

ACCESSIBILITY MATTERS

@ACCESSGRINNELL

Creating Accessible Course Materials



GRINNELL COLLEGE .



The AT Team interacts and collaborates with faculty, staff, and students to achieve an equitable learning environment for students with disabilities by:

- **Equity**- Access is achieved only when all students can fully participate in the educational opportunities, activities, and services offered by Grinnell College.
- **Collaboration** – Access happens when individuals from across campus come together to meet the needs of diverse community of learners.
- **Excellence** – We strive to establish best practices through leadership in addressing barriers to access and furthering the global conversation on disability in higher education.



About Us

The Assistive Technology Team (AT Team)

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Guidelines

Resource: Grinnell Share - Offices/Disability
Resources/Resources for Faculty

[Creating Accessible Course Materials](#)



PDF here, PDF there, PDF from anywhere

The PDF format is a destination file format. PDF files are typically created in some other application. Optimally document accessibility should begin in the native document format. For example, many documents are created in a word processing or desktop publishing application, and then exported as PDF documents.

PDF Sources:

- Copy/Scan from hardcopy (Book, Journal, handout)
- Save As PDF
- Export to PDF
- Download from website or database
- Photo or JPEG
- Create a PDF
 - Web browser add-in extension
 - Desktop applications

Making the native document accessible allows for less work when changes are made to the native document and the PDF document is regenerated



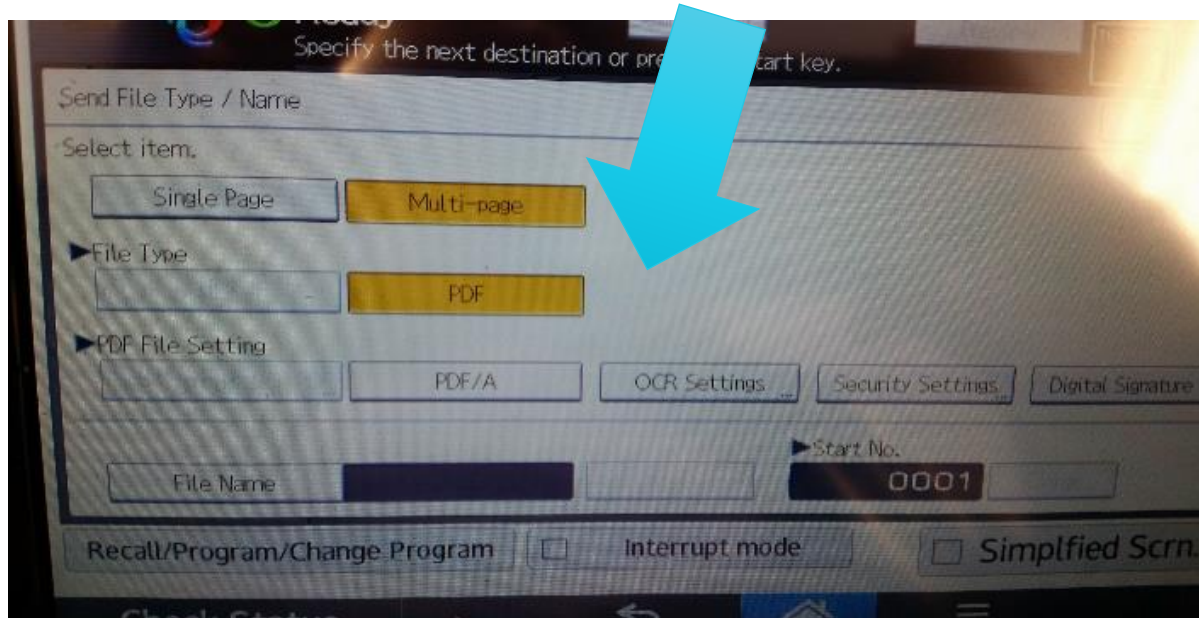
Copy/Scan to PDF



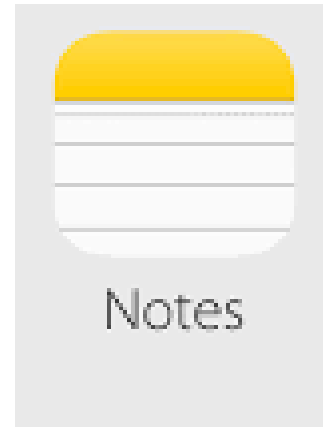
Scanner Options

Department Copiers/Scanners

- Your departmental Academic Support Staff (ASA) are trained to make sure all copies are scanned with the Optical Character Recognition (OCR) function.



Scan with your IPHONE or IPAD

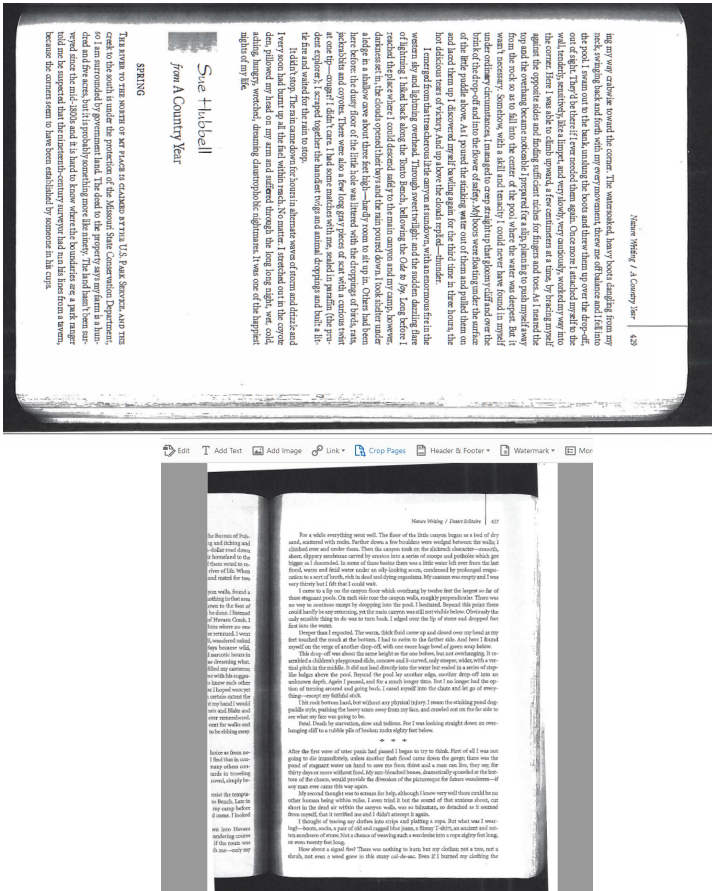
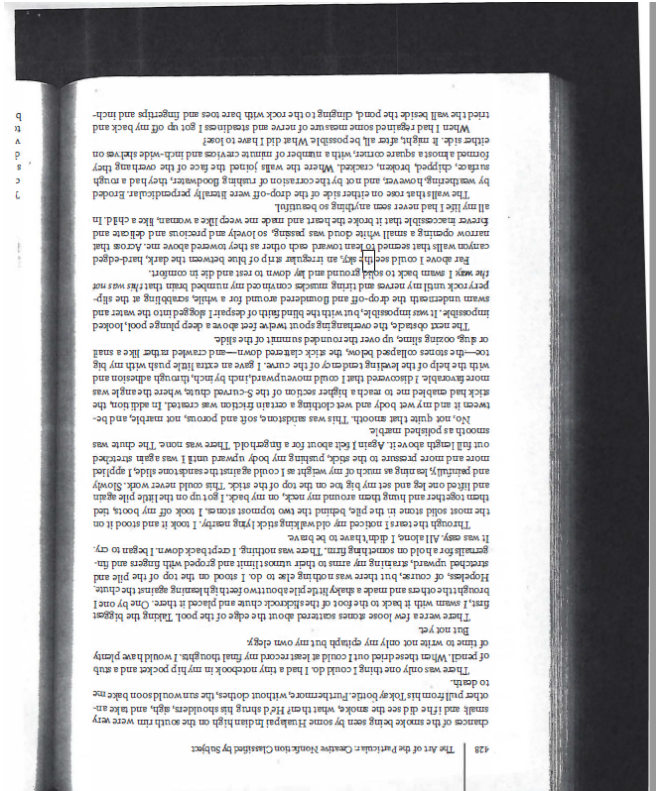


