  
Mac: Command-Option-Up Arrow
- Speaker level Down:  
Windows: Ctrl+Alt+Down Arrow  
Mac: Command-Option-Down Arrow
- Chat: Move cursor to the Message text box  
Windows: Ctrl+M  
Mac: Command-M

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**More keyboard shortcuts**

- Open Closed-Captioning window  
Windows: Ctrl+F8  
Mac: Command-F8
- Close Closed-Captioning window  
Windows: Alt+F4 or Ctrl+W  
Mac: Command-W

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### Listening to the Webinar

- The audio for today’s webinar is being broadcast through your computer. Please make sure your speakers are turned on or your headphones are plugged in.
- You can control the audio broadcast via the Audio & Video panel. You can adjust the sound by “sliding” the sound bar left or right.
- If you are having sound quality problems check your audio controls by going through the Audio Wizard which is accessed by selecting the microphone icon on the Audio & Video panel



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### Listening to the Webinar, *continued*

If you do not have sound capabilities on your computer or prefer to listen by phone, dial:

**1-712-432-3066**

**Pass Code:**  
148937

This is **not** a Toll Free number

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### Listening to the Webinar, *continued*

MOBILE Devices supported include iPhone, iPad, Android Devices, Kindle Fire HD)\*\*

Individuals can download the free Blackboard Collaborate App from the Apple Store, Google Play or Amazon



\*\*Closed Captioning is not visible via the Mobile App and there is limited access to the white board for individual's using voice over technology

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### Captioning

- Real-time captioning is provided during this webinar.
- The caption screen can be accessed by choosing the icon in the Audio & Video panel.



- Once selected you will have the option to resize the captioning window, change the font size and save the transcript.

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### Submitting Questions

- You may type and submit questions in the Chat Area Text Box or press Control-M and enter text in the Chat Area
- If you are connected via a mobile device you may submit questions in the chat area within the App
- If you are listening by phone and not logged in to the webinar, you may ask questions by emailing them to [webinars@ada-audio.org](mailto:webinars@ada-audio.org)



*Please note:* This webinar is being recorded and can be accessed on the website at [www.ada-audio.org](http://www.ada-audio.org) within 24 hours after the conclusion of the session.

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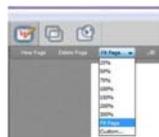
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### Customize Your View

- Resize the Whiteboard where the Presentation slides are shown to make it smaller or larger by choosing from the drop down menu located above and to the left of the whiteboard. The default is “fit page”



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**Customize Your View** *continued*

- Resize/Reposition the Chat, Participant and Audio & Video panels by “detaching” and using your mouse to reposition or “stretch/shrink”. Each panel may be detached using the  icon in the upper right corner of each panel.

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**Setting Preferences**

- Depending on your system settings you may receive visual and audible notifications when individuals enter/leave the webinar room or when other actions are taken by participants. This can be distracting.
- To turn off notifications (audible/visual)
  - Select “Edit” from the tool bar at the top of your screen
  - From the drop down menu select “Preferences”
  - Scroll down to “General”
    - select “Audible Notifications” Uncheck anything you don’t want to receive and “apply”
    - Select “Visual Notifications” Uncheck anything you don’t want to receive and “apply”
  - For Screen Reader User – Set preferences through the setting options within the Activity Window (Ctrl+slash opens the activity window)

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**Technical Assistance**

- If you experience any technical difficulties during the webinar:
  1. Submit a message regarding your issue via the chat area and the Moderator will address your concern via a private chat with you and/or refer it to one of the Great Lakes ADA Center IT Staff to contact you off line; or
  2. Email [webinars@ada-audio.org](mailto:webinars@ada-audio.org); or
  3. Call 877-232-1990 (V/TTY)

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**How Do I Know If  
My PDF Is Accessible?**

Christy Blew, M.S., C.C.T.  
IT Accessibility Specialist  
University of Illinois

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**Objectives**

- Be familiar with accessible PDF terms (ie, tags) and location of accessibility checking tools in Acrobat XI
- How to activate and use the Form Editor to add Tool Tips to form objects
- Identify at least three items that are needed to make a PDF accessible

