BUILDING A SUSTAINABLE DOCUMENT REMEDIATION PLAN: HITS AND MISSES FROM GMU'S 1-YEAR PILOT

Korey Singleton, *ATI Manager*

Robert Starr, *Program Support/Assistive Technology Specialist*

Accessing Higher Ground Conference

November 15, 2018

GEORGE MASON UNIVERSITY

Agenda

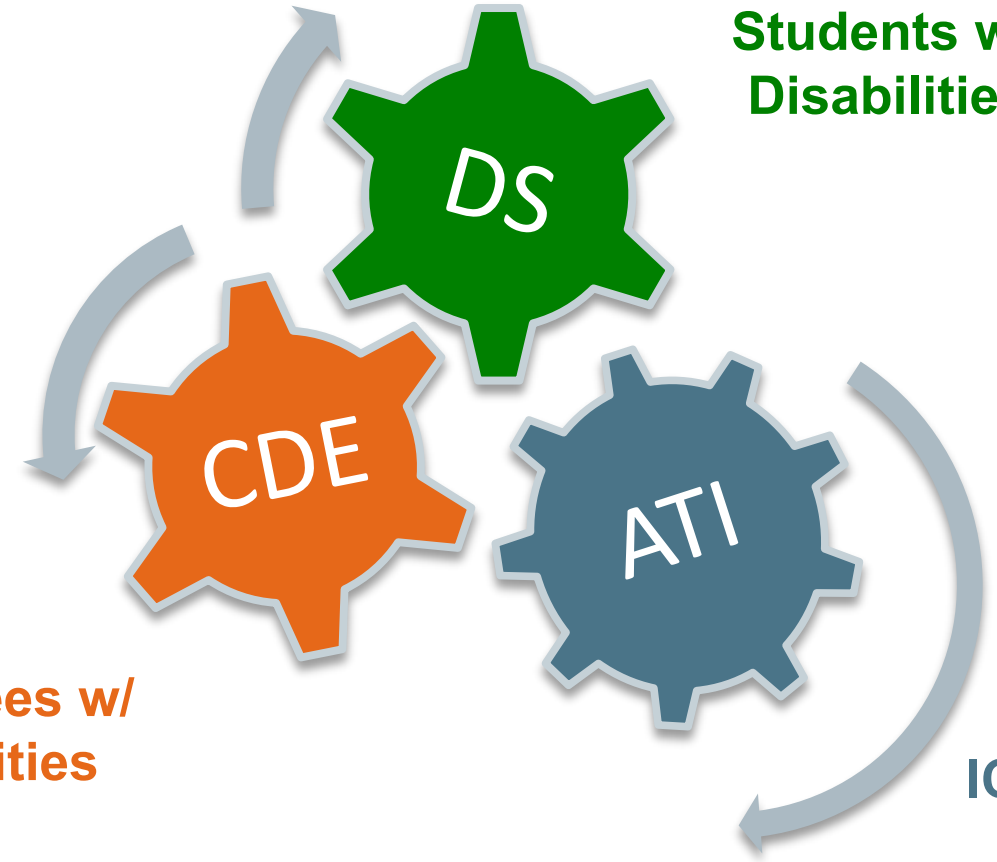
- About Us
- Background
- Overview of Document Accessibility Process
- **DEMO***: CommonLook Office Pro*
- Results & Findings
- Costs
- Hit & Misses
- Next Steps
- Q & A

ABOUT US

Location and Enrollment

- Enrollment
  - ~37k+ students from 130+ countries
  - Projected increases of 1k per year over next 5-6 years (online)
- Over 1500+ Instructional and Research Faculty
- 10 colleges and schools
- Campus locations
  - 4 locations in Northern Virginia (Fairfax/***Main***, Arlington, Manassas, and Sterling)
  - ***International:*** Songdo (Korea)

Accessibility@Mason:
A Collaborative Partnership



Students w/ Disabilities

Employees w/ Disabilities

ICT Accessibility & Compliance

DOCUMENT ACCESSIBILITY: BACKGROUND

Statement of the Problem

- **Large numbers of students with print impairments** enrolled at institution
  - Average 40-50 students with visual impairments that may require services
  - # of totally blind students fluctuates between 0 – 15 with active needs

- Issues with **lack of timely access to instructional materials** (docs & supplemental applications)
  - *Factors*: lack of communication, lack of adequate staffing, lack process, etc.

ATTEMPTS TO ADDRESS ISSUES...