- Scan a document
- Open Notes and select a note or create a new one.
- Tap the Camera button Tap Camera button to start scanning a document in Notes, then tap Scan Documents Scan document icon.
- Place your document in view of the camera.
- If your device is in Auto mode, your document will automatically scan. If you need to manually capture a scan, tap the Shutter button tap the Shutter button to scan or one of the Volume buttons. Then drag the corners to adjust the scan to fit the page, then tap Keep Scan.
- Tap Save or add additional scans to the document.

What NOT to do!

Slanted, underlined, highlighted texted, italic font, font, dirty pages, too light of text, 2-pages on one, etc.

- Upside down
- Sideways or previous page bleed





Remediation

Adobe Acrobat Pro



If a PDF is a scan of a physical copy rather than a digitally-created document, the OCR tool is necessary to recognize text

- Before OCR is used, all text in the document is technically simply part of a single image
- OCR searches through this image for things that are likely text characters and marks them as such
- The cleaner the scan, the better OCR will be able to recognize what is and is not text in the document

Adobe Acrobat Pro

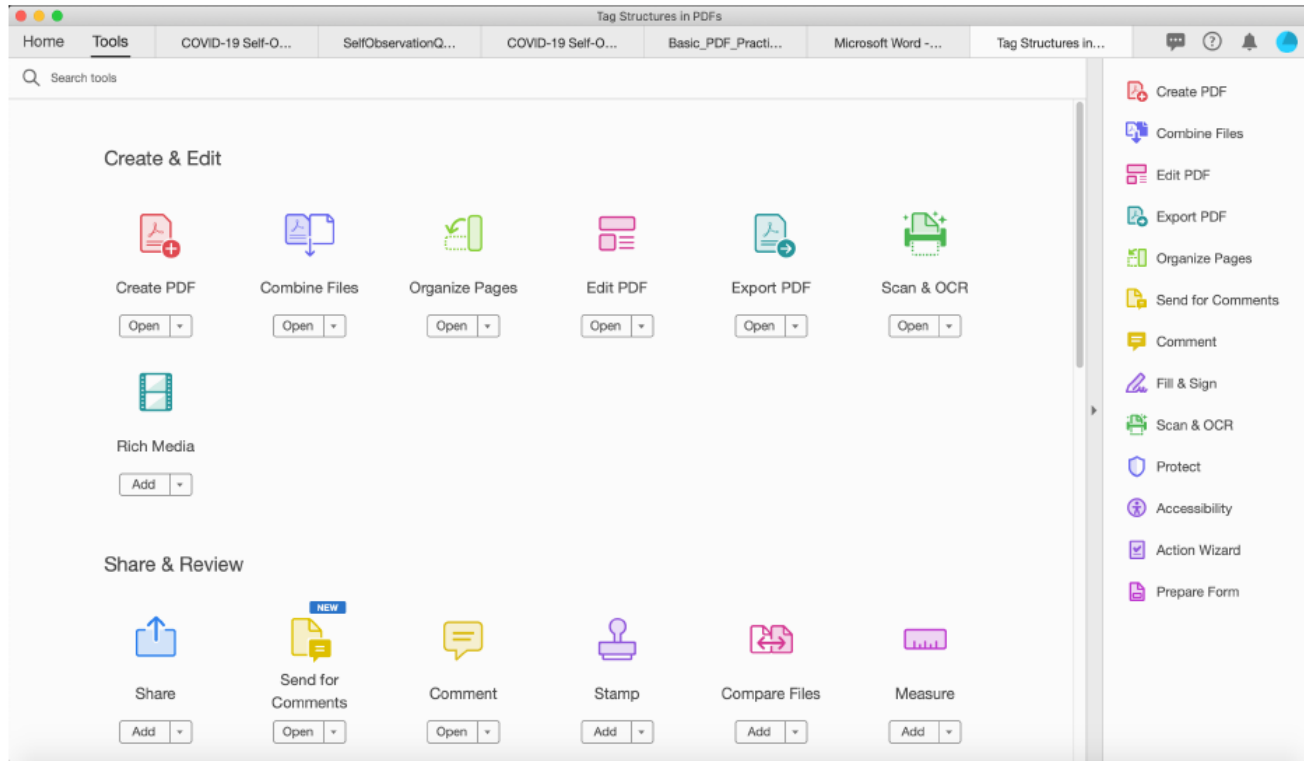


3c. Setting Up Acrobat Pro DC

To add a tool, click the “Add” button below its icon. Add the following tools:

- Scan & OCR
- Fill & Sign
- Prepare Form
- Accessibility
- Action Wizard

Exit the tool tab by clicking any right pane tool button

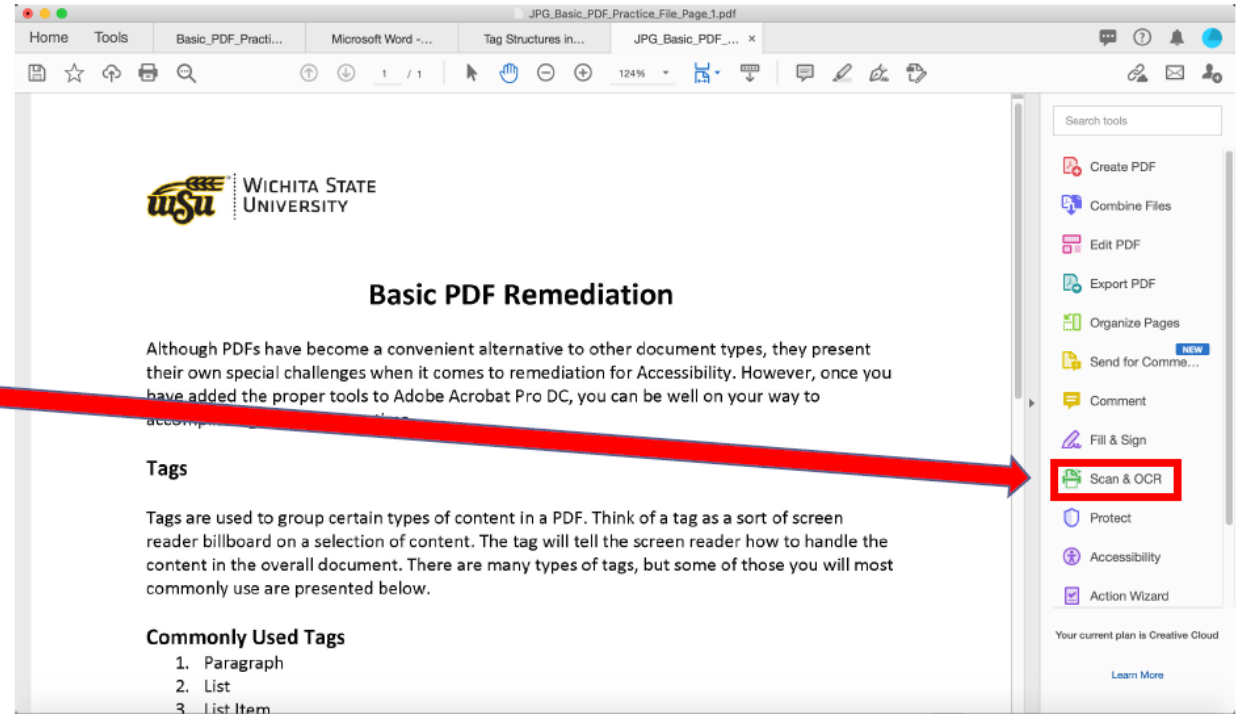


Open up your PDF Document

Open the right tool pane
Select the “Scan & OCR”
tool

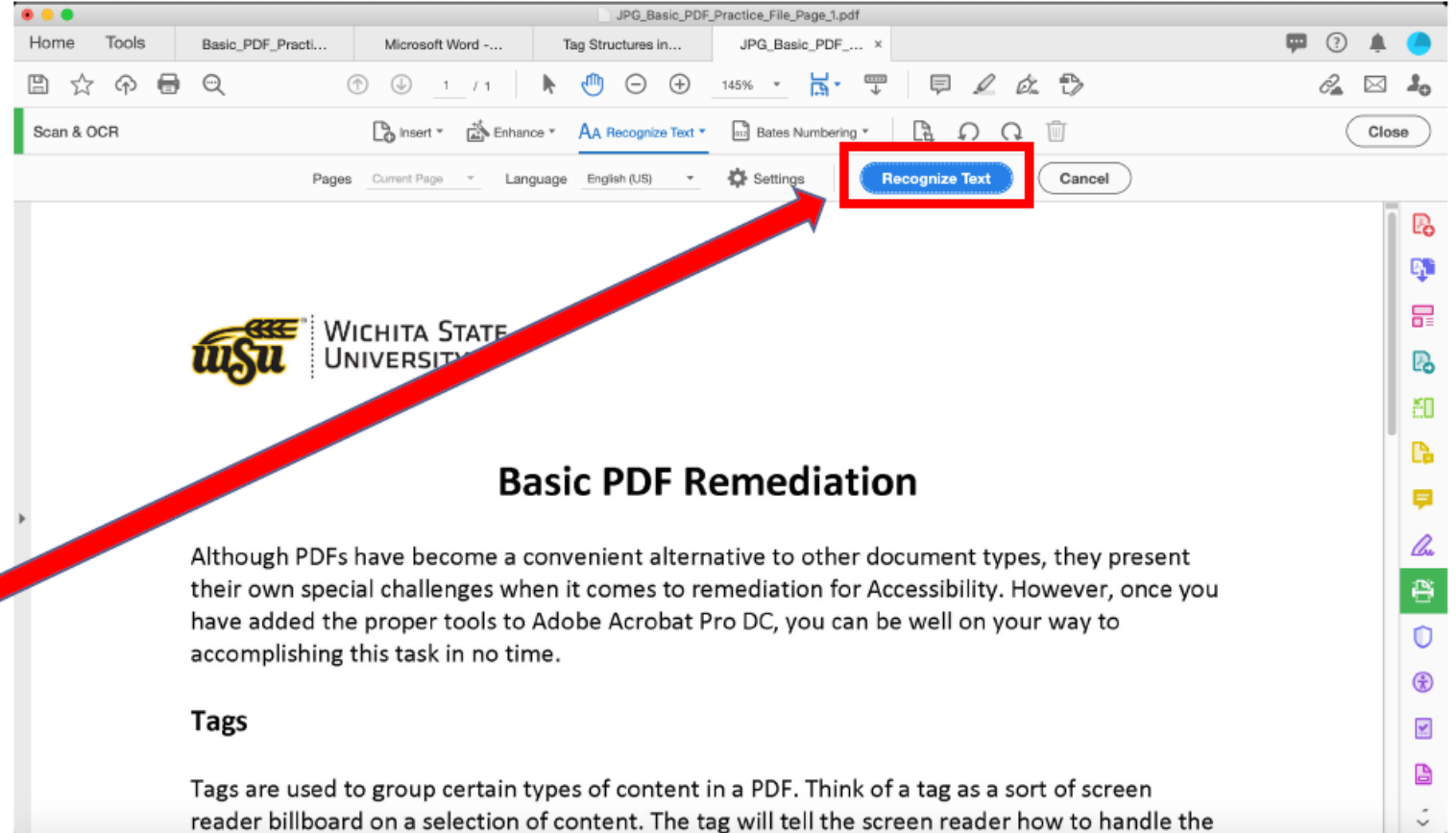


Scan & OCR



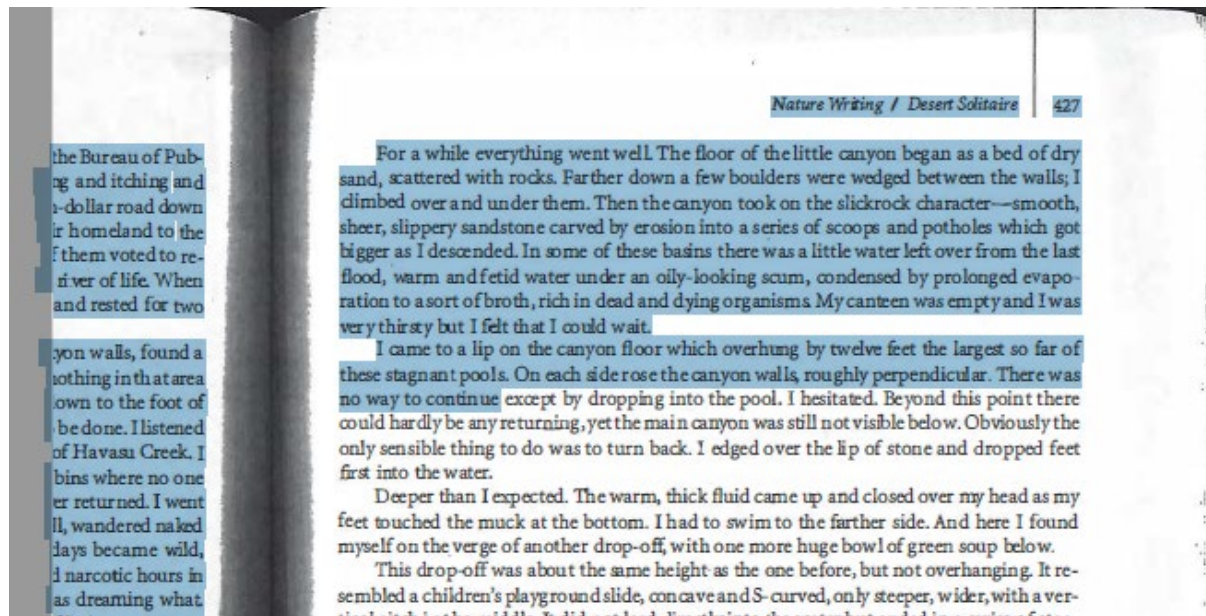
A secondary toolbar with more nuanced options will open. Select the “Recognize Text” button on this toolbar to launch OCR.