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May PDF be ever in your favor

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### Housekeeping

- Adobe is a company; they are the creators of Acrobat
- Acrobat is a tool for creating, editing and viewing PDF files, yet is not a word processing program
- PDF is an export format type of document. Just as you would get a piece of paper from a printer, you get a PDF from Acrobat

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### PDF Structure

**Visual Layer**  
(also referred to as the Physical Layer)

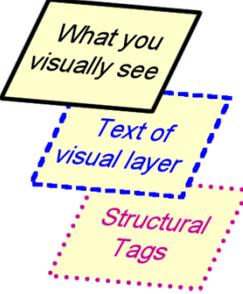
- This is what you would associate as a "PDF File". It is the version that would exist if you were to print out the PDF in a hard copy.

**Content Layer**  
(also referred to as the Text Layer)

- This layer contains the textual information that is associated with the Visual Layer. In an accessible PDF, the reading order of the Content Layer mimics the order implied by the Visual Layout of the document.

**Tags Layer**

- The Tags Layer contains the PDF tagging structure (similar to HTML markup for a webpage) that is used by assistive technology.



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### PDF "Tags"

- "Tags" provide a structured, textual representation of the PDF that is presented to assistive technology (AT) such as screen readers.
- AT can determine paragraphs, lists, tables, form elements, etc. from tags.
- A PDF without tags appears either blank or as one large block of text to AT.

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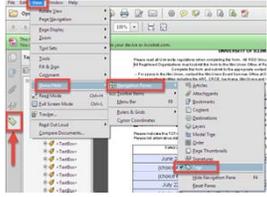
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### Where to find “Tags”

- Left side icon panel: the tag icon
- View > Show/Hide > Navigation Panes > Tags



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### PDF/UA

- ISO standard for accessible PDF, sets clear rules for developers and authors of tagged PDF documents and forms.
- On February 18 2015 the US Access Board announced its Proposed Rule for US federal policy on accessibility, commonly known as Section 508. The proposed rule identifies PDF/UA as equivalent to WCAG 2.0 for “appropriate content”

<http://www.access-board.gov/news/1717-board-proposes-updated-ict-accessibility-requirements>

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### PDF/UA Description

- A way to use Acrobat to produce documents available to all persons, including those using AT
- Tags must correctly represent the document's semantic structures (headings, lists, tables, etc)
- Problematic content is prohibited, including illogical headings, the use of color/contrast to convey information, inaccessible JavaScript, and more
- Meaningful graphics must include alternative text
- Security settings must allow assistive technology access to the content
- Fonts must be embedded, and text mapped to Unicode

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### Evaluation & Remediation

- Most people are trying to find out if a PDF is accessible or trying to fix one they know is not accessible
- Yes, this can be a nightmare!



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### Why Evaluate?

- Sometimes no access to original document or applications conversion does not maintain tagging structure
- Currently there is no tool to automatically check a PDF file for functional accessibility.
- There are tools currently that check some items, but to check a PDF for full accessibility, you still need to do manual checking.

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### “Quick Checks”

- Renderable Text – Text vs. Image
- Navigation Structure – PDF “Tags”
- Text Descriptions – Non Text Descriptions
- Table Structure
- Form Elements (including tab order)
- Reading Order

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### NOTE!!!

- Some browsers will try to “guess” what a PDF has in it when there are not tags. Some people mistake this as being “accessible” because the browser finds text
- Most of the time AT will still struggle with the PDF



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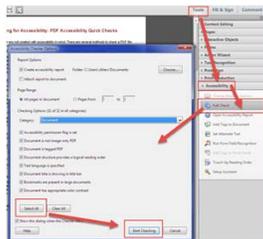
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### Accessibility Checker

- Built in Accessibility Checker
- Detailed report on accessibility
- Is a great 1<sup>st</sup> pass for accessibility
- Easy to fix issues
- Notes manual checks



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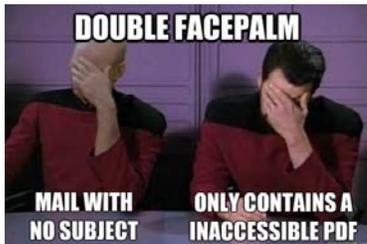
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### Using the Accessibility Checker



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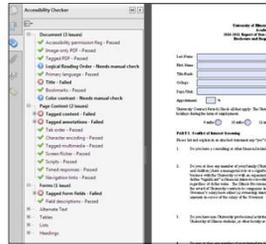
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### Working With Results

- Right click on an issue to get more information
  - Fix
  - Skip Rule
  - Explain



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### Just keep breathing....



