

Demystifying PDF Accessibility

Clearing those pesky errors + Unfamiliar Tips

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A Little About Me

Instructional Designer

Designs online courses with faculty at The University of Texas at Arlington

Accessibility Advocate

- 7+ years coaching faculty on document and video accessibility
- Authored the white paper, "Student Success and Accessible Course Content at UTA" to recommend a proactive approach to accessibility.

Mom

Mom to a 6-year-old boy and 4-month-old girl



Today's Topics



Using the Content and Tags Panels



Tips & Tricks



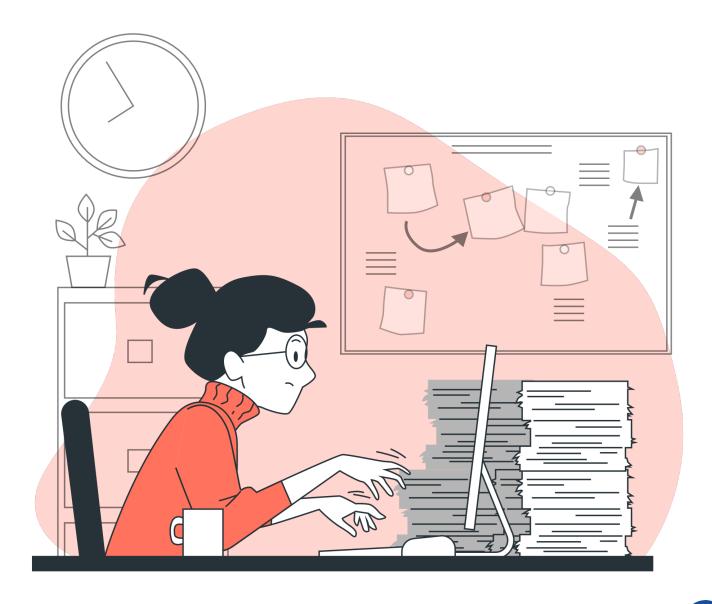
Issues with Auto Tag



Clearing Out Pesky Errors



Using the Content and Tags Panels



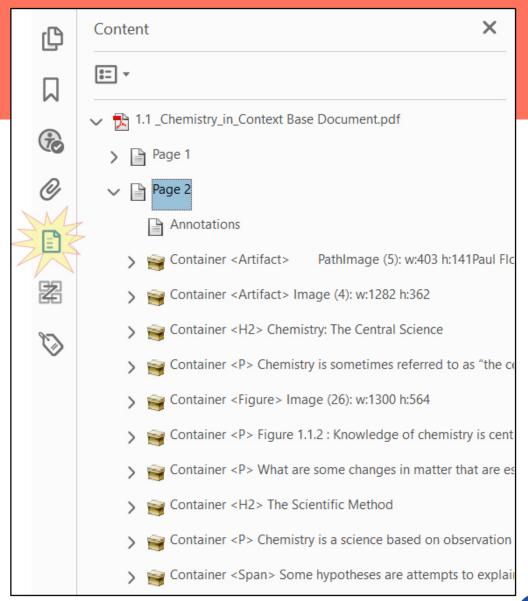
Content & Tags Panels

These are two panels that you will use extensively when checking and ensuring a PDF is accessible.

Let's compare the two!

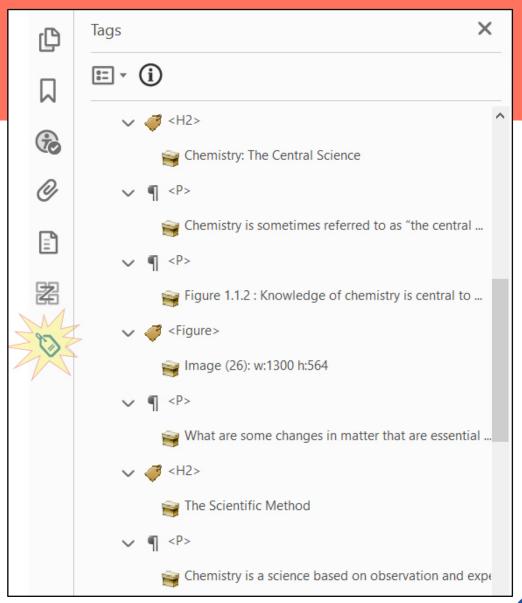
Content Panel

- Actual text, images, and links composing the document
- Deleting removes the content completely from the document
- Determines layering order