Recognize Text



Sample of an Issue

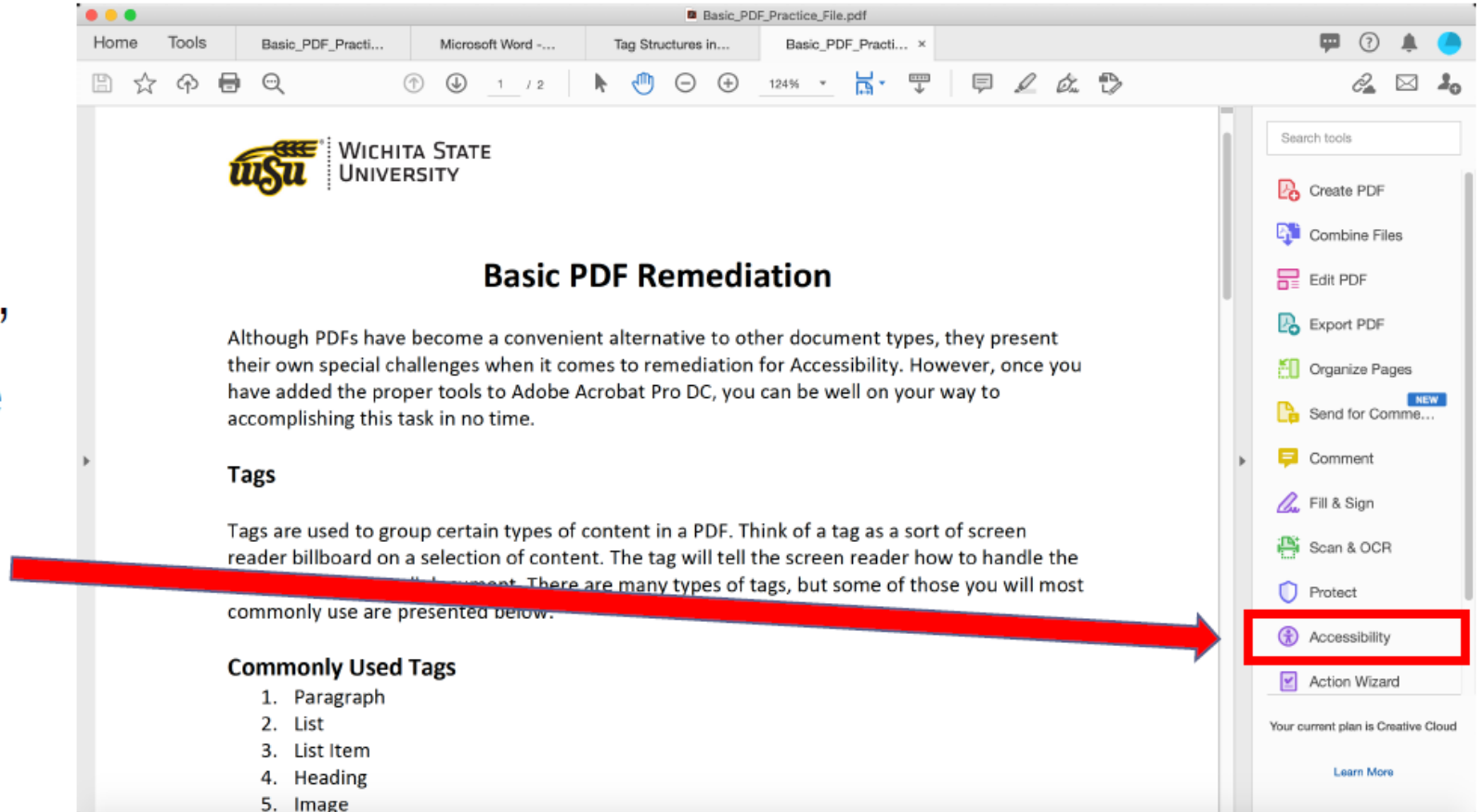
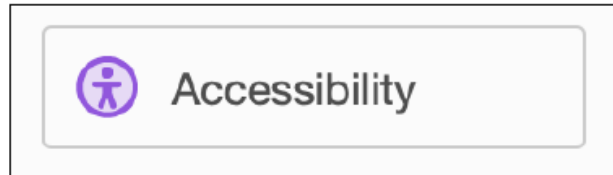
- Using View > Read Out Loud > This page:
The text highlighted in blue is what is read. See the cut off page of 426 is read first from top left to bottom.



Checking PDF Accessibility - MAC Version

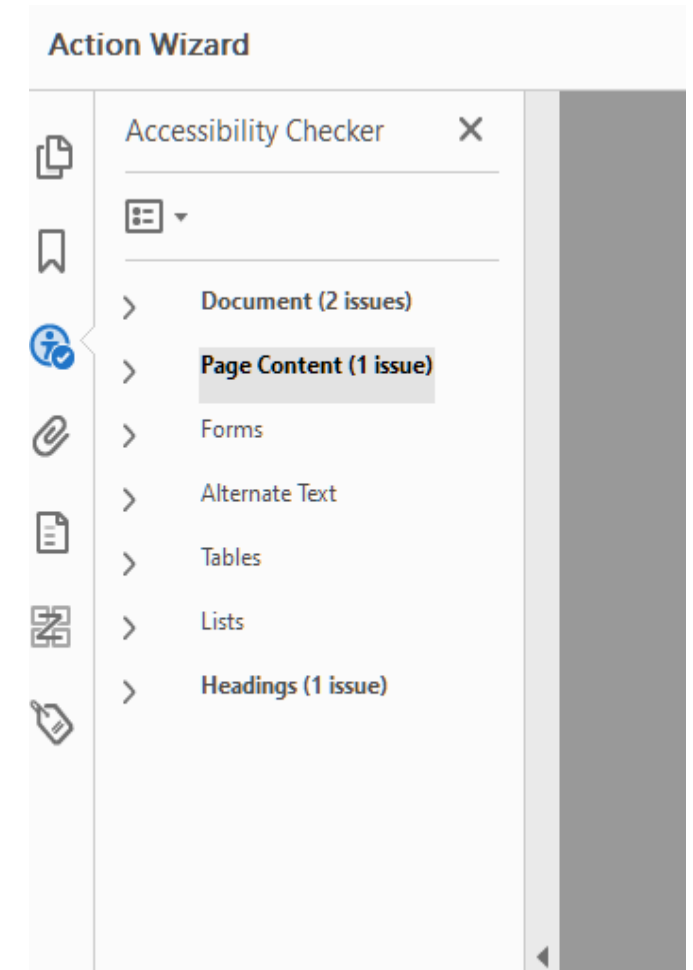
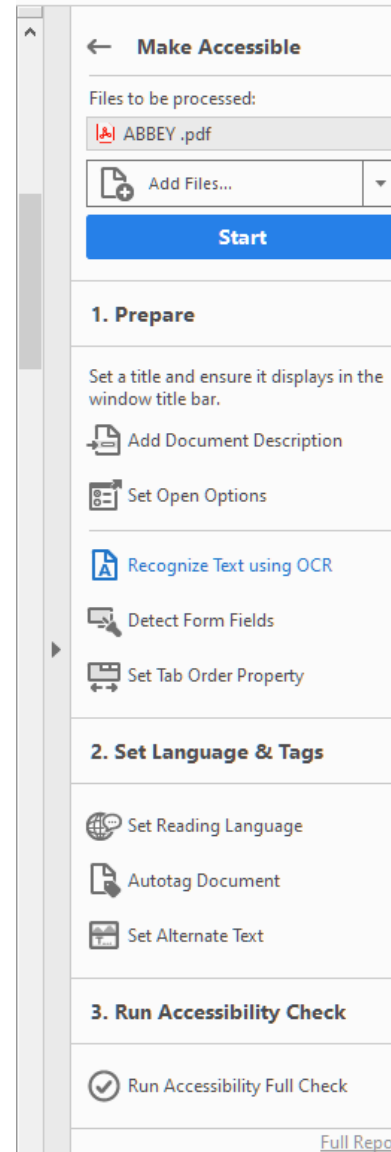
To run an accessibility check on a PDF, we will first have to enter the accessibility toolset