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### “Complex PDF” Checks

- Data Tables**
  - Use the Tags panel to check if cells are marked up with TD and TH correctly
- Charts**
  - Charts are considered non-text elements and should have associated alt text
- Forms**
  - Forms need to have Tool Tips and be a part of the Tag structure
- Multimedia**
  - Audio should have a text transcript, Video should be captioned.

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### Table Rules

- All tables must have at least one heading row
- Tables with a heading row and heading column must use ID's to identify cells

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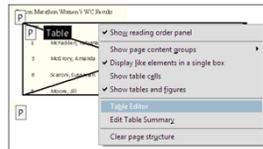
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### Table Editor

- Activate Touch Up Reading Order Panel
- Table elements show with "X" through them
- Right click on table
- Select Table Editor



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### Identifying Cell Types

- Cells will highlight
- Color coded based on cell type
- Select cell, right click, to open properties
- Change cell type here
- Change colors in Table Editor Options



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### Change to Header Cell

- Select cells to change
- Select Table Cell Properties
- Change to Header Cell




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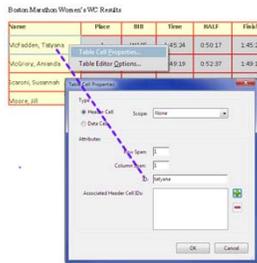
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### Assigning and ID to TH

- Each TH cell must have a unique ID assigned to it
- Enter this in the ID field in the properties
- Use identifiable words for ID




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### Associate TD with TH

- Assistive technology uses the ID's to associate the TD cells
- In Properties, select the "+" to show all available IDs
- Select the ID's that correspond to that cell




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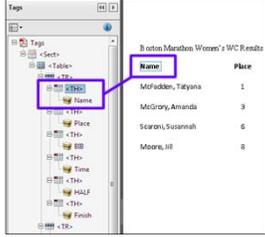
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### Check Table in Tags

- Double Check Table in Tags Panel
- TH vs TD
- Correct # of cells
- Complex Table Check



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### Complex Tables

**Merged cells**

Gender	Name	Time	H&LT	Finish
Men	Kim, Gus Dan	1:35:59	0:44:11	1:35:59
	George, Jack	1:37:41	0:46:43	1:37:41
	Phil, Karen	1:39:13	0:46:11	1:39:13
	Estrella, James	1:46:41	0:49:26	1:46:41
	Blumney, Adam	1:46:57	0:49:26	1:46:57
	Stammes, Brian	1:48:14	0:51:37	1:48:14
	Peri, Peter	1:54:31	0:53:33	1:54:31
	Kramer, Robert	1:54:50	0:53:33	1:54:50
	Grady, David	2:00:47	0:55:33	2:00:47
	Martin, Raymond	2:02:29	0:55:39	2:02:29
Women	Kim, Lawrence	2:05:14	1:03:24	2:05:14
	McFadden, Tatyana	1:46:14	0:52:17	1:46:14
	McGrory, Amanda	1:46:19	0:52:17	1:46:19
	Stammes, Susannah	1:53:30	0:53:30	1:53:30
	Morris, Jill	2:26:20	1:24:47	2:26:20