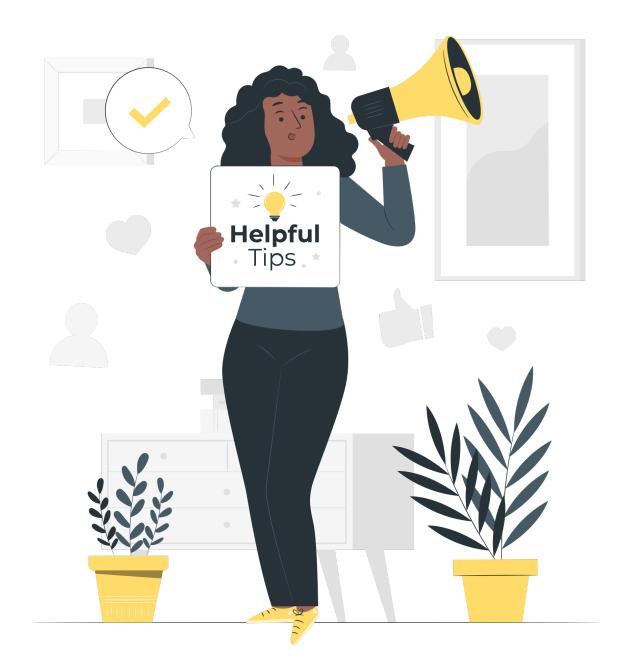


Tags Panel

- Specifies what kind of content the text, images, and links are
- Deleting keeps the content but deletes the tag
- Determines reading order



Tips & Tricks



Where is that Tag?!

You might need to find a tag to:

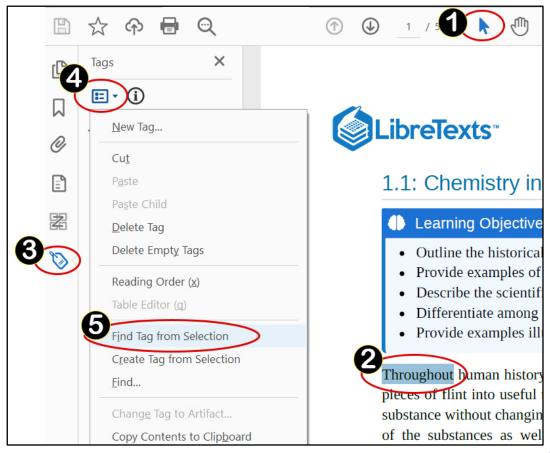
- Check or add alternate text of a figure
- Make sure the tag is correct
- Add a link reference to an existing tag
- Continue checking accessibility where you left off



How to Quickly Find a Tag

- 1. Select the text for the tag that you need to find
 - You may need to change from the hand icon to the selection tool
- 2. From the Tags panel, click the **Options** button
- 3. Choose Find Tag from Selection

Pro Tip: Sometimes I need to click "Find Tag from Selection" twice in order for it to pull me directly to the tag.



I see some incorrect tags...

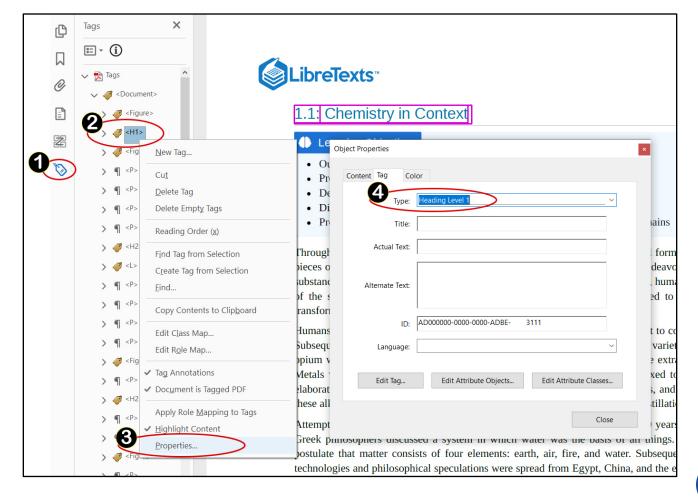
You might need to manually change tags:

- After running the auto-tag feature
- When you find tags that are incorrectly labeled



How to Change a Tag

- 1. From the Tags panel, right click the Tag
- 2. Select **Properties**
- 3. On the Tag tab, use the **Type dropdown** to select the correct tag type



Let me just make my own tag!