Select the “Accessibility” tab in the right tool pane



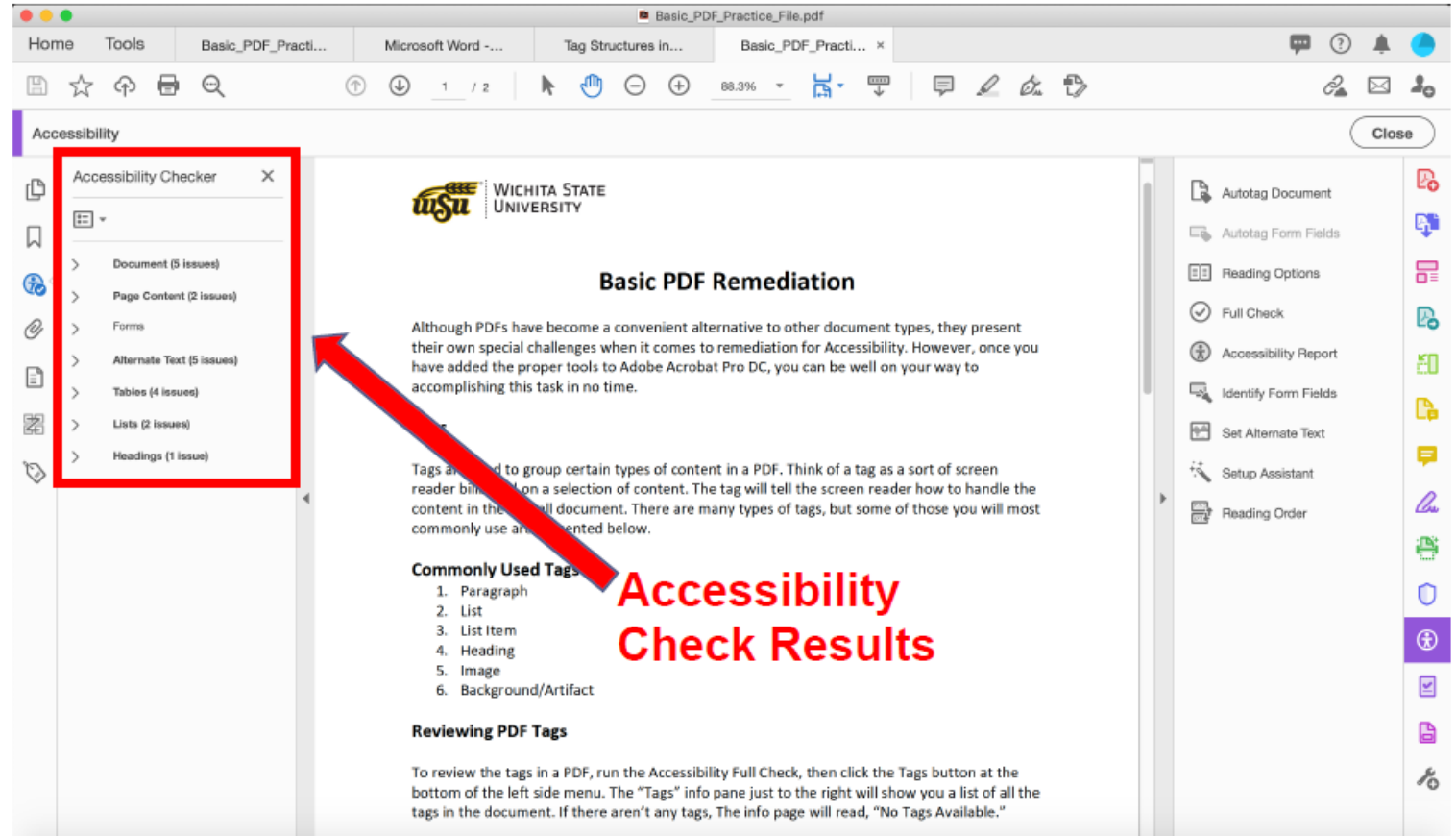
Checking PDF Accessibility - PC Version

- Action Wizard:
- Make Accessible: Hit Start > OK through dialogs.



Checking PDF Accessibility

Results of the scan will show in the left pane



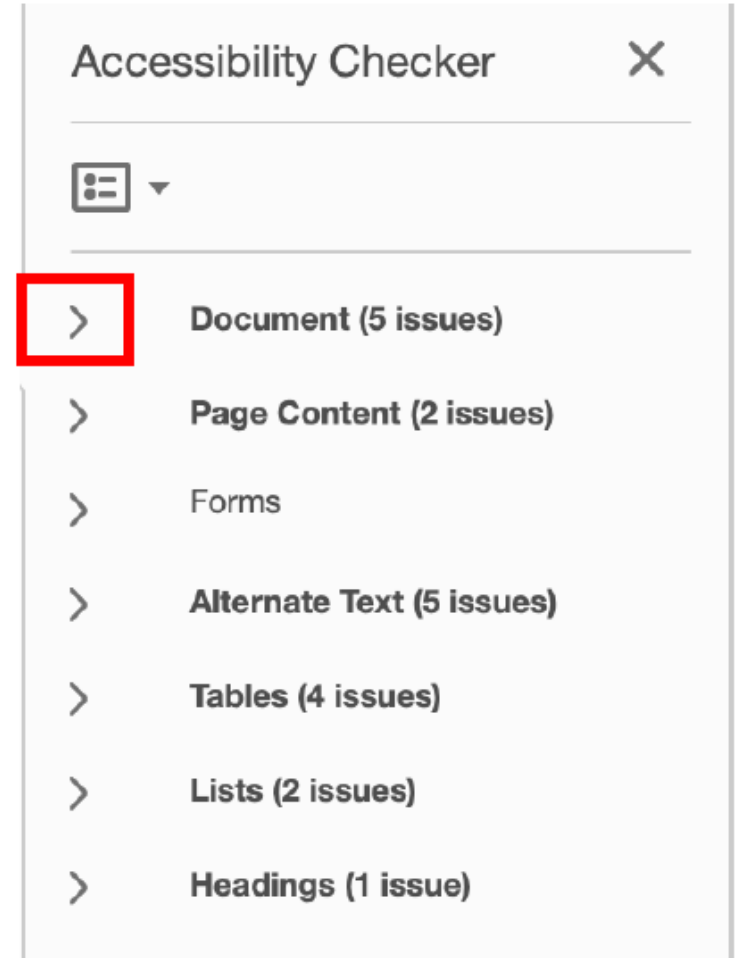
Checking PDF Accessibility

Results can be seen under a series of topic headings – “Document,” “Page Content,” etc.