**Does not seem to match up**

Gender	Name	Time	H&LT	Finish
	Kim, Gus Dan	1:35:59	0:44:11	1:35:59
	George, Jack	1:37:41	0:46:43	1:37:41
	Phil, Karen	1:39:13	0:46:11	1:39:13
	Estrella, James	1:46:41	0:49:26	1:46:41
	Blumney, Adam	1:46:57	0:49:26	1:46:57
Men	Stammes, Brian	1:48:14	0:51:37	1:48:14
	Peri, Peter	1:54:31	0:53:33	1:54:31
	Kramer, Robert	1:54:50	0:53:33	1:54:50
	Grady, David	2:00:47	0:55:33	2:00:47
	Martin, Raymond	2:02:29	0:55:39	2:02:29
	Kim, Lawrence	2:05:14	1:03:24	2:05:14
	McFadden, Tatyana	1:46:14	0:52:17	1:46:14
	McGrory, Amanda	1:46:19	0:52:17	1:46:19
Women	Stammes, Susannah	1:53:30	0:53:30	1:53:30
	Morris, Jill	2:26:20	1:24:47	2:26:20

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### Fixing Complex Tables

**Retagging gets close**

Gender	Name	Time	H&LT	Finish
Men	Kim, Gus Dan	1:35:59	0:44:11	1:35:59
	George, Jack	1:37:41	0:46:43	1:37:41
	Phil, Karen	1:39:13	0:46:11	1:39:13
	Estrella, James	1:46:41	0:49:26	1:46:41
	Blumney, Adam	1:46:57	0:49:26	1:46:57
	Stammes, Brian	1:48:14	0:51:37	1:48:14
	Peri, Peter	1:54:31	0:53:33	1:54:31
	Kramer, Robert	1:54:50	0:53:33	1:54:50
	Grady, David	2:00:47	0:55:33	2:00:47
	Martin, Raymond	2:02:29	0:55:39	2:02:29
Women	Kim, Lawrence	2:05:14	1:03:24	2:05:14
	McFadden, Tatyana	1:46:14	0:52:17	1:46:14
	McGrory, Amanda	1:46:19	0:52:17	1:46:19
	Stammes, Susannah	1:53:30	0:53:30	1:53:30
	Morris, Jill	2:26:20	1:24:47	2:26:20

**Compare to Tags to clean up**

Gender	Name	Time	H&LT	Finish
	Kim, Gus Dan	1:35:59	0:44:11	1:35:59
	George, Jack	1:37:41	0:46:43	1:37:41
	Phil, Karen	1:39:13	0:46:11	1:39:13
	Estrella, James	1:46:41	0:49:26	1:46:41
	Blumney, Adam	1:46:57	0:49:26	1:46:57
Men	Stammes, Brian	1:48:14	0:51:37	1:48:14
	Peri, Peter	1:54:31	0:53:33	1:54:31
	Kramer, Robert	1:54:50	0:53:33	1:54:50
	Grady, David	2:00:47	0:55:33	2:00:47
	Martin, Raymond	2:02:29	0:55:39	2:02:29
	Kim, Lawrence	2:05:14	1:03:24	2:05:14
	McFadden, Tatyana	1:46:14	0:52:17	1:46:14
	McGrory, Amanda	1:46:19	0:52:17	1:46:19
Women	Stammes, Susannah	1:53:30	0:53:30	1:53:30
	Morris, Jill	2:26:20	1:24:47	2:26:20

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### Don't Get Discouraged by Tables

- Yes, it may take extra time to figure out
- Yes, you may have to do it more than once
- Yes, you may use inappropriate language



**AND....  
YOU CAN DO IT!**

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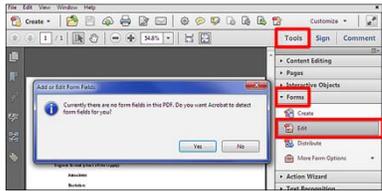
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### Forms



- Tools > Forms > Edit
- Auto-detect based on form

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### Form Elements

- Text Fields – Fill in the blank
- Check Boxes – Select one or more options
- Radio Boxes – Select only one from multiple options

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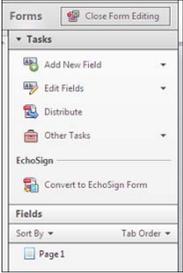
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### Form Editing Mode

- Add Fields
- Edit Fields
- Close Editor



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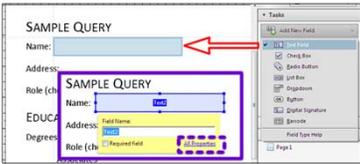
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### Add a Field