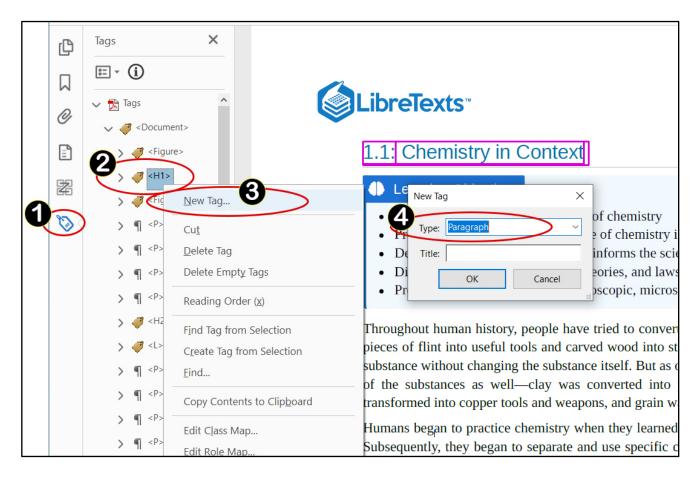
You might need to make your own tag when:

- You are manually tagging with the Reading Order and Acrobat stops creating tags
- Figures change in appearance or location when they are tagged
- You need to create List and Table tags as the parent tag for sub-tags



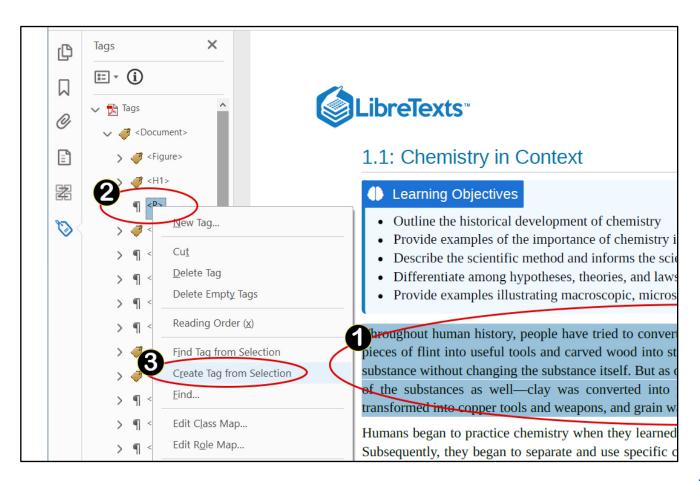
How to Manually Create a Tag, Part 1

- 1. From the Tags panel, right click the tag that is above where you want the new tag to be
- 2. Select New Tag
- 3. Select the **tag type** from the Type drop down box.

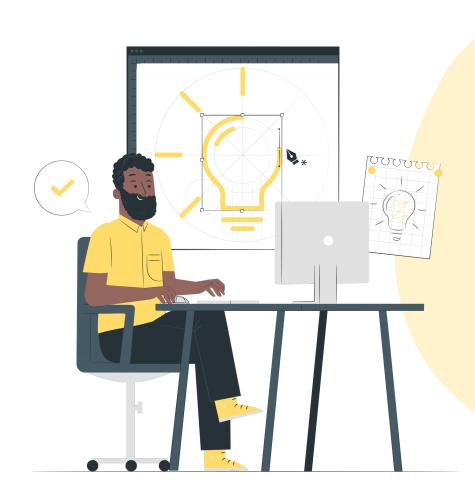


How to Manually Create a Tag, Part 2

- 1. Select the text you need to tag
- 2. In the Tags list, right click the tag that was created in Part 1
- 3. Select Create Tag from Selection



Saving Your Work



Save often but save smart!

Save often but save smart!

What does this mean?

Some actions you take when making a document accessible cannot be reverted with the Undo option!

For example:

- Tagging an item with Reading Order
- Deleting items from the Content panel
- Making changes using Table Editor

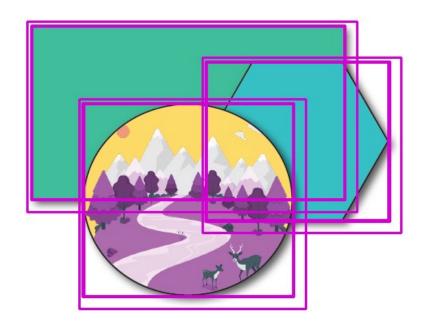


When to Save...