If there are accessibility issues, the topic heading will state how many

Click the arrow to the left of each topic to expand the list of issues

Click to expand issues list

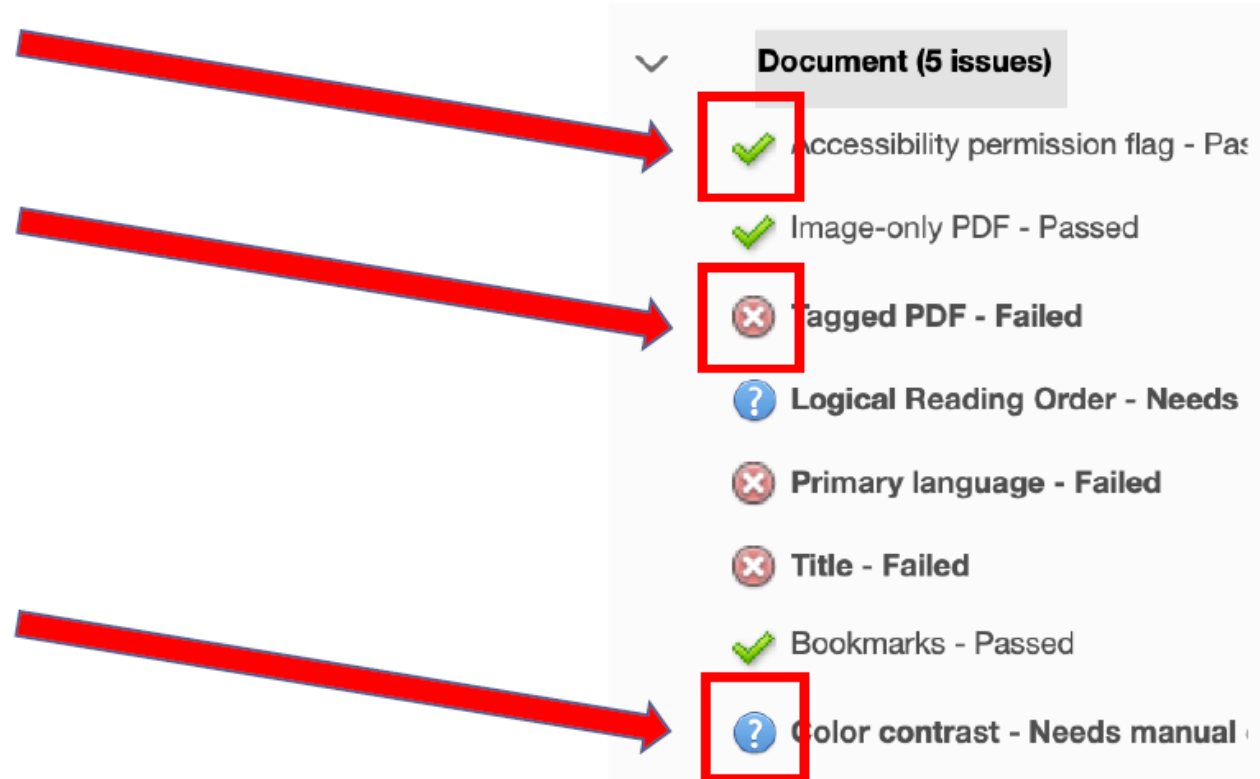


Checking PDF Accessibility

A green checkmark means that the subtopic has cleared the check with no issues

A white X in a red circle means that the subtopic has issues that need to be repaired

A white question mark in a blue circle indicates that the checker cannot determine whether the subtopic passes or not – a person has to do a manual check to make sure the topic is in compliance



Issue: Character encoding –Failed (Upside down)

Accessibility Checker

Document (2 issues)

✓

Accessibility permission flag

✓

Image-only PDF - Passed

✓

Tagged PDF - Passed

?

Logical Reading Order - Needs man

✓

Primary language - Passed

✓

Title - Passed

✓

Bookmarks - Passed

?

Color contrast - Needs man

Page Content (1 issue)

✓

Tagged content - Passed

✓

Tagged annotations - Passed

✓

Tab order - Passed

✗

Character encoding - Failed

✓

Tagged multimedia - Passed

✓

Screen flicker - Passed

✓

Scripts - Passed

✓

Timed responses - Passed

✓

Navigation links - Passed

Forms

Alternate Text

Tables

Lists

428

The Art of the Particular: Creative Nonfiction Classified by Subject

chances of the smoke being seen by some Hualapai in diam high on the south rim were very small and if he did see the smoke, what then? He'd shrug his shoulders, sigh, and take another puff from his Tokay bottle. Furthermore, without clothes, the sun would soon bake me to death.

There was only one thing I could do. I had a tiny notepad in my hip pocket and a stub of pencil. When these dried out I could at least record my final thoughts. I would have plenty of time to write not only my epitaph but my own elegy.

I here were a few loose stones scattered about the edge of the pool. Taking the biggest first, I swam with it back to the foot of the slickrock chute and placed it there. One by one I brought the others and made a slinky line about two feet high leaning against the chute. Hopelias, of course, but there was nothing else to do. I stood on the top of the pile and stretched upward, straining my arms to their utmost limit and groped with fingers and my genitalia for a hold on something firm. There was nothing. I crept back down. I began to cry.

It was easy. All alone, I didn't have to be brave.

Through the tears I noticed my old walking stick lying nearby. I took it and stood it on the most solid stone in the pile, behind the two topmost stones. I took off my boots, tied them together and hung them around my neck, on my back. I got up on the little pile again and lifted one leg and set my big toe on the top of the stick. This could never work. Slowly and painfully, leaning as much of my weight as I could against the sandstone slide, I applied more and more pressure to the stick, pushing my body upward until I was again stretched out full length above it. Again I felt about for a fingerhold. There was none. The chute was smooth as polished marble.

No, not quite that smooth. This was sandstone, soft and porous, not marble, and between it and my wet body and my clothing a certain friction was created. In addition, the stick had enabled me to reach a higher section of the S-curved chute, where the angle was more favorable. I discovered that I could move upward, inch by inch, through push with my big toe—the stones collapsed below, the stick clattered down—and crawled rather like a snail or slug, coiling slimy up over the rounded summit of the slide.

The next obstacle, the overhanging spot twenty feet above a deep plunge pool, looked impossible. It was impossible, but with the blind faith of despair I dogged into the water and swam underneath the drop-off and floundered around for a while, scabbling at the slippery rock until my nerves and tiring muscles convinced my numbed brain that this was not the way. I swam back to solid ground and lay down to rest and die in comfort.

Far above I could see the sky, an irregular strip of blue between the dark, hard-edged canyon walls that seemed to lean toward each other as they towered above me. Across that narrow opening a small white cloud was passing, so lovely and precious and delicate and forever inaccessible that it broke the heart and made me weep like a woman, like a child. In all my life I had never seen anything so beautiful.