- Add New Field
- Place Field
- Enter (visually will change)
- Select ALL PROPERTIES

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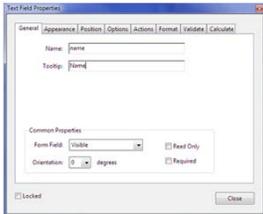
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### Tooltips

- Assistive Technology identifies form fields via tooltip
- Make sure tooltip notes what needs to be completed
- Sometimes may need to put a full question in a tooltip



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### Checking Tooltips

- Check in the properties box in the Form Editing Mode
- Hover mouse over form element in reading mode



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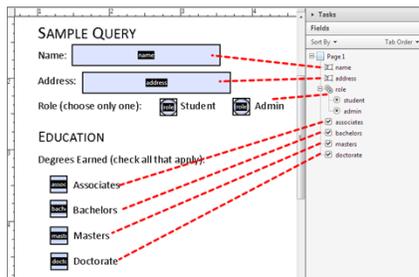
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### Form Order



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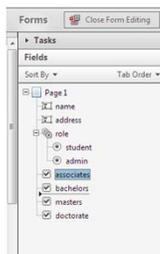
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### Change Form Tab Order

- Drag and Drop
- Match order to logical reading order of document



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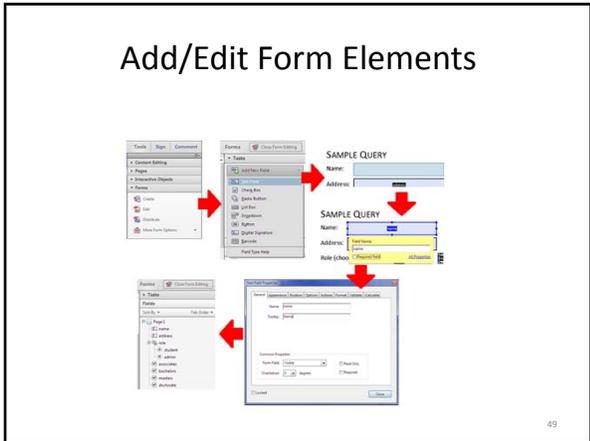
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### PDF/UA Resources

- PDF/UA – Wikipedia:  
<http://en.wikipedia.org/wiki/PDF/UA>
- PDF/UA in a Nutshell:  
<http://www.pdfa.org/publication/pdfua-in-a-nutshell/>
- Making a simple document accessible in Acrobat Pro XI: <http://itaccessibility.illinois.edu/pdf/docaccessXI>

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### Accessible PDF Tutorials

- WebAIM - <http://webaim.org/techniques/acrobat/>
- Lynda.com - <http://www.lynda.com/Acrobat-tutorials/Creating-Accessible-PDFs-2014/147579-2.html>
- Cal State - <http://www.calstate.edu/accessibility/tutorials/pdf.shtml>
- Google: "PDF Accessibility Tutorials"

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### About Christy

Christy Blew is an IT Accessibility Specialist in the Division of Disability Resources and Educational Services (DRES) at the University of Illinois at Urbana-Champaign. She has over 15 years of experience in developing and using internet technologies to deliver information to people and has been working with IT accessibility education for over 10 years. Christy is part of the ITaccess initiative at the University of Illinois that focuses on the awareness, evaluation, and education of accessibility of electronic information. Her online and classroom training sessions include accessibility issues with Word, PowerPoint, and PDF. She is a member of the W3C Protocols and Formats working group and the International Association of Accessibility Professionals (IAAP). Christy currently holds a Masters in Technology and a Certification in Computer Science from Eastern Illinois University, and a certificate in Audio Description through Audio Description Associates, LLC. Christy can be reached at [cblew@illinois.edu](mailto:cblew@illinois.edu).



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**Thank you for participating!**

**NEXT SESSION IS NOVEMBER 19, 2015**

***Social Media, Accessibility,  
and Disability Inclusion***

The session today was recorded  
and will be archived at  
[HTTP://ADA-AUDIO.ORG/ARCHIVES/ACCESSIBLETECH/](http://ada-audio.org/archives/accessibletech/)

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