- Faculty/Staff Training and/or Remediation Support
  - Group/Individual (compliance), one-to-one support (accommodation)
- Automated OCR solutions (i.e., ABBYY Recognition Server) (~2012)
- Doc Accessibility Pilot (Fall 2014)
  - 2 IDs, 3 Faculty Members
  - **Findings:** Doc Formats (Word, PPT, PDF), *CommonLook Office Pro*, *Acrobat Pro*, strategies for supporting faculty with students with visual impairments
- Online course accessibility reviews (Spring 2015 – Fall 2017)
  - Partnership with Office of Digital Learning
  - **Findings:** Snapshot of accessibility problems (over 100 online courses reviewed in 2 years – e.g., captions vs. docs), need to offer accessibility services/solutions/targeted trainings

DOCUMENT ACCESSIBILITY: CURRENT PROCESS

Pilot Partners

Disability Services (DS)

- Faculty/Staff trainings 2-3 weeks prior to semester for faculty teaching students with visual impairments
- *Accommodation-focused*
- **Training**:
  - Document Preparation (alternative text, headings, tables, built-in slide layouts)

Office of Digital Learning (ODL)

- Online Course Development Trainings for faculty teaching online courses
  - SOUPR – 1yr, OCDI – 6wk
- *Compliance-focused*
- **Training**:
  - Document Preparation (alternative text, headings, tables, built-in slide layouts)

Process Overview

Step 1

New Requests

Step 2

Document Accessibility Review

Step 3

Remediate Documents

Step 4

Quality Control

Step 5

Return Remediated Documents

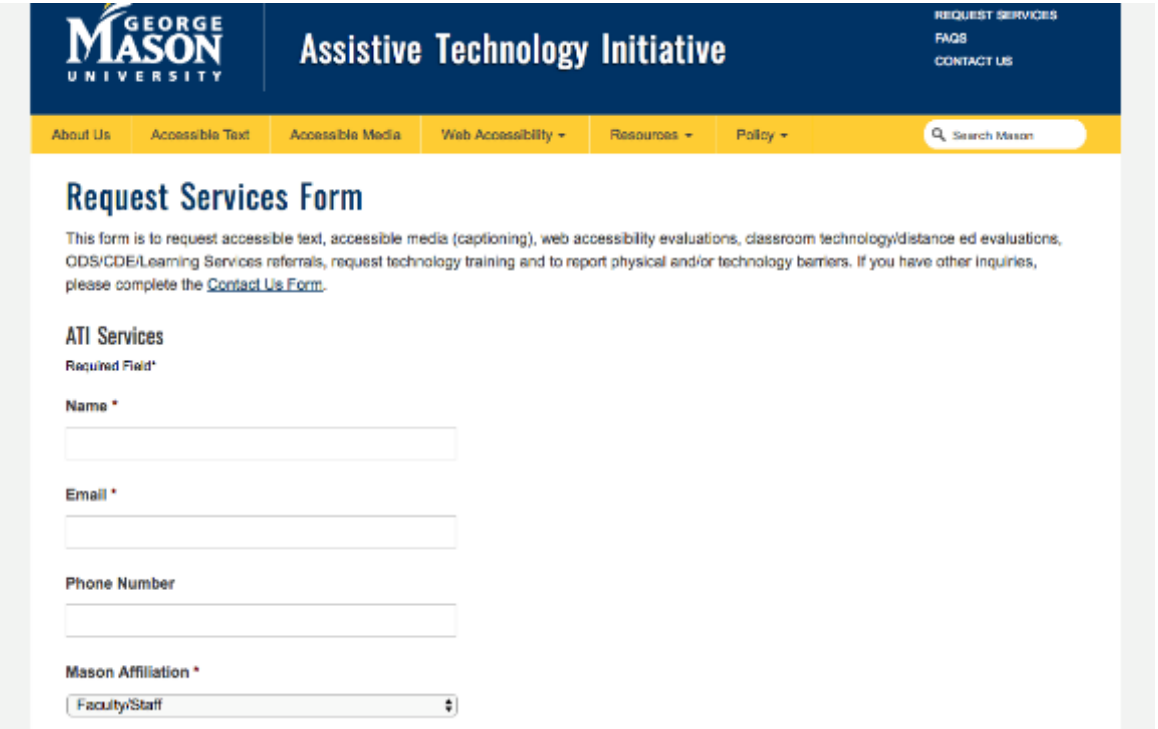
Step 1 – New Requests

URL

https://ati.gmu.edu/request-services-form/

Information Collected

- Type of Request (Accommodation, Compliance, SOUPR/OCDI)
- # of Documents
- Document Types (PDF, Word, PPT)
- Due Date
- Semester
- First & Last Name of Submitter
- Course Name and # (e.g. MGMT 100)