The walls that rose on either side of the drop-off were literally perpendicular. Eroded by weathering, however, and not by the corrosion of rushing bloodwater, they had a rough surface, chipped, broken, cracked. Where the walls joined the face of the overhang they formed a most square corner, with a number of minute crevices and inch-wide shelves on either side. It might, after all, be possible. What did I have to lose?

When I had regained some measure of nerve and steadiness I got up off my back and tried the wall beside the pond, clinging to the rock with bare toes and fingertips and inch-



Issue: Character encoding – Failed (side-ways)

Accessibility Checker

Logical Reading Order - Passed

Primary language - Passed

Title - Passed

Bookmarks - Passed

Color contrast - Needs more

Page Content (1 issue)

Tagged content - Passed

Tagged annotations - Passed

Tab order - Passed

Character encoding - Failed

Word 1

Word 2

Word 3

Word 4

Word 5

Word 6

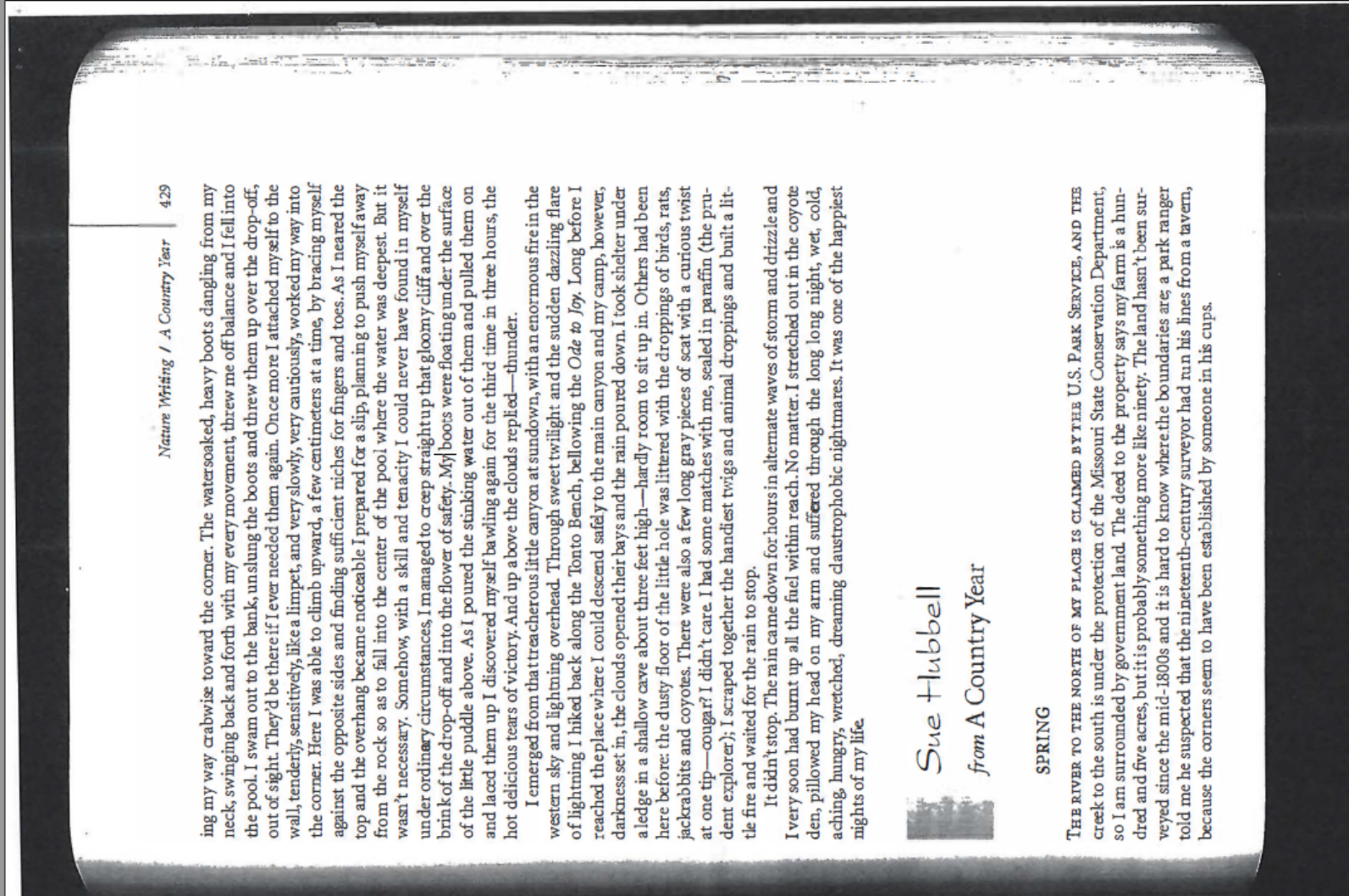
Word 7

Word 8

Word 9

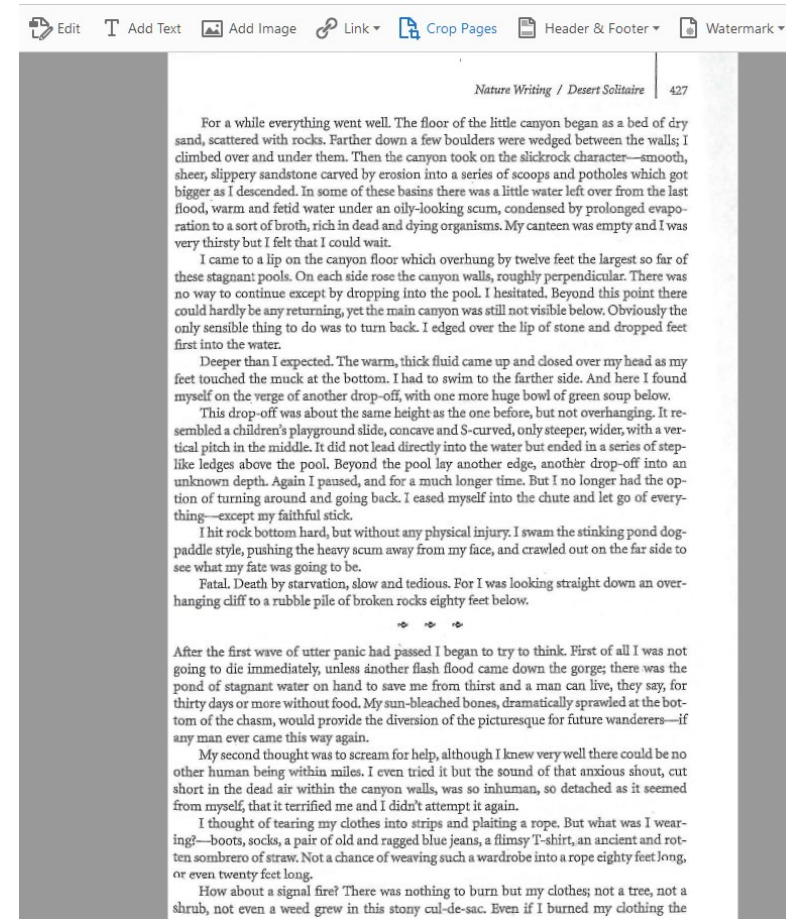
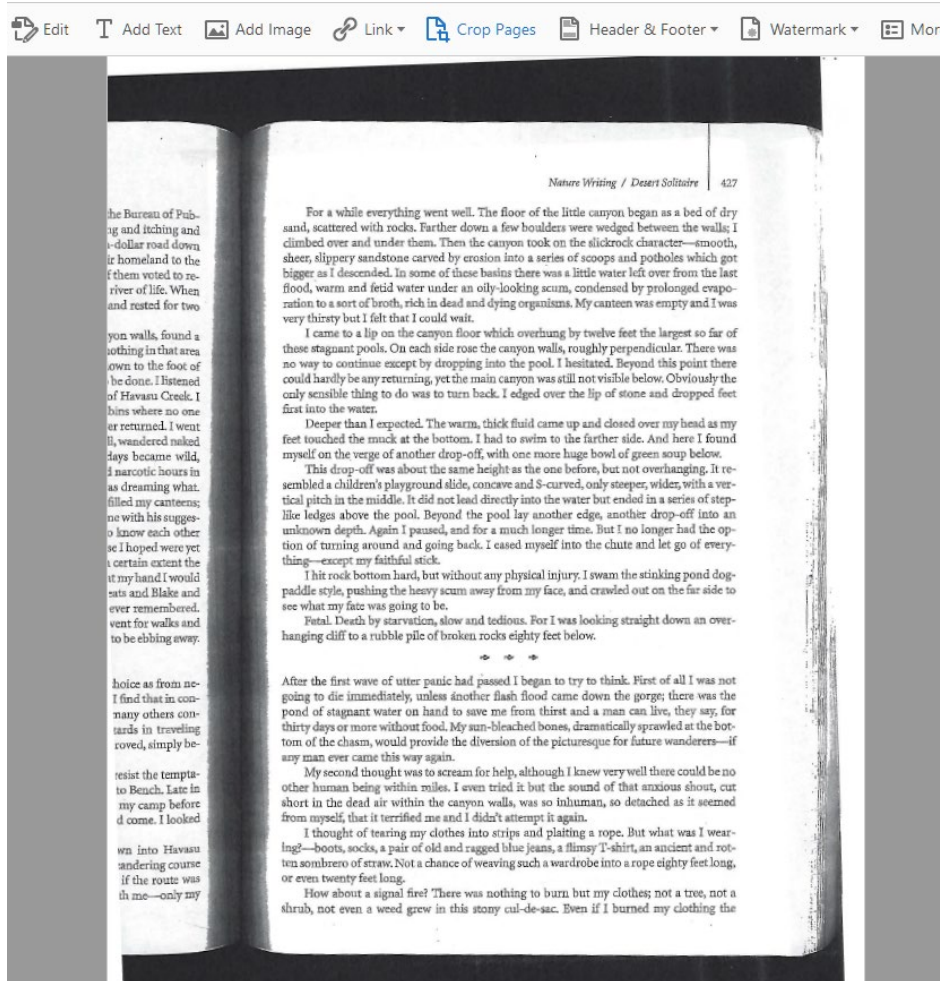
Word 10

Word 11



Editing:

Crop the page to remove excess black and part of previous page.



Is it over?

- A PDF may pass the checker but still not be accessible
- For example, the system cannot determine if reading order or color contrast is accessible – the document creator(s) and/or editor(s) must check these for themselves
- Do not assume a PDF is accessible even if it says it is – always take a look at the tags and reading order to make sure everything is as it should be
- Ask the Disability Resource staff if you are not sure.





Thank You

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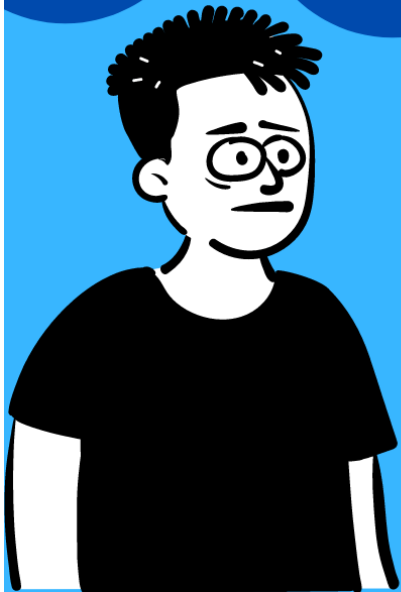
Assistive Technology Grinnell College



Access Grinnell FaceBook Page: On-line instruction and learning challenges:

Do your eyes hurt from looking at a screen all day?

Stay tuned for tips on how to manage digital eye strain

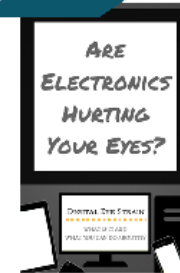


DIGITAL EYE STRAIN TIPS

Prolonged viewing of a computer screen or other digital device screens can cause eyestrain, dry eye, and eye discomfort.

DEVICE SETTINGS

- ☐ (Windows) Ease of Access
 - Text Size –try 14pt or 16pt, adjust contrast
- ☐ (Windows) Personalization