Before tagging a complex figure

A complex figure is when you select it and there is more than one bounding box. These have a greater chance of changing their appearance once it is tagged.

- Before tagging artifacts
- Before deleting items from the Content panel

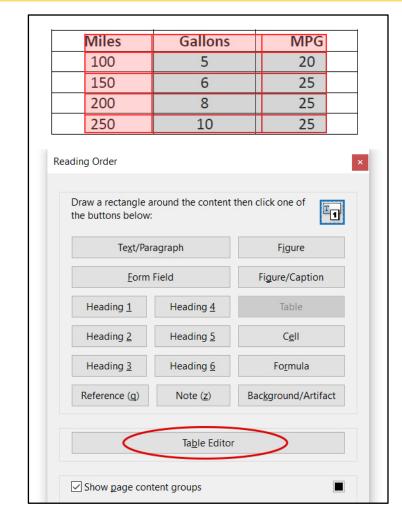


... And When Not to Save!

When working in Table Editor to adjust column and row span settings, before saving, run the Accessibility Checker to make sure this did not cause any "Table Regularity" errors.

Why? Once there are table regularity errors, it is sometimes hard to work in Table Editor.

If there are no table errors, then save your work.



When to Tag Figures & Artifacts

Tag figures after you have tagged all other text items.

Why?

Sometimes figures change appearance or location when you tag them. So, save them for the end when you can use "Save often.

Safe smart." to make sure you can always close without saving if things go wrong with figures.

Tag artifacts after you have tagged all other text items and figures.

Why?

Sometimes tagging artifacts will cause Acrobat to stop creating additional tags.

Additional Accessibility Checkers

(Free and available for PC)

PAC 3



PAC 3 will check additional items, such as:

- If table header cells are associated with their sub-cells
- If Path content is tagged
- If Link Annotations are in a Link tag
- If Link Annotations have alt text
- If Note tags have a unique ID
- If the PDF/UA Identifier is set

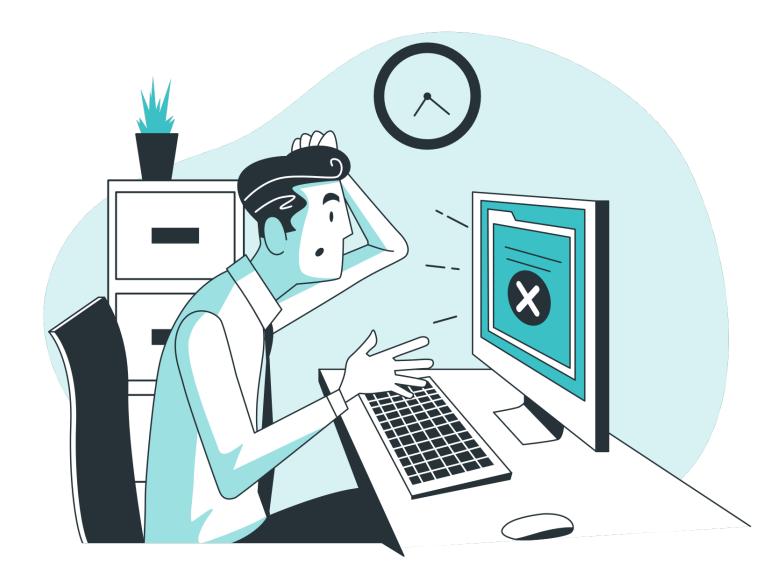
CommonLook PDF Validator



CommonLook will check even more!

- Advertised as the "only PDF checker that tests against Section 508, WCAG 2.0 AA, PDF/UA and HHS standards"
- Full PDF Validator Features
 (https://commonlook.com/accessibility-software/pdf-validator/)

Issues with Auto-Tag & Tagging



Where did the text go?

If text disappears after using auto-tag, check the Content panel.

Is the text present and correct in the Content panel?

- If yes, manually tag the text. (See slide: Tips & Tricks > How to Manually Create a Tag Part 1 and 2)
- If no, edit the PDF and put the correct text. Then try auto-tag again.



Where did this link come from?