Step 2/3 – Document Remediation Workflow

Workflow Steps

1. Document(s) uploaded directly to **request form** or emailed to ATI
2. Information entered into spreadsheet for tracking purposes
3. **Document(s) reviewed** and then moved to '*Step 1 - New Request*' folder
4. Student worker starts initial **remediation** (i.e., headings, lists, etc.) and moves to '*Step 3 Word/PPT*' and '*PDF*' folders for **additional remediation** (i.e., alt text, hyperlink text, etc.)*
5. After remediation, documents moved to '*Step 4 – Quality Control*' folder for **quality check**
6. If necessary, documents with issues are returned to the '*Step 1 – New Request*' folder with notation indicating issue. ATI staff is also alerted.
7. Once document(s) pass QC, source and remediated document(s) moved to faculty's Dropbox folder. Faculty member receives email with link to the folder.**

Step 2/3 – General Document Remediation Tasks

Word and PowerPoint

- Headings
- Lists
- Meaningful Hyperlink Text
- Tables
- Color Contrast
- Alternative Text for Images

PDF

- Headings
- Lists
- Meaningful Hyperlink Text
- Tables
- Color Contrast
- Alternative Text for Images
- Page Numbers

Step 4 – Quality Control

Manual Review

1. Headings
2. Links
3. Tables
4. Alternative Text
5. Logical Reading Order

Screen Reader Review (Jaws)

1. Headings
   - *Keystroke*: Insert + F6, H
2. Links
   - *Keystroke*: Insert + F7, Tab
3. Tables
   - *Keystroke*: Insert + T, Ctrl + Alt + Arrows
4. Alternative Text
   - *Keystroke*: G
5. Logical Reading Order
   - *Keystroke*: Arrows

COMMONLOOK OFFICE PROFESSIONAL DEMO

DOCUMENT ACCESSIBILITY: POST-PILOT RESULTS AND FINDINGS

TRAININGS CONDUCTED (1-YR)

Disability Services (10)

- Face-to-face *Faculty* trainings prior to fall and spring semesters (4)
- One-to-one *Faculty* trainings during semester (6)

Office of Digital Learning (13)

- Face-to-face/Online faculty training workshops (9)
- One-to-one Faculty/Staff sessions (4)

Pilot Results (1-yr)

- **Faculty/Staff Participants:** 40
- **# of Docs Processed**
  - 498 documents
  - 7,956 pages

- **By Format**
  - 196 PPT (39%), 147 Word (30%), 155 PDF (31%)

- **By Type of Request:**
  - 49% Compliance (244 requests – 62% SOUPR)
  - 51% Disability Accommodation (254 requests)

Additional Findings

- Avg. turnaround time – Approx. 2 weeks*
- Avg. document length – Approx. 15 pages
- Format-specific findings…
  - **Word**
    - Syllabi
    - More common to have tables than images
  - **PPT**
    - Most faculty use built-in layouts
    - More training needed with respect to use of nested tables, grouping images, alternative text
  - **PDF**
    - Articles pulled from databases or web
    - Scans of hard-copy resources/scans of scans

- Only one instance where same document was used in another course**

Hits and Misses

- **What worked...**
  - Trainings (student workers, faculty/staff)
  - Partnerships with DS and ODL
  - Hybrid process (Assembly-line approach vs. Per file)
  - Online submission workflow
    - STEM content, Tactile graphics
  - Increased ATI's capacity to provide timely access for other types of requests (e.g., STEM, tactile graphics)

- **What DID NOT work...**
  - Faculty training (sometimes)
  - Document management/Data tracking
  - Assembly line approach solely

Associated Costs, FY18

Staffing (annual)	PT Student Workers (3), Avg. 10-15 hours/week	$10,600.00
	ATI Staff (2), Avg. 2-4 hours/week**	**$8,000-$14,000**
	ODL Staff (1), Avg. 5 hours/week**	**$12,000**
Equipment	Windows PC (5)*	N/A
Software	Acrobat Pro 11 (3), students*	N/A
	Acrobat Pro DC (2), staff*	N/A
	CommonLook Office Pro (annual, 10-seat license)	$722.00
	Office 2016*	N/A
	DropBox Business (annual, 1 TB)	$99.00
	TactileView (2)	$750
Total Costs (approx.)	**$31,750 ($3.99/page) - $37,750 ($4.74/page)**	

Associated Costs Cont. (Disclaimers)