 - Background, Colors, ClearType Text Tuner
- ☐ (MAC) System Preferences Accessibility (MAC)
 - Adjust text size- 14pt if not 16pt.
 - Brightness of screen- it should match your environment.



PROGRAMS AND APPS

- ☐ [F.lux](#)- Is a free program that monitors your color temperature automatically.
- ☐ [Twilight](#) is another app reducing blue light.
- ☐ [GLARminY](#) to show you ways to change background color & brightness.
- ☐ Chrome Extension- [Dark Mode](#)
- ☐ Read & Write Gold's Screen Masking [Windows/MAC/Google Chrome](#)
- ☐ Read & Write Gold's [PDF Reader](#)
- ☐ Text-to Speech App for iOS [Voice Dream](#) Text-to Speech App for iOS
- ☐ [Iris](#)- blue filter and eye protection software

ADDITIONAL IDEAS & TIPS

- ☐ 20-20-20 Rule – Look away from the screen every 20 minutes, at an object 20 feet away for 20 seconds or more.
- ☐ Schedule your important screen time.
- ☐ Read from a physical book or print out.
- ☐ Try a pair of blue-light filtering specs or digital screen protection glasses.
- ☐ Establish non-technology, including TV watching, breaks. (10-minute break every hour.) Stand up, walk and stretch.
- ☐ [Eye Yoga](#)
- ☐ Position your computer screen so windows are to the side, instead of in front or behind it or you!
- ☐ Eliminate exterior light by closing drapes, shades or blinds.
- ☐ Monitor brightness should match your surrounding workspace brightness.



Access Grinnell FaceBook Page: On-line instruction and learning challenges:



Exercise - get your blood flowing by taking a short exercise break. Try:

- going for a short walk
- doing some jumping jacks
- Yoga with Adriene on Youtube
- Madfit 15 min dance workouts on YouTube (or just dance to a song!)

Do something active with your hands (burn off stress & give your brain a break)

- cook a meal
- fold laundry
- color or draw
- make a friendship bracelet



Prioritize sleep

- realize when you are too tired to be productive
- If it's not due tomorrow, opt for sleep over staying up late
- take (20 min) cat naps



Managing seasonal affective disorder

Common treatments for seasonal depression include:

Light therapy (using a lamp)

Opening blinds to let in more sunlight, sitting near a window

Increased time outdoors

Bloodwork to check for deficiencies

Psychotherapy

Psychiatric medications

(Resources provided in the description)