Auto-tag tries to be helpful by creating links for URLs, but sometimes it makes links for items that only look like URLs.

If this happens, delete the Annotation from the Content panel.

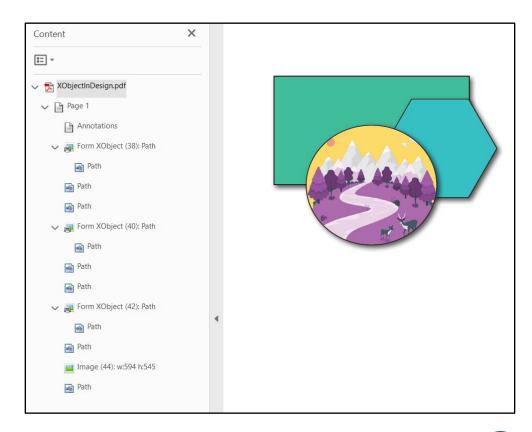


Why did the image change in appearance?

Most likely, the figure was an x-object.

What are XObjects?

- Meant for repetitive objects that only get stored once in a PDF but referenced multiple times.
- Adobe InDesign makes frequent use of this technology in exported PDF files.
- Items on master pages are typically turned into Form XObjects.



How do I fix the image that changed in appearance?

The layering of the individual pieces of the image may have just got rearranged in the Content panel.

Go to the Content panel and check if you can rearrange the individual paths and images items to make it look right again.

If that's not possible, manually create a Figure tag and associate the content with that figure tag.

(See slide: Tips & Tricks > How to Manually Create a Tag Part 1 and 2)



Clearing Out Pesky Errors



What is Character Encoding?

Character encoding is a set of mappings between the bytes in the computer and the characters in the character set.

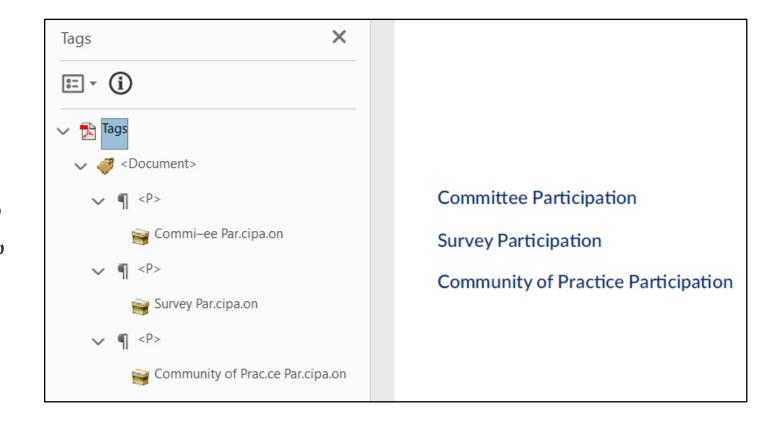
Pro Tip: Always check for Character Encoding errors BEFORE you start any PDF remediation.



What Do Character Encoding Errors Look Like?

The screenshot shows:

- The "tt" in "committee" is encoded as a dash "—"
- The "ti" in "participation" is encoded as a period "."



Clearing Character Encoding Errors: Editing in Acrobat

If you have the same font installed (or if it is ok to change the font):

- 1. Click the Edit PDF tool
- 2. Delete the incorrect characters
- 3. Re-type the correct characters
- 4. Check the words now display correctly in the Tags and/or Content panel and verify the error is cleared out.
- * You may need to re-tag the text if it had previously been tagged.



What are Tagged Annotations?

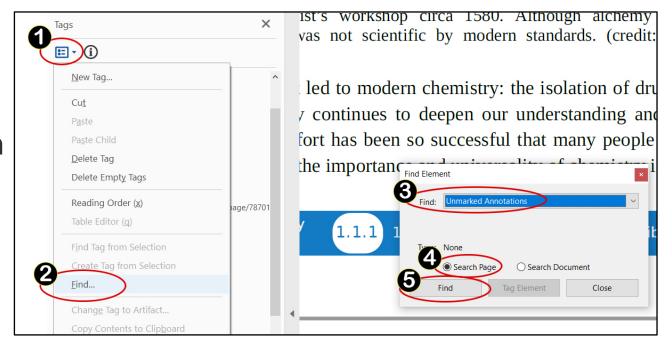
Annotations are links to either a location in the document or an external website.