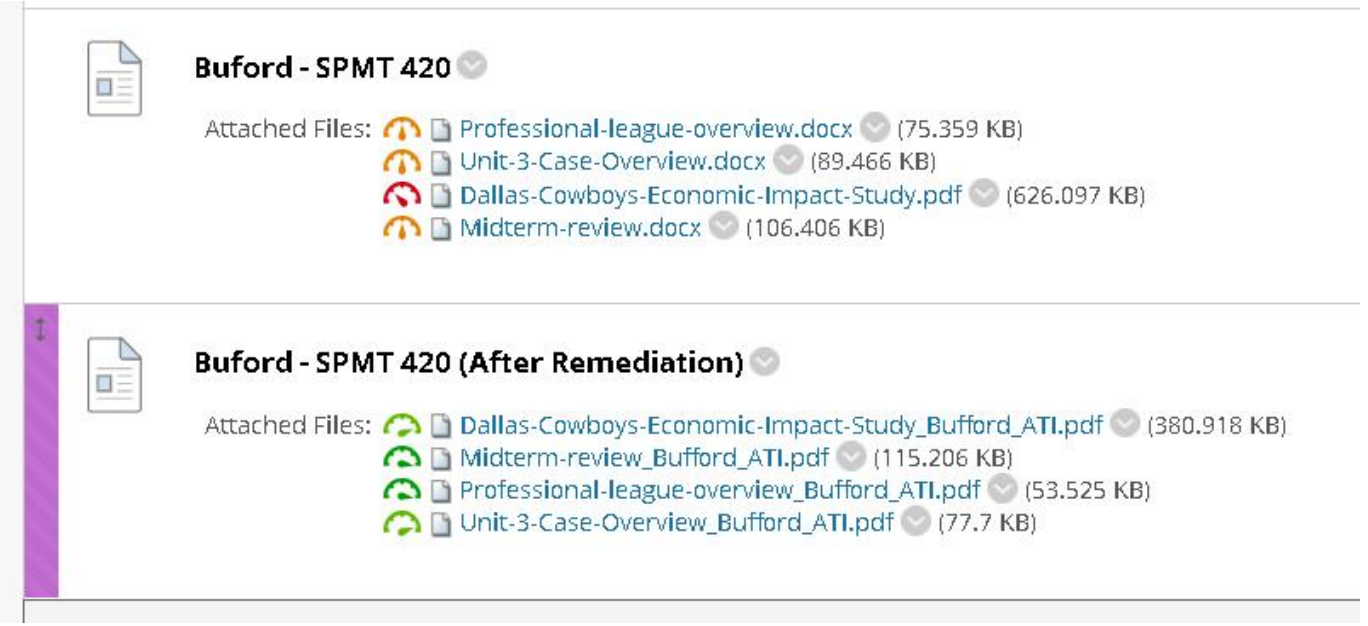
***Take this with a grain of salt…*your situation may be different**

- **Equipment Costs**
  - Items owned or free to Mason students, staff, and/or faculty

- **ATI (non student-wage) and ODL Staffing Costs**
  - Includes faculty/staff communications, student/staff/faculty training, and doc remediation.
  - *ODL Staff* – Includes coordination of the workshops; creation and maintenance of Blackboard course used in the training workshops; leading workshops; accessibility checks on the SOUPR courses in Blackboard.

Blackboard Ally Sandbox

- 6-month pilot (March 2018 – Sept. 2018)
- Uploaded documents submitted for processing and those completed post-remediation
- Laying groundwork



GOING FORWARD

2ND-YR NUMBERS, SO FAR (AS OF 11/09)...

- **Faculty/Staff Participants:** 35*
- **# of Docs Processed**
  - 416 documents
  - 5,299 pages

- **By Format**
  - 178 PPT (43%), 90 Word (21%), 148 PDF (36%)

- **By Type of Request:**
  - 65% Compliance (80% SOUPR)
  - 35% Disability Accommodation

Next Steps

- Streamline Workflow
  - Document Management System (Ticketing)
  - Staffing responsibilities (reduce costs)
- Training
  - Re-training for student workers (software updates, consistency, etc.)
  - Document preparation (videos)
- Seek out new partners...
  - by Academic Dept. (*MAPPS Initiative*)
  - ODL/Academic Units (*Bb Ally*) – Plans to increase online offerings/programs

QUESTIONS

Contact Us

Assistive Technology Initiative (ATI)

4400 University Drive, MSN 6A11
Aquia Building, Rm. 238
Fairfax, VA 22030

Phone: 703-993-4329
Fax: 703-993-4743
E-mail: ati@gmu.edu
Web: http://ati.gmu.edu
Twitter: @AccessibleMason