When these links are tagged, producing a "Link-OBJR" item, they are called Tagged Annotations.



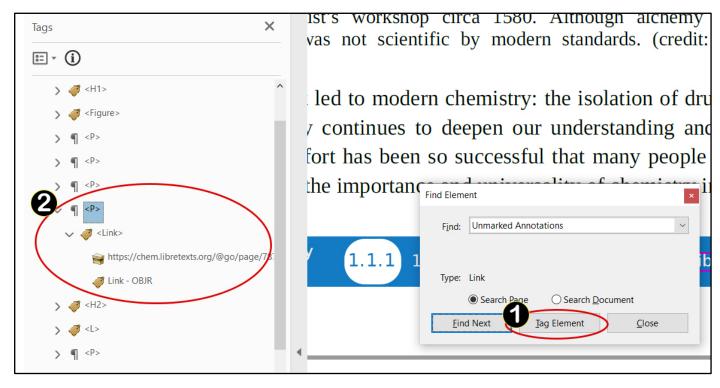
How to Tag Annotaations, Part 1

- 1. Locate the tag that contains the text for the link. (See slide: Tips & Tricks > How to Quickly Find a Tag)
- 2. Within that tag, **create** a new Link tag (See slide: Tips & Tricks > How to Manually Create a Tag)
- 3. With the new Link tag selected, click the **Options** button and select **Find**
- 4. Change the Find drop down to **Unmarked Annotations** and select the radio button for **Search Page**
- 5. Click Find



How to Tag Annotaations, Part 2

- 6. When the link is found, click **Tag Element**
- 7. Organize the tag for the proper link structure



Other Elements Alternate Text

- Other Elements refers to content, other than figures, that requires alternate text (such as multimedia, annotation, or 3D model)
- Though, you may find it most often refers to figures or Xobjects that are:
 - Figures that haven't been tagged Tag them and add alt text
 - Parts/layers of an image that got separated from a tagged figure Drag the part/layer into the existing tag on the Content panel

What is Table Regularity?

Errors with table regularity mean there are not the same number of columns (TH/TD tags) in each row (TR tag).

This often occurs when there are merged cells and the column or row span settings have not been set correctly.



How to Fix Table Regularity: Simple Tables

If it is a simple table with no merged cells, start with Tags.

Are the tags correct?

Label	Estimate	Margin of Error	Estimate	Margin of Error
Kindergarten	4,011,764	±36,839	5.0%	±0.1%
Elementary: grade 1 to grade 4	15,728,625	±56,885	19.5%	±0.1%
Elementary: grade 5 to grade 8	16,918,899	±64,578	21.0%	±0.1%
High school: grade 9 to 12	16,932,635	±40,048	21.0%	±0.1%
College, undergraduate	17,507,427	±67,260	21.8	±0.1%
Graduate, professional school	4,321,881	±44,244	5.4	±0.1%

Are there any extra empty TH or TD tags that should be deleted?

If the tags are correct, move to the steps for Complex Tables. (on the next slide)

How to Fix Table Regularity: Complex Tables

If it's a complex table with merged cells, start with Table Editor.

- 1. Open the Reading Order tool
- 2. Right click the Table and select **Table Editor**
- 3. Right click a cell and select **Table Cell Properties**
 - Pro-Tip: Check cells from right to left

	1 To Tip. Check cells from right to left
4.	Verify the Row Span and Column Span are set correctly

5. Check the tags to make sure there are no empty/unused TH or TD tags that need to be deleted.

Pro-Tip: Remember the save often, save smart tip! Changing row and column span can "break" the table. Check if what you did cleared the regularity error before saving.

	United States					
	Total		Percent			
Label	Estimate	Margin of Error	Estimate	Margin of Error		
Kindergarten to 12 th grade						
Kindergarten	4,011,764	±36,839	5.0%	±0.1%		
Elementary: grade 1 to grade 4	15,728,625	±56,885	19.5%	±0.1%		
Elementary: grade 5 to grade 8	16,918,899	±64,578	21.0%	±0.1%		
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College, undergraduate	17,507,427	±67,260	21.8	±0.1%		
Graduate, professional school	4,321,881	±44,244	5.4	±0.1%		

Let's Talk!

Speak with Brittany or one of our experts to learn how RemDoc makes PDF accessibility easy.

Rembook Most Reliable Document Remediation Service

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